



The **SUMMIT**

GRADUATE SCHOOL JOURNAL
UNIVERSITY of the ASSUMPTION

City of San Fernando (P), Philippines 2000

www.ua.edu.ph

2023

The **SUMMIT** **2023**

University of the Assumption
City of San Fernando (P) 2000, Philippines

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PUBLISHED BY THE
UA GRADUATE SCHOOL

ISSN 2094-6317

Cover Design by: Jaime G. Orlanda

FOREWORD

Publication of research outputs is essential in dissemination. University research culture can be cultivated through research publication. Specifically, graduate students are encouraged to publish their scholarly works through journals.

The Summit, the official journal of the University of the Assumption (UA), publishes doctorate dissertations and masters' theses. It is composed of editors who carefully select written manuscripts using standards in research in its issues. Its published annual issue showcases the best research outputs for the duration of the whole year.

The 17th (2023) issue of "The Summit" is a compilation of five masters' theses. These papers were first defended in front of esteemed panelists prior to submission as final requirement for the graduate school degree. In response to the challenge of publishing quality researches, "The Summit", with pride and joy, presents the following studies:

Exploring non-digital gamification vs. digital gamification: Toward improving grade 7 students' skill in adding rational numbers (dissimilar fractions) is the thesis of Jessica Manabat Canlas-Zapata for the degree of Master of Arts in Education, major in Mathematics. This mixed-method research compared the results of the use of two contemporary strategies in two separate grade 7 classes in teaching addition of dissimilar fractions.

Situational analysis of the Grade 8 students' performance in summative evaluation and their learning circumstances in a school in a coastal area: Basis for alternative delivery mode of instruction is the thesis of Lilibeth L. Sonza for the degree of Master of Arts in Education, major in Educational Management. This is explanatory sequential mixed-method research which primarily aimed to feature the situation of the grade 8 students' performance in the summative evaluation particularly the periodical test as a springboard for a greater analysis of the learning circumstances in a school located in a covered coastal area and the grade 8 teachers' performances based on the Result-based Performances Management System (RPMS).

"DoReMi-ABC: Music integration to enhance the kindergarten pupils' phonological awareness towards achieving reading readiness": A lesson study is the thesis of Eliza Q. Perez for the degree of Master of Arts in Education, major in Early Childhood. This study examined the usefulness of music integration in improving the reading skills of kindergarten pupils, with emphasis on phonological awareness, letter-sound decoding, and reading CVC words.

Outstanding school principals' experiences in the old normal: Avenues for developing novice leaders' managerial skills in the new normal is the thesis of Avijel L. Barro for the degree of Master of Arts in Education, major in Educational Management. This qualitative study described the leadership styles and experiences of outstanding school principals during the old normal in the performance of their managerial functions in terms of school leadership, management and operations, and creating student-centered learning climate as basis for the crafting of leadership and development program for novice and would-be school leaders.

Exploring the implementation of the basic education learning continuity plan (BE-LCP): Challenges and opportunities from the lenses of select stakeholder researcher is a thesis of Kelvin L. Tolentino for the degree of Master of Arts in Education, major in Educational Management. This qualitative case study aimed to derive research-based inputs for a policy review in enhancing the Basic Education Learning Continuity Plan (BE-LCP) in public schools. Journal publication is the pinnacle of research dissemination. It is through publishing of scholarly works where the research culture can thrive in an academic institution such as the University of the Assumption.

The SUMMIT is the Graduate School Journal of the University of the Assumption published annually. It contains full texts of completed and successfully defended theses and dissertations in the UA Graduate School.

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Exploring non-digital gamification vs. digital gamification: Toward improving grade 7 students' skill in adding rational numbers (dissimilar fractions)

Jessica Manabat Canlas-Zapata

Master of Arts in Education, major in Mathematics

Abstract

In Mathematics, one of the most challenging lessons for students are rational numbers specifically the addition of dissimilar fractions. This mixed-methods research compared the results of the use of two contemporary strategies in two separate grade 7 classes in teaching addition of dissimilar fractions: the non-digital gamification and the digital gamification to determine which would yield more favorable results. Pre-test and post-test scores were used to determine the difference between groups. Statistically, using t-test, digital gamification acquired the higher mean, thus appeared to be more effective. Moreover, the participants' experiences with the two modalities were collated and carefully scrutinized. From the feedback of the non-digital gamification class, four themes were formed: fun-filled learning; insightful experience; facilitated efficiently and expression of improved skills. On the other hand, three themes emerged from the responses of those in the class who underwent the digital gamification strategy: delightful experience; easy access and swift evaluation. After an overall analysis of worded feedback, digital gamification appeared to be a more interesting method for teaching the addition of rational numbers (dissimilar fractions) as learners highly appreciated learning with digitalized resources.

Keywords: non-digital gamification, digital gamification, rational numbers, addition of dissimilar fractions, mixed methods design

INTRODUCTION

Education's traditional pedagogical paradigms are becoming harder to use and less effective (Biggs & Tang, 2011). Students are becoming less motivated to participate in activities such as readings, class discussions, and independent research, especially when these do not involve direct evaluation. Motivational challenges among students are now widespread (Hitchens & Tulloch, 2018).

Today's generation is highly exposed to digital technologies such as mobile phones, multimedia, online games, and social media. This generation is often referred to as the "Net Generation" or "Digital Natives." According to Prensky (2001), individuals born in or after 1980 are considered digital natives because they grew up in the era of computers, internet, and modern technology. As a result, technology has become an integral part of their daily lives for communication, entertainment, shopping, and other activities.

Because of this, the use of digital technology in education has become essential in addressing the needs of today's learners. Modern pedagogical trends reinforced by ICT encourage active learning, and gamification is one of these approaches (Angelova et al., 2014). Coined by Nick Pelling in 2002, gamification refers to the application of game elements such as point scoring and competition to non-game activities. In education, gamification is considered engaging and

motivating because it incorporates entertaining and interactive elements that promote learning (McGonigal, 2011). Several studies also revealed that game-based elements are effective in classroom settings (de-Marcos et al., 2014; Stott & Neustaedter, 2013), especially since learners today are immersed in interactive media and video games (Glover, 2013).

Statement of the Problem

According to the Mathematics Framework for Philippine Basic Education, Mathematics is one of the most studied subjects from preschool to college. Over the years, the Philippine mathematics curriculum has undergone several revisions. Mathematics plays an important role in facilitating participation in productive life activities, making sense of the world, serving as a means of communication, and contributing to national advancement (SEI-DOST & MATHED, 2011).

However, many students still consider Mathematics difficult, especially when discussing rational numbers such as fractions (V Trivena et al., 2017). There is a gap between dealing with whole numbers and fractions. While students easily grasp concepts involving whole numbers, many struggle in understanding fractions. Researchers revealed that fractions are considered difficult because of the many rules involved in operating them (Lestiana, 2014). Prior experiences with whole numbers also hamper students' understanding of fractions (Ni & Zhou, 2005). As Wu (2008) stated, children are at a loss when they can no longer use their fingers to compute. Hence, a competent teaching strategy is essential in teaching addition of dissimilar fractions.

With this, digital gamification combines technology and game-based elements as a strategy in the teaching-learning process. This mixed-methods research aims to determine the effectiveness of digital gamification in improving the addition of rational numbers: dissimilar fractions skills of Grade 7 students.

Objectives

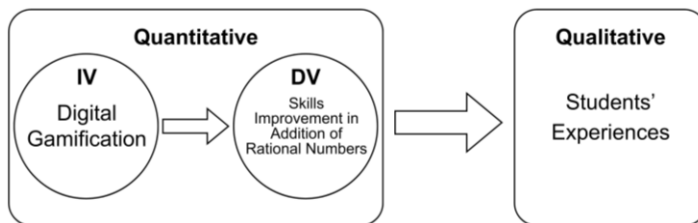
Each objective in the quantitative part of this study were specified followed by its null hypothesis and alternative hypothesis. This study aims to determine that digital gamification can be considered as a means to improve the addition of rational numbers: dissimilar fractions skills of grade 7 students. Specifically, attempts to describe the:

1. difference of the pre-test scores between the non-digital gamification and digital gamification groups - H_0 : There is no significant difference in the pre-test scores between the non-digital gamification and digital gamification groups. H_A : There is a significant difference in the pre-test scores between the non-digital gamification and digital gamification groups;
2. difference of the pre-test and post-test scores of the non-digital gamification group - H_0 : There is no significant difference in the pre-test and post-test scores of the non-digital gamification group. H_A : The post-test scores are higher than the pre-test scores of the non-digital gamification group;
3. difference of the pre-test and post-test scores of the digital gamification group - H_0 : There is no significant difference of the pre-test and post-test scores of the digital gamification group. H_A : The post-test scores are higher than the pre-test scores of the digital gamification group;
4. difference of the post-test scores between the non-digital gamification and digital gamification groups - H_0 : There is no significant difference in the post-test scores

between the non-digital gamification and digital gamification groups. H_A : There is a significant difference in the post-test scores between the non-digital gamification and digital gamification groups;

5. experiences of the students in the non-digital gamification during the lesson; and
6. experiences of the students in the digital-gamification in the application of digital gamification during the post-test.

Conceptual Framework



In this study's quantitative section, it attempted to evaluate the teaching methods' efficacy of digital gamification to determine if there is an improvement in addition of rational number (dissimilar fraction) skills of grade 7 students. Meanwhile, in the qualitative part, it confirmed the results from the quantitative by analyzing the feedbacks from the experiences of the participants.

Significance

Most aspects of modern life, including placing food orders, paying for purchases, scheduling appointments, and applying for visas, are now digital. As a result, learners become more accustomed to using technology and gadgets in their learning activities.

In situations such as the pandemic, digital gamification can serve as an effective teaching strategy. Because of its interactive nature, learners are able to acquire new knowledge while enjoying the learning process. It promotes learning through various digital tools such as educational apps, mobile devices, PowerPoint presentations, and social media platforms, making learning more engaging even in difficult situations.

Additionally, most assessments have shifted from paper-and-pencil to digital formats. This allows students to respond with greater confidence while also preparing them to handle digital systems they encounter in daily life, not only in school but beyond the classroom.

Definition of Terms

1. **Digital Gamification** – The use of technology offers new organizational, educational, personal, procedural, and cultural opportunities for both students and teachers. They also emphasized that one of the key considerations for schools is the requirement to prepare students for a changing world in which technology plays a significant role. (Hawkes and Cambre, 2001). Also, it's a method of instruction that is highly relevant today and utilizes technology in teaching-learning process.

2. **Fraction Calculator** - a software application for fractional math problems. The problem has a solution so that students can see how the solution was arrived at. Digital calculators are crucial tools for learning and practicing mathematics because they can accurately calculate complex mathematical problems. (Reys et al., 2001)
3. **Non-digital Gamification** – the application of gaming elements outside of a gaming context is known as gamification. It creates a learning environment where there is more motivation, which leads to more engagement and participation, higher self-esteem, and risk-taking that is productive. (Werbach & Hunter, 2012). It's the use of games in the classroom to make the lesson fun for the students.

METHOD

This study used a mixed-methods research design involving the collection and analysis of both quantitative and qualitative data. Two groups were utilized: the non-digital gamification group as the control group and the digital gamification group as the experimental group. Pre-test scores of both groups were used to determine the equivalency of the participants in terms of their ability in adding rational numbers (dissimilar fractions). Pre-test and post-test scores were also used to measure the improvement of each group, while post-test results were used to compare the effectiveness of the two approaches. For the qualitative part, participants were asked to provide written feedback about their experiences during the intervention.

The participants were 61 Grade 7 students from a national high school, grouped into heterogeneous sections. The control group was taught using non-digital game-based learning, while the experimental group was taught using digital gamification strategies. Some participants were excluded due to absence during either the pre-test or post-test, reducing the final number of respondents in both groups.

The research instruments consisted of researcher-made 10-item multiple-choice pre-test and post-test questionnaires, validated by two mathematics experts. Improvements focused on item parallelism and presentation. Open-ended interview questions were also validated for the qualitative data. The experimental group also completed a digital post-test via Google Forms.

Pre-test results were analyzed using t-test for independent samples and verified through SPSS. Both groups initially showed almost similar mean scores, indicating comparable baseline performance.

After the intervention, both groups showed improvement based on post-test results. The data were analyzed using t-test for correlated samples and SPSS. The experimental group demonstrated a higher mean score compared to the control group. Further comparison of post-test results showed a significant difference between the two groups.

For qualitative data, students from both groups wrote free responses about their learning experiences. All responses were collected and treated with confidentiality.

Content analysis was used in studying the feedback of both groups. This research collected the written outputs and had an initial reading to be familiarize with the data. To be organized, the feedback from the controlled group were assigned with a code of a word "Student" in the beginning,

an "C" for they belong in the controlled group and an assigned number at the end. Example, Student C7. After thorough readings, their experiences were categorized into four themes: fun-filled learning; insightful experience; facilitated efficiently; and the expression of improved skills.

Another open-ended question was conducted to the experimental group. The researcher ensured that all data collected was kept confidential as well. Content analysis was used once more in studying the responses. The participants in the said group were instructed to input freely about their application of digital gamification in the post-test. This research collected the written outputs and had an initial reading to be familiarize with the data. To be organized, the feedback from the participants were assigned with a code of a word "Learner" in the beginning, an "E" for they belong in the experimental group and an assigned number at the end. Example, Learner E7. After thorough readings, their experiences were categorized into three themes: delightful experience; easy access and the swift evaluation.

RESULTS

This section presents the data gathered organized following the sequence of the objectives of the study stated in the Introduction: (1) difference of the pre-test scores between the non-digital gamification and digital gamification groups; (2) difference of the pre-test and post-test scores of the non-digital gamification group; (3) difference of the pre-test and post-test scores of the digital gamification group; (4) difference of the post-test scores between the non-digital gamification and digital gamification groups; (5) experiences of the students in non-digital gamification during the lesson; and (6) experiences of the students in the digital-gamification in the application of digital gamification during the post-test.

Respondents' Pre-test Scores

Respondents were given 10 multiple-choice test items. Data in the Table 1 show the difference between the controlled and experimental groups prior to the conduct of class session on addition of rational numbers: dissimilar fractions.

Table 1

Difference in the pre-test scores between non-digital gamification and digital gamification groups

<i>t</i>	<i>df</i>	<i>t-crit</i>	DECISION	INTERPRETATION
0.2294	59	1.67	HO cannot be rejected	There is no significance difference

Note: t-critical alpha = 0.05 level of significance

As shown in the table above, the computed *t* – value is 0.2294 with the degree of freedom of 59, is lower than the *t* – critical value at alpha =0.05 level of significance of 1.67. As a final decision, the null hypothesis cannot be rejected, there is no significant difference in the pre-test results of the groups.

Controlled Group's Pre-test and Post-test Scores

Table 2 data displays the game-based learning scores before and after the intervention.

Table 2

Significant Difference in the Pre-test and Post-test of the Non-digital Gamification Group

<i>t</i>	<i>df</i>	<i>t-crit</i>	DECISION	INTERPRETATION
-16.9	35	±1.67	Reject HO	The post-test scores are higher than the pre-test scores

Note: *t-critical alpha = 0.05 level of significance*

As shown in the table above, the computed *t* – value is -16.9 with the degree of freedom of 35, is beyond than the *t* – critical value at $\alpha = 0.05$ level of significance of ± 1.67 . As a final decision, the non-digital gamification group's pre-test and post-test scores differ significantly, rejecting the null hypothesis.

Experimental Group's Pre-test and Post-test Scores

The scores in the digital gamification are displayed in table 3 before and after the intervention.

Table 3

Significant difference in the pre-test and post-test of digital gamification group

<i>t</i>	<i>df</i>	<i>t-crit</i>	DECISION	INTERPRETATION
-24	24	±1.711	Reject HO	The post-test scores are higher than the pre-test scores

Note: *alpha = 0.05 level of significance*

In the experimental group (digital gamification), the computed *t* – value is -24 with the degree of freedom of 24, is beyond the *t* – critical value at $\alpha = 0.05$ level of significance of ± 1.711 . As a final decision, reject the null hypothesis, there is a significant difference in the pre-test and post test scores of the digital gamification group.

Respondents' Posttest Scores

The two groups were given another 10 multiple-choice test items during the post-test. Presented in Table 4 are the results of the two groups' post-tests.

Table 4

Significant difference in the post-test between the non-digital gamification and digital gamification groups

<i>t</i>	<i>df</i>	<i>t-crit</i>	DECISION	INTERPRETATION
-3.02	59	1.67	Reject HO	There is a significance difference

Note: $\alpha = 0.05$ level of significance

As stated in the table 4, the computed *t* – value is -3.02 which is beyond the *t* – critical value at $\alpha = 0.05$ level of significance of ± 1.667 . As a final decision, reject the null hypothesis, there is a significant difference in the academic performance between the two groups regarding addition of rational numbers (dissimilar fractions).

Experiences of the Students in the Non-digital Gamification Group During the Lesson

Students in the non-digital gamification group were asked to write freely about their experiences during the class session. Their narratives were culled and four categories emerged from common responses: **Fun-filled Learning**; **Insightful Experience**; **Facilitated Efficiently**; and **Expression of Improved Skills**.

Fun-filled Learning. At least 21 of the 36 students in the non-digital gamification group said that they enjoyed the lesson. They felt the excitement while going through the lesson and most expressed that they were happy while engaging in the activities. Their feedback on this are the following:

“Ako ay nakasagot kagina sa activities ay nakaka-enjoy at masaya”
[I was able to answer the activities a while ago. These activities are enjoyable and fun]. (Student C1)

“Nakakaenjoy ang paglalaro at nagiging akong masaya at hindi nakakasawang maglaro” [Participation in the games was enjoyable and I felt very happy and I cannot get enough play]. (Student C4)

“Nagenjoy ako dahil naki opperate ang aking mga kaklase sa aming activities at nagiging masaya” [I enjoyed because my classmates cooperated in our activities and it became fun]. (Student C6)

“Kalako noong elementary ako, mahirap ang math sa high school Noong Naging High School Easy lang pala at masaya! ☺” [When I was in elementary, I thought Math is a difficult subject but when I entered high school, math seems to be easy and fun! ☺]. (Student C9)

"Masaya ako sa mga activities at sa mga kaklase ko at kalako si MaaM ay Masungit yun Pala Madait at kaya gusto ko na ang Math"
[I'm happy with the activities, my classmates and my teacher (although I thought my teacher is rugged but I found out she's nice). And those are the reasons why I love Math]. (Student C12)

"Masaya ako dahil may natutunan ako sa Math dahil sa Math natuto akong mag-add, magsubtract, mag-multiply at mag-division. -KING"
[I'm happy because I learned something in Math. Because of this subject, I learned the four fundamental operations all the more]. (Student C16)

"nakasagot ako kanina sa math activities at nabigyan ako ng smiley at nagenjoy ako!!" [I was able to answer the math activities and I was given smiley. And it was enjoyable!] (Student C18)

"ako ay nagenjoy kase marami akong natutunan" [I enjoyed because I've learned a lot]. (Student C19)

"Nakaka Enjoy ang Math dahil maraming natutunan at exciting ang mga palaro" [Math is enjoyable because I get to learn a lot and the games are exciting]. (Student C21)

"Nag-enjoy ako kanina sa Math dahil marunong siyang magturo at exciting din ako sa mga palaro." [I enjoyed the lesson in Math a while ago because she is good in teaching. And I felt excitement with the games]. (Student C22)

"Ako ay nag enjoy dahil marami akong natutunan. Katulad nang pagdidivide." [I enjoyed for I've learned a lot like division]. (Student C23)

"1. My teacher is so very beautiful 2. My teacher is Hero. 3. Math is all around us. because is math is very enjoyable. And understood to teach me." [My teacher is very beautiful. She's like a hero for me. Aside from this, Mathematics is all around us. Also, it enjoyable. I understood the lesson taught to me]. (Student C25)

"The problem are so very easy to answer. I love MATH because Math is easy for me and the activities that our teacher give us are so very enjoyable and exciting" [The problems were very easy to answer. I love MATH because it is easy for me and the activities provided by our teacher are so enjoyable and exciting]. (Student C26)

"nakakaenjoy ang Math kasi naman marami akong natutunan at maganda ang mga pinapagawa ni ma'am sa amin na mga laro at nakakasagot ako paminsan-minsan" [Math is enjoyable because I've learning a lot and the activities provided by our teacher are great. There were times that I was able to answer]. (Student C27)

*"Nakaka-ganado ang activities ng Mathematical at nakaSagot ako at Naka – smiles ako Nakaka-enjoy pala ang Math kahit Maganda ang teacher naming napapasaya kami ng teacher naming napapasaya kami ng teacher ganda at nagging matalio o nagbago na aking kaklase dahil sa teacher ng mathematical I LOVE MATH *heart"* [The activities in Mathematics are so motivating. I was able to answer and had smileys (reward chips). Math is enjoyable. Our teacher is beautiful and she makes us happy. Because of her, we became bright and our class has changed for the betterment. I love math! *heart] (Student C28)

"Nag-e-enjoy ako sa Math Subject, dahil malinaw na itinuturo ito ni Ma'am at buti nalang ang teacher sa Math na napunta sa amin ay maganda, mabait at mapagpasensya." [I had fun with our Math subject because it was clearly discussed. And fortunately, the teacher assigned to us is beautiful, kind and patience]. (Student C29)

"Nakaka exciting Po ang mga subject pero ang gusto ko ay math dahil lagi akong nagenjoy sa math and masayang nagtuturo anhg teacher naman." [All the subjects are exciting but math is what I like the most because it's enjoyable. Also, our teacher in math teaches us cheerfully]. (Student C30)

"Dati po akong di nakikinig kala kopo mahirap po ang ang math pero nung nakinig ako madali lang pala at nakaka-enjoy." [I wasn't listening before. I thought Math is a difficult subject. But when I started listening, I realized that it is so easy and enjoyable]. (Student C32)

"I was able to recite and cooperate. I enjoy answering the activities. I LOVE MATH because is easy for me and exciting" [I was able to recite and cooperate with my classmates. I enjoyed answering the activities. I love math because it's easy and exciting as the same time]. (Student C33)

"Masaya ang mga laro nakaka enjoy. Kapag Math time nakaka enjoy making kasi ang teacher naming ay sweet kapag nakakapagrecite ako nakakuha ako ng smileys." [The games are fun and enjoyable.

It's so enjoyable during math time because our teacher is sweet and appreciative for I got smileys (reward chips for those who got the correct answers)]. (Student C34)

"Nakakaenjoy ang math kase marami akong natututunan at minsan nakakakuha ako ng mataas na score." [Math is enjoyable for I've learned a lot and sometimes I get high scores]. (Student C36)

Insightful Experience. Seventeen out of 36 students mentioned that they learned so much. Their view regarding this are the following:

"Marami akong natutunan dahil magaling ang aming guro" [I've learned a lot because our teacher is great]. (Student C2)

"Marami akong natutunan dahil bawat araw sa pagpasok sa school ay natutunan kong magbasa at magsulat dahil ang pagbabasa ay nakakatulong sa isipan ng bawat mag-aaral at magsulat dahil ang pagsusulat para matandaan ang takdang aralin." [I learned so many things because everytime I go to school, I learned how to read and to write. Reading helps learners exercise their brains and writing makes the assignment easily to remember]. (Student C3)

"Marami akong natutunan kasi magaling magturo ang aming Guro" [I am more knowledgeable for my teacher is superb at teaching]. (Student C5)

"Maraming salamat sa guro naming sa Math at marami akong natutunan" [I'm very grateful for my teacher in Math for I've learned a lot]. (Student C8)

"Date hindi ako nakikinig pero nagsumikap ako dahil bumagsak ako pero ngayon nakikinig nako at marami nakong natutunan." [Before, I wasn't listening. I strived because my I got failing grade. But now, I am listening and learned a lot]. (Student C11)

"Marami akong natutunan dahil sa aming mabuting guro" [I've learned a lot because of our good teacher]. (Student C14)

"Marami akong natutunan dahil nakinig ako" [I've learned a lot because I listened]. (Student C15)

"Ang subject na may maraming kang matutunan dahil maayos itong na didiscust ng aming guro" [This is the subject where you will learn a lot because the teacher discusses well]. (Student C17)

"ako ay nagenjoy kase marami akong natutunan" [I enjoyed because I've learned a lot]. (Student C19)

"Marami akong natutunan dahil nakinig ako sa tinuturo ng guro." [I've learned a lot because I'm listening to my teacher]. (Student C20)

"Nakaka Enjoy ang Math dahil maraming natutunan at exciting ang mga palaro" [Math is enjoyable because I get to learn a lot and the games are exciting]. (Student C21)

"Ako ay nag enjoy dahil marami akong natutunan. Katulad nang pagdidivide." [I enjoyed for I've learned a lot like division]. (Student C23)

"Yung games kanina ay nakakaexcite at nakakaenjoy at nakakuha ako ng 1 smiley" [The games a while ago were exciting and enjoyable. And I got 1 smiley]. (Student C24)

"nakakaenjoy ang Math kasi naman marami akong natutunan at maganda ang mga pinapagawa ni ma'am sa amin na mga laro at nakakasagot ako paminsan-minsan" [Math is enjoyable because I've learning a lot and the activities provided by our teacher are great. There were times that I was able to answer]. (Student C27)

"Marami akong natutunan kase akala ko mahirap ang Math pero nung nakinig ako duon ko naranasan na masaya pala ang math." [I've learned a lot because I thought Math is difficult but when I listened well, I was able to experience the happiness in Math]. (Student C31)

"I've learned a lot in the activities we answer a while ago. The operation looks hard but when ma'am Jec's discuss it to us i was able to recite because it's easy to answer when ma'am Jec's who's the one who discuss it." [I've learned a lot in the activities we answered a while ago. The operation looks hard but when ma'am Jecs discussed it to us, I was able to recite because it was easy answering the activities]. (Student C35)

"Nakakaenjoy ang math kase marami akong natutunan at minsan nakakuha ako ng mataas na score." [Math is enjoyable for I've learned a lot and sometimes I get high scores]. (Student C36)

Facilitated Efficiently. Nine out of 36 students stated that their teacher taught well. Their observation concerning their teacher are as follows:

"Marami akong natutunan dahil magaling ang aming guro" [I learned a lot because my teacher is good at teaching]. (Student C7)

"Marami akong natutunan kasi magaling magturo ang aming Guro" [I am more knowledgeable for my teacher is superb at teaching]. (Student C5)

"Maraming salamat sa guro naming sa Math at marami akong natutunan" [I'm very grateful for my teacher in Math for I've learned a lot]. (Student C8)

"Ang paborito ko dati ay science at ngayon na ay math dahil magaling ang nagtuturo sa amin at mabait kaya natutunan kong mag plus, minus, times at divide" [Before my favorite subject was Science. But now, Mathematics is my new favorite subject because my teacher is teaching effectively and she is kind. For that reason, I was able to have the four fundamental skills]. (Student C13)

"Ang subject na may maraming kang matutunan dahil maayos itong na didiscust ng aming guro." [This is the subject where you will learn a lot because the teacher discusses well]. (Student C17)

"Nag-enjoy ako kanina sa Math dahil marunong siyang magturo at exciting din ako sa mga palaro." [I enjoyed the lesson in Math a while ago because she is good in teaching. And I felt excitement with the games]. (Student C22)

"Nag-e-enjoy ako sa Math Subject, dahil malinaw na itinuturo ito ni Ma'am at buti nalang ang teacher sa Math na napunta sa amin ay maganda, mabait at mapagpasensya." [I had fun with our Math subject because it was clearly discussed. And fortunately, the teacher assigned to us is beautiful, kind and patience]. (Student C29)

"Nakaka exciting Po ang mga subject pero ang gusto ko ay math dahil lagi akong nagenjoy sa math and masayang nagtuturo anhg teacher namen." [I get so excited with my different subjects specially in Math because I.m always enjoying and my teacher teaches cheerfully]. (Student C30)

"I've learned a lot in the activities we answer a while ago. The operation looks hard but when ma'am Jec's discuss it to us i was able to recite because it's easy to answer when ma'am Jec's who's the one who discuss it." [I've learned a lot in the activities we answered a while ago. The operation looks hard but when ma'am

Jecs discussed it to us, I was able to recite because it was easy answering the activities]. (Student C35)

Expression of Improved Skills. Four of the 36 students in the non-digital gamification group revealed that there is an enhancement to their way of learning in Mathematics by comparing between their past and present behavior. The shared thoughts are as follow:

“Date diman ako marunong sa Math kase di ako gaanong nakikinig at mababa at grades ko sa Math pero nagsumikap ako at nakinig kaya natuto akong sa Math at tumaas ang mga grades ko” [I wasn't good at Math before for I wasn't listening and my grades are not desirable. But I strived and listened well that's why I'm now good at Math. Also, my grades increased]. (Student C7)

“Last year I'm not listening in our lesson and activities after that my grades in Math decreased! and now Im listening and my knowledge in Math increased.” [Last year, I'm not paying attention to our lessons and even in the activities. For that reason, my grades in Math got low. Today, I'm paying more attention and gain more knowledge in Math]. (Student C10)

“Date hindi ako nakikinig pero nagsumikap ako dahil bumagsak ako pero ngayon nakikinig nako at marami nakong natutunan.” [Before, I wasn't listening. I strived because my I got failing grade. But now, I am listening and learned a lot]. (Student C11)

“Dati po akong di nakikinig kala kopo mahirap po ang ang math pero nung nakinig ako madali lang pala at nakaka-enjoy.” [I wasn't listening before. I thought Math is a difficult subject. But when I started listening, I realized that it is so easy and enjoyable]. (Student C32)

Experiences of the Students in the Digital Gamification During the Post – Test

Students in the Digital Gamification group were asked two questions:

1. *Did you enjoy answering the post-test?*
2. *What can you say about the application of fraction calculator in your post-test?*

Percentage of the Students in the Digital Gamification Who Enjoyed the Post-Test

Twenty-five out of twenty-five said “YES”. 100% of the respondents enjoyed answering the post-test. The said post-test is in Google Form made by the researcher.

Experiences of the Students in the Digital Gamification Group During the Application of Digital Gamification in their Post-Test

Students in the digital gamification group were instructed to input their experiences in the application of digital gamification during the post-test. After a thorough analysis of their most frequent responses, three categories were established: **Delightful Experience**; **Easy Access**; and **Swift Evaluation**.

Delightful Experience. Twelve out of 25 stated that they enjoy the application of the digital gamification. The following are the responses regarding enjoyment:

"Masaya ito" [It's fun]. (Learner E6)

"It's ok to use a fraction calc if you need to" [It's good to use a fraction calculator if you needed to]. (Learner E7)

"Happy" (Learner E9)

"nakaka enjoy" [It's enjoyable]. (Learner E14)

"Masaya dahil nakakuha agad ang sagot" [Happy because I was able to get the answer right away]. (Learner E15)

"nakakaenjoy po" [It's enjoyable]. (Learner E16)

Napadali Ang pagsaot ko dahil sa Fraction calculator sobrang saya nya gamitin [It became easier for me to answer the test because of the Fraction Calculator. It's so much fun in using it]. (Learner E17)

"Masaya, dahil madali kolang nasagutan at hindi ako nahirapan" [I'm happy because I was able to answer easily and I didn't have a hard time]. (Learner E19)

Masaya gamitin [It's fun to use the app]. (Learner E21)

Mas bumilis mas naging madali [It's faster and easier]. (Learner E22)

"Maganda sya gamit at nakakatulog Sya" [Its good to use it and it's helpful]. (Learner E23)

"Makikita po yung mga answer shaka maganda gamitin" [You can able to see the answer and it's nice to use it]. (Learner E25)

"nakakaexciting" [It's exciting!] (Learner E2)

Easy Access. Ten of the 25 learners said that digital gamification helped them in answering the post-test easily. The following are their specific views:

"napadali ang aking pagsusulit" [My exam was easy]. (Learner E1)

"it bacame so fast and much easier than solving the problem" [It became so fast and much easier than solving the problem manually]. (Learner E4)

"Mas madali po makaa pag solve" [It's easier to solve]. (Learner E8)

"napadali Ang mga sinasagutan kesa sa pagsasagot Ng problem" [It's easier than answering traditionally]. (Learner E11)

Mas lalong napadali ang aking pagsagot dahil sa app na ito. [It's easier to answer the test because of the app (fraction calculator)]. (Learner E12)

"maganda po dahil na padali po ang pagsagot naming" [It's good because we easily answered...]. (Learner E13)

Napadali Ang pagsaot ko dahil sa Fraction calculator sobrang saya nya gamitin [It became easier for me to answer the test because of the Fraction Calculator. It's so much fun in using it]. (Learner E17)

"Okay siya kase Ms madali ang pagsagot" [e app it nice because it makes the exam easier]. (Learner E18)

"Masaya, dahil madali kolang nasagutan at hindi ako nahirapan" [I'm happy because I was able to answer easily and I didn't have a hard time]. (Learner E19)

"napadali ang aking pagsusulit" [My exam became easier]. (Learner E20)

Swift Evaluation. Three out of 25 mentioned that the use of digital gamification made them answer faster. These are their thought regarding this matter:

"it bacame so fast and much easier than solving the problem" [It became so fast and much easier than solving the problem manually]. (Learner E4)

"Maganda po siya tsaka mabilis po makasagot" [It's nice and much easier to answer]. (Learner E10)

"Magandang gamitin ang fraction calculator Dahil mas mabilis mong makukuha ang sagot at ang solving at pwedi

mo ring mapag aralan Kung papaano na solve Ng fraction calculator ang given sa fraction [It's nice to use the fraction calculator because its fast in getting the answer and in solving. Also, you can learn the solution of the given in the fraction calculator]. (Learner E24)

DISCUSSION

This mixed-methods research aims to determine the effectiveness of digital gamification in improving the addition of rational numbers (dissimilar fractions) skills of Grade 7 students. It specifically describes (1) the difference in pre-test scores between the non-digital gamification and digital gamification groups; (2) the difference between pre-test and post-test scores of the non-digital gamification group; (3) the difference between pre-test and post-test scores of the digital gamification group; (4) the difference in post-test scores between both groups; (5) the experiences of students under non-digital gamification; and (6) the experiences of students under digital gamification.

In the pre-test, both groups obtained low mean scores (control: 1.8056 or 2; experimental: 1.8 or 2) out of 10 items, indicating difficulty in adding dissimilar fractions. This confirms that understanding fractional concepts remains a challenge in Mathematics (Simon et al., 2018), highlighting the need for innovative teaching strategies.

Using a t-test for independent samples, the computed t-value was lower than the t-critical value, indicating no significant difference in pre-test scores between the two groups. Thus, the null hypothesis was not rejected, confirming that both groups were comparable in ability and were heterogeneously sectioned (Oddo, 1994).

Post-test results showed improvement in both groups. The control group increased to a mean of 8.3889 (rounded to 8), while the experimental group increased to 9.72 (rounded to 10). This reflects a notable improvement in both groups after the intervention.

In the control group, t-test results showed a significant difference between pre-test and post-test scores, leading to the rejection of the null hypothesis. Similarly, the experimental group also showed a significant improvement, resulting in the rejection of its null hypothesis. These results indicate that both non-digital and digital gamification are effective teaching strategies in improving students' performance.

However, a t-test comparing post-test scores of both groups showed a significant difference, with the experimental group obtaining higher results. Therefore, digital gamification is concluded to be more effective in teaching addition of dissimilar fractions, demonstrating the value of digital learning materials in enhancing instruction.

Digital gamification promotes engagement and meaningful learning (Kaufmann, 2018). It supports learning through interactive technologies (Sabirli et al., 2020) and addresses learners' needs across different levels and subjects (Silca et al., 2020). It also helps address learning difficulties in specific topics within a pedagogical context (Alsawaier, 2017).

Meanwhile, in the qualitative part, the research used content analysis in associating the findings in the written interview intended to summarize the experiences of the participants in the non-digital gamification group during the study. Among 36 respondents, 22 answered they enjoy the lesson, 12 answered they've learned a lot, 10 commended the teacher in teaching well and 4 expresses self-improvement. Each respondent answered with 1-3 main answers. Thus, four themes were developed: 1. Fun-filled learning; 2. Insightful experience; 3. Facilitated efficiently; and 4. Expression of improved skills.

1. Fun-filled learning – Learning may be challenging in subjects that requires critical thinking and mental focus specifically Mathematics. Incorporating the lesson with fun activities engages learning. The use of gamification is a strategy used to make learning fun yet meaningful. Students enjoy learning due to the desirable stimuli (Hernik & Jaworska, 2018) – digital gamification. Playing games helps to reinforce learning. The skills acquired during the games are critical to the learning process. This experience makes learning more engaging by using games. While learning, students are also having fun.
2. Insightful experience – The skill of addition of dissimilar fractions has various steps in performing it. These steps are complicated when not explained well. On the other hand, it can result of a feeling content after mastering the skill and executing it correctly. Learners are very eager to learn. One of the teaching strategies that can make learners learn this skill is the digital gamification. Learners inspired in learning fractions when teaching-learning has touch of technology (Naidoo & Hajaree, 2021).
3. Facilitated efficiently – Learners exert efforts whenever they feel they are given the best quality of education. They tend to equate how they are taught. Learners who consider they are being taught well, engage learning all the more. Learners desire quality instruction. Also, this is a revalidation that the teacher is still the best instructional material. Global modifications in education failed to defeat the spirit of educators (Berry, 2016). Teachers remain the best source of knowledge.
4. Expression of improved skills – The goal of education is not only for students to learn a lot, enjoy the lessons, and be well-taught, but also for them to improve in their lives. Education is meaningless unless it results in a change in behavior. The challenge in education is to be able the learners seek for continuous improvement (Cadwell & Anderson, 2019). The biggest impact on education is the desired change.

In addition, in the qualitative part, the research used content analysis in associating the findings in the written interview intended to summarize the experiences of the participants in the digital gamification group during the application of fraction calculator during their post-test. Among 25 respondents, 12 answered they enjoyed the application of digital gamification during the post-test, 10 shared that the fraction calculator made them answer easily and 3 of them mentioned it made them answer faster. Thus, three themes were developed: 1. Delightful experience; 2. Easy access; and 3. Swift evaluation

1. Delightful experience – Learners enjoy doing activities with the use of digital technology. Digitalized materials, can create innovative ways that are highly suitable in education where learners appreciate it so much. Learners enjoy participating digital gamification.
2. Easy access – Today's generation are very much practiced in using digitalized materials than doing the conventional ways. For example, it's easier for them to have research on a specific topic by surfing the internet rather than going to the library and read tons of books. For them, technology is now their new study-buddy.
3. Swift evaluation – Everyone hates waiting. Even in education. Specifically, the learners. For example, in Math, if there are two ways in solving a particular Math question, they will choose the math tricks. Not because of the ignorance of the use of formula but because Math tricks are faster. Same as through with use of applications. Learners are very fascinated with the quick answers.

As a conclusion, students tend to enjoy lessons when games are incorporated, often without realizing that they are already learning in the process. Through gamified activities, they are able to grasp concepts more easily and apply mathematical skills effectively. They also show greater appreciation for teachers when they feel well-supported in their learning. Comparing their perspectives before and after the intervention also reflects their improvement and learning development.

Digital technology, often described as making life easier and faster, also shapes learners who expect quick results and may easily feel frustrated with challenges. However, when digital materials are combined with games, learning becomes more engaging, convenient, and enjoyable. Students today are also highly exposed to online environments, making them naturally curious and receptive to digital learning tools.

The COVID-19 pandemic further emphasized the importance of flexible learning. As stated by DepEd Secretary Leonor Briones, "Education cannot wait," leading to the shift toward home-based learning through modalities such as online, modular, and blended learning. According to de Berr et al. (2020), homeschooling and alternative learning approaches have become widely practiced globally, requiring education systems to adapt to new learning conditions.

In response, teaching strategies must continuously adjust to learners' needs. Blended learning, which combines face-to-face, online, and modular instruction (CIIT College of Arts and Technology, 2020), has long been part of the education system even before the pandemic (Custodio, 2020).

Digital gamification emerges as a relevant and adaptable teaching strategy suited for both traditional and modern learning environments. It remains effective whether in face-to-face or online settings, making it a flexible approach for current and future education. Ultimately, digital gamification reflects the evolving nature of teaching and learning in a technology-driven world.

In connection to the conclusion, significance and limitations drawn, the following recommendations are hereby made:

1. Creating other innovative teaching strategy or usable instructional materials that will improve the addition of dissimilar fraction skill of the learners whether pandemic or not. Regardless of the circumstances, education must continue. Thus, it is a challenge to reinvent a teaching approach for all seasons;
2. Conduct a study on the effectivity of digital gamification in education in an online set-up. For this study happened only during a face-to-face class (offline). Digitalized teaching approaches but in a different classroom arrangement. For online is very rampant nowadays; and
3. Perform a study on digital self-independence learning materials where there will be different level of difficulty. Each level has a specific skill that learners needed to master in order to proceed to the next level. And without the assistance of an educator wherein learners can acquire knowledge on their own. Independency is one of the goals in education.
4. Create a study on the effectivity and impacts of use of internet connection to different schools (government or public) physically, emotional and psychological.

Limitation of the study

Although digital gamification makes learning enjoyable, this study cannot guarantee that all students have access to laptops, mobile phones, or other learning-supporting technologies. Some students may not even have personal devices, especially those from families with limited financial means (The News Lens, 2020). In line with this, the Department of Education (DepEd, 2020) stated that students do not need technology to continue learning during the pandemic, as printed self-learning materials are provided.

Internet connectivity is another major limitation. Even if students have devices, they may not always have stable internet access. As Senator Sherwin Gatchalian (2020) noted, students who cannot afford digital resources are not required to use the internet. This limits the full use of digital gamification, particularly its online features.

However, gamification can still be applied offline since it is not limited to digital platforms or apps. It is flexible and can be integrated into modular learning through simple strategies, such as awarding points for completing module activities, submitting work on time, or following instructions properly. Ultimately, the effectiveness of gamification depends on the creativity of the teacher in adapting it to both online and offline learning contexts.

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Situational analysis of the Grade 8 students' performance in summative evaluation and their learning circumstances in a coastal area school: Basis for alternative delivery mode of instruction

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Abstract

This is an explanatory sequential mixed-method research which primarily aimed to feature the situation of the grade 8 students' performance in the summative evaluation particularly the periodical test as a springboard for a greater analysis of the learning circumstances in a school located in a covered coastal area and the grade 8 teachers' performances based on the Result-based Performances Management System (RPMS). It aimed also to describe the relationship between the Grade 8 students' and teachers' performance in a given school-year. This is undertaken to derive necessary inputs and insights as a basis for a possible design of an alternative delivery mode of instruction in the said type of setting and surrounding conditions. Data were gathered from the results of the grade 8 students' performances in the periodical tests in eight subject areas and from the ratings of the Grade 8 teachers' performances based on the RPMS in the same covered school-year. Data were correlated using Pearson r . Results show that the two variables are not statistically correlated. The study concludes that other institutional factors could be accounted for the poor performance of the Grade 8 students apart from the teachers and from the Barangay Captain and Councilors. The study found that the learning facilities and the surrounding conditions of the schools located in the coastal area appear to be less conducive for learning that contributes to the poor performances of the Grade 8 students. Insights from the study may be used to design steps on supervising and monitoring institution to help learners in similar residential areas achieve better outcome regardless of the modalities of instruction. .

Keywords: *Correlation, instructional quality, learning environment, physical facilities, situational analysis, summative evaluation*

INTRODUCTION

Education is very vital in the transformation of each child. The learning Institution must be aware of its responsibilities in the said transformation, thus committing itself in providing quality education so that the students will be uprooted from poverty and they can become productive members of their respective communities.

The provisions of Education for All (EFA) has always been the key priority of the Philippine government. The access to basic education is the first step for achieving a brighter future, that is why the government always aim that every Filipino will have an access to basic education. Providing access to basic education is not enough, it needs to consider all the aspects and components of quality education that no child should be left behind.

In order to provide a solid core foundation for an education that represents the desire for excellence, feedback coming from students; evaluation tools is a major consideration for the educators. Assessment provides measurable approach towards students' excellence.

The study is mixed method research primarily aimed to feature the situation of the Grade 8 students' performance in summative evaluation as a springboard for a greater analysis of the

learning circumstances in the school located in the coastal area. This is undertaken to derive necessary inputs and insights for a possible design of alternative delivery modes of instruction in said type of setting and surrounding conditions.

Specifically, the study seeks to describe (1) the performance of grade 8 students based on summative evaluation particularly the periodical tests in a given school year; (2) The Grade 8 teachers' performance based on the Results-based Performance Management System; (3) The relationship between the Grade 8 students' and teachers' performances; and (4) The learning circumstances in the school located in the covered coastal area.

The study is expected to have the following significance; it may provide important information to the national and local policy makers and program designers so that they will further revise and develop appropriate programs. This research also desired to contribute to the school community by initiating responsible parties in a school improvement program which will end with the high performance of students. Lastly will serve as a starting point for other researchers who are interested to do their research on the title.

Time constraint and demographic location are the problems encountered while conducting the study. Initially, data was not collected as planned, because some of the schools are located on places where accessibility for land transportation is quite not easy due to demographic location. The school participants as well as the researcher are residing along the coastal area where massive flooding is uncontrollable and very prominent.

Internet journals and other articles which were examined through the internet were limited due to poor access in the internet. This research was limited to the Grade 8 students' summative evaluation particularly the periodical tests in one school year and Grade 8 Teachers' performance based on the Results-based Performance Management System framework. The learning environment presented is limited also to the geographic location, surrounding environment and classroom facilities.

Literature Review

United Nation's Educational Scientific and Cultural Organization (UNESCO] (2019) stressed the importance of education in their 2030 Agenda for Sustainable Development wherein representatives of various states agreed to promote education as a basic human right. This means that members of United Nation will need to make sure that their countries provide an inclusive and equitable education and promote lifelong opportunities. The Philippines, who is a member country is one of the supporters of this advocacy by incorporating the "No Child Left Behind Policy" among schools.

Generally, this is observed among schools in the country starting with the compliance of the Department of Education with the number of years of schooling of Filipino learners in the basic education. Currently, the Philippines implements the K-12 program where students are required to attend kindergarten and 12 years of primary and secondary education (6 years in elementary, 4 years in Junior High School and 2 years in Senior High School).

In the same way, contextualization and localization of lessons as mentioned in section 10.2 of Republic Act 10533 known as Enhanced Basic Education Act of 2013 is expected to be adhered by schools in the country so they may offer lessons which are relevant to the lives of the learners.

These programs intended to make the quality of education in the country more appealing to the students and at the same time competitive enough so that the graduates of the Philippines can be comparable to the graduates of other countries.

Unfortunately, though there were several programs already implemented, some factors still trigger the poor performance of students. In December 03, 2019, CNN Philippines reported that the Philippines ranked low in Reading, Science and Math. Results were based on the Program for International Assessment (PISA) which tested 600,000 fifteen (15) year old students in 79 countries.

A UNESCO report in 2008 found out that one of the factors why Filipinos have poor academic performance is due to "chronic underfunding" (2020) (cited in World Education News and Reviews [WENR], 2020). World Bank has reported that even if education remains as a top priority of the Philippines in terms of budget, it is still deficit in terms of infrastructure.

Other factors that affect students' performance are low proficiency in English, absenteeism and living on crowded households (Harb & Shaaram, 2006). Aside from these, Mushtaq and Khan (2012) said that communication and parental guidance are important factors to student's performance.

Normally, schools in coastal areas are often underdog in terms of students' performance since not much is given attention to them due to their distance from towns and cities. There is also less likely that mainstream media will broadcast what happen to them unless documentaries will be shoot on their places.

Problems of many coastal areas in the country are focused on two: (1) constant flooding and; (2) poor academic performance. Since the Philippine is prone to experience a minimum of 20 typhoons every year, class suspensions are inevitable to these areas. Add up the lack of functional school facilities, students' academic performance suffers. (Figuerola, 2016] Lim & Lee, 2016).

To understand the needs of the learners in these coastal areas, a situational analysis is most suitable to take. Situational analysis in schools include the following components: (1) learners' environment; (2) curriculum; (3) teachers' skills and; (4) stakeholders support.

Teachers' Skills-Teachers' professional and personal competence are necessary to education. When teachers know what they are teaching, how they will teach it, and how they will relate it to their students, it encourages the students to love learning. However, to ensure this, continuous professional development must be ensured.

Stakeholders' support – School heads must always make that it communicates not just to the students and teachers the different programs of the school but also to the other members of the community. In this way, all the members of the community take part in the education of the students. In this study, all these factors must be considered in order to understand the learning circumstances of Grade 8 students in a school in a coastal area.

Finally, situational analysis is a key foundation for any sound intervention. It helps to ensure a program's relevance and to find out the best course of action such as strategies, entry points, and partnership. Carrying out a situational analysis will help avoid duplication of efforts.

Instructional quality is considered to be an important classroom variable as it is significantly related to students' motivation and achievement. Existing studies in educational effectiveness furthermore identified a positive relation between instructional quality and school climate, suggesting that the school environment plays a significant role in teachers' instructional practices.

Summative evaluation is used to measure the comprehension of the students about the lesson. It is based on the assessment that was given at the end of the educative learning process. This will certify the students' developed and acquired knowledge at the end of the education activity, it is applied on the basis of modifying and applying next lesson plan.

Evaluation is a strategic process of measuring the success of a program in achieving its goal and to anticipate along the lessons learned. An evaluation should be contrived so that there is some thought and intent as to what is to be considered, how best to get hold of it and what analysis of the collected data will tell us about the plan. It is about finding a decision on the information gathered.

Summative evaluation results are likewise reported to agencies outside of schools for the intent of awarding qualification and for accountability measures. These are described as high stakes purposes because students into tertiary education or work have often related or determined by their success in such summative evaluation.

Summative assessment for qualification needs to be based on operations and the criteria that guarantee comparability both within and between schools. The government officials from the educational institution with their counterparts' view. Summative evaluation as a tool useful for accountability purposes and for calculating the effectiveness of teacher or schools and for ranking schools,

There is particular concern when school ranking based on aggregated summative evaluation data from limited sources is published leaving government officials and the general public interpret the summary without important contextual knowledge.

The extensive use of summative evaluation for proper accountability can bring the public an insight of students' is well functioning and performing at school. This evaluation might give some unintended consequences such as unfair public judgment about the standard of instruction in some schools leading to question the school's reputation and enrollment pressures.

Summative is lifted by a scope of parameters. Tests must indicate standards to be aimed for and enable these measures to be monitored and maintained the set up standards. Advocates claimed that tests, caused students as well as teachers and schools to put more elbow grease into their work on account of rewards and penalties that can be given along the footing of the outcome of tests.

In proponent of this argument is the claim that the increases in scores are mainly the consequences of familiarization with the tests. Teaching is directed toward answering the questions rather than building up the skills and knowledge of the students which are intended in the curriculum. It is indicated that tests motivate only some students and increase the disruption between the higher and lower achieving students, moreover, tests motivate even the highest achieving students towards performance goals as called for continuing learning.

This methodical analysis was stimulated by apprehension to see the impact of summative assessment and testing which has increased in some rural regions for the past years on the student's motivation for learning. The impact of evaluation on teachers about their teachings as well as student's achievement has been well studied and reviewed which was represented through research, less consideration and attention have been given which influence much the effects of the emotive and cognitive ability of students that contributes to less enthusiasm for learning.

Summative assessment *must* have the following essential requisite (1) It must reflect the knowledge learned on the formative assessment that comes before it. (2) It should counterpart the material taught. (3) It must define students' final achievement (4) It may be significant to a final decision, final grade or final report.

Students' summative evaluation has been considered in the literature, international research focusing on ongoing teacher decision making based on suggested data argues, that teachers are often unskilled in the used of aggregated information and tend to struggle to make best utilization of the information collected

The vital information to work with collected assessment data is specialized and requires technical expertise, such as knowledge of basic statistical testing, ways to graphically represent data sets, level of significance and so on.

To ensure quality summative evaluation the principle of ethics and fairness need to be applied. noted that teaching is conceptualized as primarily and essentially an ethical enterprise by most researchers, even disciplinary knowledge has a moral dimension at its heart and so shapes teachers' moral commitment and action.

Summative assessment makes so invaluable of each high-stakes tests may result in educators using the data for conclusion with substantial long-term consequences affecting a student's time to come. Passing this evaluation, grants important remunerations, such as having a high school certificate, scholarship, or admission to college, and failure can involve student's future employment scenarios and earning potential as an adult.

Additionally, summative evaluation plays an important function in refining upcoming instruction by providing mentors with data on the effectiveness of curriculum and teaching. Knowing what approaches worked for a lesson or semester may not help current students, but it can provide educators with the essential comprehension into how and where to redesign instructional practices to lift up next year's students' scores

Summative evaluation is a review of learning and knowledge gained at the culmination of an instruction at a given point in time. It relates students' knowledge, thoughts, ideas, skills, and talents against standards or benchmarks. It evaluates the mastery of learning; it gauges how a specific person responds to an intervention rather than concentrating on an individual.

Summative evaluation was classified as (1) Teacher constructed tests (Informal) which originated from teacher's daily interactions and observations of how students work and perform in school, since the opening of the school, teachers become dependent predominantly, which today includes teacher constructed tests and quizzes, grades and portfolios and relies heavily on a teacher's professional judgement. Teachers inevitably formed judgement often accurate about students' performance.

Robustness or validity is the standard of how good an instrument gauges the relevant accomplishment of students. A survey which was based on literature makes the three basic types of validity, these are the (1) constructed (2) criterion (3) content. Students will be at its best when teachers focus on content validity, to make sure the content verified is actually the content that was taught

Dependability is the key in the evolution of any teacher- constructed tests because teachers must guarantee that repeated testing of a student practicing the same evaluation will produce consistent results. A reliable evaluation gives the teacher confidence that the instrument provides an honest description of a students' skills or knowledge thoughts and ideas.

Reliability and validity may sometimes be at odds. For illustration, an English language tests given between a person whose main language is English while the other is not, the English tests are valid and not valid respectively.

The second major category of summative evaluation is the standardized tests (Systematic). It is normally used in schools. Schools gives an emphasis and significance in this type of evaluation, since the passage of the No Child is Left Behind. Every student is requested to participate in mandatory standardized tests during his or her academic career.

Summative evaluation should be selected, trained, and applied based on their ability to assess the mastery of the program outcomes, core abilities and learning that passed both general instruction and support courses related to the progress of students. display of skills, talents, abilities and knowledge learned throughout the class, course or program.

Evaluation is used for different purposes. The purpose is internal if it used within the school premises or inside the school jurisdiction and it is external if it is used outside the school jurisdiction, such as, an award of qualification and for accountability purposes.

Educators continue for quest of excellence, until they come with different competency-based teaching standards and one of these competencies is the Domains of National Competency-Based Teaching Standards for teachers. This serves as the guidelines of effective teaching in an educational activity.

Educators continue for quest for excellence they continue to study to improve the educational system of the country, until they come up with RPMS framework and implemented its guidelines.

The RPMS Framework serves as the guidelines on the founding and Implementation of the outcomes-based Performance Management System (RPMS) the RPMS framework which is recognized as the DepEd Order no. 2, s 2015 describes the detailed mechanisms, standards, progressions and improvements of the performance target setting, monitoring, evaluation, and development planning for schools and government offices.

The Result-based Performance Management System (RPMS) is the department of education worldwide process of insuring that employees focus work efforts towards achieving the mission, vision of the Institution and its strategic priorities. It is also a mechanism to supervise, monitor and measure performance, and identify human resource and organizational development needs.

DepEd order no. 2, s, 2015 is the guide on the implementation of the Results-based Performance Management System (RPMS) in the Department of Education.

METHODS

This research sought to describe the situation of Grade 8 students and their performance in summative evaluation as a springboard for a greater analysis of the learning circumstances in a school in a coastal area.

To derive the necessary inputs for the study, a mixed method research design was employed. Shorten and Smith (2017) describe this research design where a researcher collects both quantitative and qualitative data. According to them the use of mixed method allows a researcher to get a "panoramic view" of a research topic since it can analyze both numerical and descriptive data. In this research, the analysis of students' summative evaluation and teachers' performance for one school year served as the numerical data to be analyzed, whereas the results of the situational analysis were the qualitative data. These types of data allowed the researcher to see in a greater perspective the effects of living and studying in a coastal area for the students' academic performance.

Meanwhile, to be able to carry out the data gathering, twelve (12) schools in a coastal area in a certain province were chosen to be the setting of the study. Out of these schools, the performance rating of Grade 8 teachers in the Individual Performance Commitment Review Form (IPCRF) and summative evaluation results of Grade 8 students in the different periodical exams of various areas were derived. These data were duly requested started from the School Division Superintendent where these schools are under supervision, the school head of each school and the particular head teachers of each subject concerned.

Periodical examination used to obtain numerical data came from the Division Office usually prepared by Education Program Supervisor (EPS) assigned in a specific subject area. On the other hand, Individual Performance Commitment Review Form is an annual improvement plan a teacher prepared in order to set her goals for a specific school year. These IPCRF are evaluated twice a year: first is at the end of November whereas the final evaluation is on April of the current school year.

To determine the relationship between students' performance on periodical examinations and teachers' performance, Pearson r was used to correlate the results.

Numerical data obtained were validated by each school heads. Some of the data were sent to the researcher either through electronic mail of Facebook Account while the rest was personally handed to her by the school personnel in charge of the said documents. Meanwhile, to be able to describe the current situation of students and teachers in these schools near the coastal area, specific documents were requested from the Disaster Risk Reduction Office of the particular province where the research is set, the Enhanced School Implementation Plan (E-SIP), the Local Government Unit (LGU) and the teachers.

To analyze the data obtained from these different individuals, situational analysis was used by the researcher. Situational analysis on the weather condition which affected the area, natural calamities and scenario during and after this phenomenon.

Presentation of Data

Table 1

Population and Performance of Grade 8 Students per Subject who took the Periodical Test (PT)

School	1 PT	2 PT	3 PT	4 PT	Average Populatio n	Eng	Math	Sci	Fil	Aral Pan	MAPEH	ESP	TLE
A	381	386	372	372	378	63.18	48.03	65.08	52.23	57.87	65.05	68.37	65.46
B	23	23	23	22	23	67.69	66.58	68.34	69.68	76.09	68.35	65.08	73.54
C	44	47	47	48	47	65.86	66.95	34.45	65.61	68.01	67.61	70.14	16.10
D	161	157	151	152	155	55.88	55.80	49.58	57.34	60.43	58.49	64.25	31.71
E	59	59	59	56	58	65.19	62.74	62.33	68.79	66.68	61.60	65.49	63.19
F	505	525	525	524	520	55.93	52.29	51.95	58.78	61.69	59.77	65.93	38.49
G	88	88	88	84	87	60.63	59.42	59.85	63.56	61.55	57.29	59.19	9.53
H	50	48	45	45	47	53.89	59.91	87.56	63.29	60.19	54.15	61.61	23.16
I	332	325	315	315	322	55.50	56.38	56.89	57.24	58.76	57.49	66.19	19.48
J	248	250	253	254	251	63.43	63.44	60.82	63.70	63.83	64.17	65.36	63.05
K	156	154	152	152	154	66.67	71.37	64.39	65.85	65.13	67.26	63.24	8.18
L	136	129	128	128	130	59.39	60.46	61.32	63.63	61.83	61.31	64.66	62.94
Total Population/ average performance	2183	2191	2158	2152	2171	61.10	60.28	60.21	62.48	63.51	61.88	64.96	39.57

Table 2

Population of Grade 8 Teachers

No	Subjects	Very Satisfaction/Years in Service							Total	Very Satisfaction/Years in Service							Total
		1-5	6-10	11-15	16-20	21-25	26-30	31-35		1-5	6-10	11-15	16-20	21-25	26-30	31-35	
1	Fil	8	3					1	12	1							1
2	Eng	7	4						11	8							8
3	Math	6	4					1	11	5							5
4	Sci	8	2					1	11	2			2				4
5	Aral Pan	6	5						11	3	2						5
6	ESP	12	1						13	3	1						4
7	TLE	6	7						13	2		1	5				8
8	MAPEH	2	8						10	4							4
Total		55	34	0	0	0	2	1	92	28	3	1	7	0	0	0	39
%		42%	26%	0%	0%	0%	2%	1%	70%	22%	2%	1%	5%	0%	0%	0%	30%

Source: Individual performance commitment review form

Table 3

Data interpretation (Students)

Numerical rating scale	Equivalent rating (%)	Adjectival rating scale
5	66% or above	Outstanding
4	64%-65.9%	Very Satisfactory
3	62%-63.9%	Satisfactory
2	60%-61.9%	Unsatisfactory
1	59.9% or below	Poor

Table 4
Data interpretation (Teachers)

Mean Range	Adjectival rating scale
4.50-5.00	Outstanding
3.50-4.49	Very satisfactory
2.50-3.49	Satisfactory
1.50-2.49	Unsatisfactory
1.00-1.49	Poor

RESULTS

The results of the study are presented with reference to the aim of the study. First is to describe the performance of Grade 8 students based on the summative evaluation (periodical) in a school year. Second is to describe the Grade 8 Teachers' performance based on RPMS framework. Third is to determine the relation by the two variables and fourth is to describe the learning circumstances of the schools located in the coastal area.

Table 5
Students' performance

No.	Subjects	Average Mean per Subjects/quarter				Ave	Numerical Rating	Adjectival Rating	Mean Rank
		1 st qtr.	2 nd qtr.	3 rd qtr.	4 th qtr.				
1	English	57.10	58.55	61.62	67.14	61.10	2	Unsatisfactory	5
2	Mathematics	55.79	59.11	60.70	64.17	60.28	2	Unsatisfactory	6
3	Science	55.98	58.87	62.36	63.65	60.21	2	Unsatisfactory	7
4	Filipino	56.75	60.06	64.62	68.46	62.48	3	Satisfactory	3
5	Araling Panlipunan	60.75	62.67	63.95	66.52	63.51	3	Satisfactory	2
6	Music, Arts, Physical Education and Health	57.95	61.60	63.53	64.44	61.88	2	Unsatisfactory	4
7	Edukasyon sa Pagpapakatao		65.14	63.51	65.93	64.96	4	Very satisfactory	1
8	Technology and Livelihood Education		49.26	19.23	19.28	39.57	1	Poor	8
Average per Quarter			57.34	55.45	57.66	60.55	59.25	1	Poor

Source: School records of teachers on test scores

The table shows that the Grade 8 students achieved poor performance in all subjects (59.25). Specifically, the average performance per subject is ranked accordingly: Edukasyon sa Pagpapakatao; Araling Panlipunan; Filipino; Music, Arts, Physical Education and Health; English; Mathematics; and Science and Technology and Livelihood Education.

Table 6
Grade 8 Teachers' performance using the results-based performance management system

No.		1	2	3	4	5	6	7	8	
Subject teachers		Filipino Teacher	English Teacher	Math Teacher	Science Teacher	AP Teacher	EPP Teacher	TLE Teacher	MAPEH Teacher	Overall rating
Framework	APR	4.20	4.29	4.24	4.29	4.34	4.23	4.33	4.37	4.29
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
	APR	4.40	4.46	4.40	4.30	4.56	4.35	4.40	3.91	
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
A	APR	4.60	4.19	4.54	4.45	4.45	4.51	4.51	4.45	4.46
	AR	Outstanding	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Outstanding	Outstanding	Very satisfactory	Very satisfactory
B	APR	4.34	4.15	4.21	4.45	3.86	3.86	4.30	4.46	4.20
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
C	APR	4.00	4.65	4.33	4.45	4.40	4.01	4.25	4.42	4.31
	AR	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
D	APR	4.20	4.20	4.00	4.00	4.30	4.20	4.38	4.00	4.16
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
E	APR	4.20	4.65	4.33	4.20	4.40	4.01	4.25	4.42	4.31
	AR	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
F	APR	3.75	3.79	3.80	3.80	4.75	4.75	4.76	4.50	4.24
	AR	Very satisfactory	4.25	Very satisfactory	Very satisfactory	Outstanding	Outstanding	Outstanding	Outstanding	Very satisfactory
G	APR	4.11	4.19	4.25	4.45	4.16	4.18	4.20	4.15	4.21
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory
H	APR	4.20	4.40	4.42	4.62	4.60	4.50	4.50	4.50	4.50
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding
I	APR	4.40	4.50	4.28	4.40	4.55	4.40	4.35	4.66	4.44
	AR	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Outstanding	Very satisfactory	Very satisfactory	Outstanding	Very satisfactory
J	APR	3.75	3.75	4.00	4.05	3.45	3.45	3.50	4.50	3.81
	AR	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Very satisfactory	Outstanding	Very satisfactory
K	APR	4.20	4.50	4.50	4.62	4.60	4.50	4.50	4.50	4.49
	AR	Very satisfactory	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Very satisfactory

APR = Average Performance Rating; AR = Adjectival Rating

The Periodical tests are prepared by a master teacher per subject area which is validated by the respective Education Program Supervisor then will send to different school and thru schools' e-mail address and will receive by the testing coordinator of each school for distribution to the concerned.

Table 6 exhibits the Grade 8 teachers' performance based on RPMS. Generally, the Grade 8 teachers achieved a *very satisfactory rating with a score of 4.29*. Specifically, the ratings are as follows: English teachers (VS-4.29); Math teachers (VS-4.24); Science teachers (VS-4.29); Filipino teachers (VS-4.20); A. Pan teachers (VS-4.34); MAPEH teachers (VS-4.37); ESP teachers (VS-4.23); and TLE teachers (VS-4.33).

Table 7

Relationship between Grade 8 students' performance in summative tests and RPMS-based teachers' performance

Bivariate	Pearson r	P-value	Interpretation	Conclusion
Grade 8 Teachers' Performances based on RPMS and Grade 8 Students' Periodic Test Summative Evaluation	-.312	0.453	Not significant at 0.05 level	No significant relationship

p-value is greater than 0.05 level = not statistically significant

RPMS = Results-based Performance Management System

Table 7 presents the relationship between the Grade 8 Teachers' performance based on RPMS framework and Grade 8 students' summative evaluation (periodical test) It can be observed from the above data that there is no relationship between the two variables.

Table 8

School geography

Schools' Geography	
(1) Location	Near the river
(2) Relative Distance of the School	
a. from the Población	5 km
b. from the nearest public Elementary school	0.2km
c. from nearest private elementary school	4 km
d. from the nearest public secondary school	5 km
e. from the nearest private secondary school	5 km
f. from the District Office	0.2 km
g. from the Division Office	20 km
(3) Most Frequent Hazards	
a. 1 st most frequent	flood
b. 2 nd most frequent	Typhoon/storm/ tropical depression

Table 9
Learning Environment

Learning Environment	
(1) Grade 8 total Enrollment	292
(2) Classroom/Learner seat	48.67: 1
(3) Toilet seat	
a. Male	64.78: 1
b. Female	48.33 : 1
(4) Internet Connection	Poor connection
(5) Road Condition	Poor condition

Table 10
Class suspension due to typhoon

Month	Number of School Days Suspended
June	1
July	8
August	11
September	8
October	1

Source: Pampanga Disaster Risk Reduction Management Office (PDRMO)

DISCUSSION

Information analysis is believed to be an important step and the core of the inquiry. In this chapter the data gathered together are believed to be as raw materials needs to be sort out and organize in a certain format to get a significant information. It is the most vital and crucial mechanisms of the inquiry.

The study draws and attained a decision from the set of the gathered data. Interpretations in this research has two most important aspects, namely, instituting continuousness in the research through associating the results of a given study with those of another and the setting up of some relationship with the collected data.

Analysis can be defined as the means of explaining what has been gathered in the course of the study for better understanding, it serves as a guide for other researchers to go for further research work.

Interpretation of the data in this research work has become a very significant and essential process, because it gives an in-depth knowledge about the findings, for better understanding about the reasons behind their existence, to gives more knowledge that can be acquired with the help of future and further research. Finally, it provides guidance in the studies relating to the research work.

This research presents the situational analysis of the Grade 8 students' performance in summative evaluation as a springboard for a greater analysis of the learning circumstances of the

twelve schools in coastal area to derive necessary inputs and insights as a basis for a possible design of alternative delivery mode of instructions in said type of setting and surrounding conditions.

Barangay in the coastal area are headed by a barangay captain with councilors who work hand and hand to achieve the goal of the community. They involved themselves in the community that aims to produce progress in the school. Since the schools in the coastal area are surrounded by a body of water, the major source of income is fishery. Some families developed some of their land property into fishpond, raising tilapia, shrimps, crabs and other kind of fish.

Barangay in the coastal area flood prone. Every now and then, water will come and go, thus the people have learned to adopt with the flood. Some families see this as an advantage by catching fish for food, others used "Bangka" a boat for transporting people from one place to another place within the community to earn for a living. Tricycle is the most popular means of transportation in the barangay. Electrical, water provisions, Internet access and digital telephone are some of the technologies available in the barangays.

Schools in the coastal area are generally categorized as big and small schools. Despite of their eagerness and dedication for achieving students' academic excellence there are still some factors beyond their control that affects the quality of education. During rainy seasons, schools will encounter frequent suspension of classes which lasts for almost 30 days because the classrooms as of this seasons are under flood water as well as the school premises. Electrical wirings and electrical switch inside classrooms are not functioning and not safe to used due to flood. Roads are not passable to vehicle due to heavy flood, after flood subsides dengue fever might encounter. These circumstances are beyond the control of the school management; these contributes to the performance of the students in academic for a certain grading period. Teachers cannot teach the necessary learning competencies within the time frame that resulted of poor performance in the standard test given by the Division Office.

When flood subside and classes resume, the school management need to consider again the schedule of the high tide and low tide issued by the Pampanga Disaster Risk Reduction Management Office (PDRMO) in scheduling the classes for safety and security purposes, as water level rises, schools will be flooded again and this scenario will last up to October of the current school year. Some schools in the coastal area are shifting schedule mode. Morning shift is 6:00 am to 12:00 am while the afternoon shift is from 12:00 am to 6:00 pm due to shortage of classrooms. Because of classroom shortage no proper venue which are conducive for learning to be used for training activities, remedial classes, school activities rehearsal, and reviewing. These different activities are contributory factor on the academic performance of the learners because it is usually done in the covered court and along the hallway or corridor which contributes noise that makes the learners inside the classroom unfocused.

During the Saturday Classes, which were scheduled as remedial classes, almost half of the teaching personnel are absent because of their studies in the Graduate School, aside from that, students do not come to school, some parents consider Saturday as family bonding. Strategic Intervention Materials and modular lesson was introduced to cope up with the lessons during class suspension due to flood, but not effective enough because some of the students are 4p's beneficiary and do not have internet access at home and no extra money to go to internet shop to download their respective intervention lesson.

Roads are not in good condition. Transportation going to the school premises is not quite easy aside from high fare being charge by the tricycle driver due to the condition of the roads, they claim that they will incur higher maintenance cost and repair because of the condition of the roads.

Finally, during the "BER" months the school management needs to resort with the daylight-saving time (DST) for safety and security purposes again, some of the students are residing far from the school especially those who cross the river and riding a boat which is very risky for them if they will go to school and going home at dark night.

These are the learning circumstances in the school in the coastal area, aside from these, schools in the coastal area are Child Friendly School who's teaching and non-teaching personnel are very satisfactory in fulfilling their duties and responsibilities as per the recent Result-Based Performance Management System (RPMS) ratings. These circumstances are being undertaken because the study aims to describe also the grade 8 students' performance in the summative evaluation and the performance of the grade 8 teachers in one school year and the relationship between them.

The performance in the first quarter is poor with an average score of 57.34. As mentioned before under the previous chapter that schools are located on the coastal area wherein massive and perennial flooding is very prominent. During the first quarter of the school year, schools are under flood water, classes are always suspended because of the danger that might be encountered by the learner in going to school. Roads are not passable to light vehicle due to heavy flood, classrooms are under water, this problem is very fatal because it affects the learning activity and momentum of the learners, teachers cannot teach the required competencies for the quarter, results are poor performance on the summative evaluation (periodical test).

The problem continues up to the second quarter with an average performance score of 55.45 due to same reasons. On the third quarter with an average performance score of 57.66 shows slight improvement, because the rainy season ends at this time, no frequent suspension of classes and it is also the time for remedial classes which falls every Saturday to cope up with the missed lessons. On the fourth quarter there were some improvements with an average performance score of 60.55, but not enough to meet expectation, since it is the last quarter, summer vacation is fast approaching, learners are losing their momentum to strive hard, and it's too late for more improvement because it is the time for evaluation and assessment.

Comments on this study is presented in this section, providing an overview of the research endeavor. The first research objective is to describe the Grade 8 students' performance based on summative evaluation, particularly the periodical tests result in one school year. The students' performance was interpreted as poor; comments on the first quarter were as follows; (1) Opening and start of classes is every first Monday of June (2) First periodical test falls every midweek of the month of august (3) After regular three weeks of classes, the succeeding classes will be suspended due to the flood brought by different calamities and typhoon landed in the province. (4) Suspension of classes by this time lasts for almost 30 days because during these days, classrooms are under water, roads are not passable (5) sometimes class suspension is extended until September (6) Learning competencies for the first quarter and second quarter needed by the learners is affected due to the worst situation in this area (7) When classes resume, still irregular, adapting with the high tide and low tide announcement by the LGU's, the school head need to adhere and to look after with these announcements for safety and security purposes (8) Teachers are running out of time in teaching the learning competency just to comply with the standards set by the School Division Office.

For example, in mathematics 8, there are 20 learning competencies in the first quarter of the school year which are needed to be taught within 56 days, but 30 days has been lost due to suspension of classes brought by perennial flood. On the second quarter, (1) Suspension of classes is still extended until second quarter (2) Some teachers are still teaching the learning competencies for the first quarter (3) Periodical test for the second quarter will be given again and not yet discussed the learning competencies needed for this quarter (4) Relying on the schedule of the low tide and high tide as basis for class schedule due to safety and security purposes. On the third quarter, (1) regular class, regular schedule and remedial classes begins, while same schedule on the fourth quarter of the school year.

The second objective is to describe the Grade 8 teachers' performances based on RPMS framework. The Teachers' performance was interpreted as very satisfactory. Comments were as follows; (1) Key Results Area are not standardized and general when preparing the Individual Performance Commitment Review Form.

The third objective are the correlation of the two variables to determine if there is a relationship between them. Observation were as follows; (1) Students' Performance was poor (2) Teachers' Performance was Very satisfactory (3) there was no relationship between the two variables.

The fourth objective describe the learning circumstances in the school located along the covered coastal area. The surroundings are flooded, remedial classes are done along the corridor and hallway as well as training and rehearsal for school activities due to classroom shortage.

Finally, the conclusion of this research paper are limited only to the context of the Philippines wherein the provisions of school facilities is limited that it lacks even the basic utilities and resources are low and that the standard facility to student ratios are not reached.

The study shows that the government should increase education resource funds with regards to the four aspects that will contribute better academic performance within the covered study area, (1) more teachers, (2) provisions of better road conditions and (3) more toilet seats (4) more classrooms. The first aspect is public education, which is to educate the people. The second aspect indicate that a districts lacking appropriate transportation infrastructure are deprived from the means to engage in not only business but also academic activities. Lack of transportation infrastructure might be restricting the government from providing other services, such as tap water, electricity, sanitation and suitable school facilities, the same might also be restricting the continuous school attendance of the children. The third aspect relates to the provision of sanitary facilities which are essential for children as they will spend more than 4 hours in the school. The fourth aspect is necessary for students' instructions.

The study has shown that there is no standard one-size-fits-all solution, because the provision will vary depending on the context of the school community. However, the findings are useful for decentralized planning as it can identify which education resource should be prioritized by each district in order to improve academic performances. The situational analysis of the school learning facilities, geographic location and the surrounding environment serves as a guide for identifying government intervention which can improve community conditions and eventually enhance education outcomes.

The results of this research should be considered in light of the fact that facilities make a very small impact aside for the need of more in-depth analysis and explore more fully the factors affecting the students' performance in the Summative Evaluation particularly the periodical test, apart from teachers' factors, because this study reveals that there is no significant relationship between the Grade 8 Students' and Grade 8 teachers' performances given in the same covered school year. Research shows also the learning circumstances of the schools in the covered coastal area based on the observations and relative data presented, it cannot be denied the fact that Learning Environment, Climate and Geography plays an important role and become a major contributory factor attributed to the students' learnings outcome as well as to the Instructional Quality.

Conclusions

This research primarily aimed to feature the situation of Grade 8 students and their performance in summative evaluation as a springboard for a greater analysis of the learning circumstances in a school in a coastal area. Results generally indicated a low performance among the students who came from the twelve (12) schools in the coastal area and though their teachers performed well with a rating of "very satisfactory", statistical analysis has indicated that there is no relationship between the two. From this perspective, the results of the situational analysis are given importance.

Based on the situational analysis, it can be seen how geographical location and neighborhood context and availability of functional school facilities affect students' performance due to constant class suspension because of typhoon, southwest monsoon and high tides, students are not able to master the learning competencies. Another thing is due to limited number of classrooms, school are forced to conduct shifting schedules, or will have to facilitate their remedial sessions and other co-curricular activities on places which are not suitable for learning, this is detrimental to students' education because they do not meet the number of class hours, they should spend for a particular subject to master.

Lastly, neighborhood context is also a crucial factor to their learning because students especially members of 4P's are given limited access to available educational services. Their lack of money disables them to access the intervention materials their teacher prepared.

With this, it can be described that the learning circumstances of the Grade 8 students are harmful to their education and needs to be improved.

Recommendations

Based on the analysis of the result, this study offers the following recommendations:

(1) That a re-visitation of the instructional policy and supervision program be done to ensure that policies and guidelines are customized to the needs of the students and teachers in a school located in the coastal area (2) That education authorities in the schools' division may consider the demographic location of the school in administering and regulating the summative evaluation particularly the periodical test, make an in-depth evaluation of the number of school days every quarter to see if the learning competencies needed by the learners is met without hindrances, interruptions on the learning activity of the learners and other burdens on the part of the learners, teachers, administrators and other school personnel (3) that a re-visitation of the policy regarding the Individual performance, commitment review form (IPCRF) of the teachers as well as the (OPCRF) Office Performance Commitment and Review Form of the respective schools and the SDO if there is alignment between their aims, goals and objectives (4) That re-visitation and

redefining the criteria for students' academic performance and teachers' performances, analyze the function, uses and purpose of standardized test, particularly the periodical test (5) That Education authorities in coordination with the national government must include necessary budget allocation for the improvement of the learning facilities and surrounding environment of the schools located in the coastal area.

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“DoReMi-ABC: Music integration to enhance the kindergarten pupils’ phonological awareness towards achieving reading readiness”: A lesson study

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Abstract

This study examined the usefulness of music integration in improving the reading skills of kindergarten pupils, with emphasis on phonological awareness, letter-sound decoding, and reading CVC words. Using a qualitative Lesson Study approach, preschool teachers collaborated to plan and revise the lesson according to pupils’ reading needs. The study involved 21 kindergarten learners from a private school in a rural area. A pretest was administered to assess their initial phonological skills, followed by a revised lesson that used music, specifically the tune of “The Wheels on the Bus,” as the instructional medium. After the intervention, a post-oral reading assessment was conducted to determine changes in performance. Results showed improvement in pupils’ ability to identify letter sounds, blend CVC words, and match words with pictures, indicating growth in both phonological awareness and comprehension. Specifically, 16 of the 21 pupils were able to produce sounds more easily and correctly match pictures. The pupils also showed greater engagement during the lesson. The findings suggest that music integration can enhance early reading instruction and support the development of foundational literacy skills among kindergarten learners. The study recommends the use of Lesson Study in assessing reading skills and identifying gaps in phonological awareness instruction.

Keywords: *comprehension skills, CVC pattern, decode sound, kindergarten pupils, phonological awareness*

INTRODUCTION

Reading is a basic skill that a child is expected to possess at a young age. It is the most powerful tool that can change the lives of every learner and the core foundation of success in learning that opens new information, grasps new skills, and enriches their vocabulary, which will eventually help them to develop their written and verbal communication skills. It also enhances their imagination from the text that they read in a book. However, it is one of the most complicated skills that a child can perform. Most preschoolers have difficulty coping with their reading subject during the early phase of decoding words (Wagner & Kantor, 2010).

Based on observation, a child who lacks phonological skills often resorts to guessing how words are read. This is due to difficulties encountered in figuring out and blending letters and sounds together, being unable to segment words into sounds, and having trouble in identifying the beginning, middle, or ending sounds in words. As a result, children disengage themselves from the reading activities and find the subject uninteresting.

Twenty-first-century pupils have different learning styles for acquiring knowledge. Some are visual learners and can easily learn through pictures, graphical representations, and watching audio-visual materials and other learning tools used during classroom instructions. Other kindergarten pupils are auditory or aural learners and can easily comprehend or remember information through listening to stories or telling stories. They prefer to listen to class lectures to

gain information. Some learners have other ways of learning. They prefer taking text-based information. These learners are called reading and writing learners. They find that reading textbooks and other reading materials is a great source of information for learning. They rewrite notes and other principles into words. Some learners are kinesthetic or tactile. There are instances when it can be difficult for them to sit still for a long period of time and can be easily distracted. They find pleasure in tasks that involve manipulatives and various hands-on activities (Flavin, 2019).

With the diverse learners today, teachers seek different ways and means to cultivate the skills of their pupils to improve and learn to embrace learning, specifically when it comes to reading. "Fluency and comprehension were proven to have a significant relationship based on the different studies performed due to the accuracy in a letter to sound to word distinction that enables the pupils to read words that show an indicator of reading comprehension" (Zugel, 2009, p. 3).

Reading teachers in the preschool continuously look for different strategies and innovative instructional materials that will boost the reading skills of young learners. Moreover, the need for improved and varied educational techniques is utilized to help upgrade the reading competencies of kindergarten pupils as they pass from one level to another. Proper motivation is needed to let them feel that reading is something that they should look forward to with excitement and enthusiasm.

The researchers have probed the significance of studying different techniques that will help stimulate the reading prowess of kindergarten pupils (Anmarkrud & Braten, 2009). There were a series of studies that associated music skills with the different speech recognition that can be of great help to improve the reading readiness of young learners (Francois & Shon, 2011; Wong et al., 2007). Kouri and Telander (2008) stated that many professionals, specifically teachers, have advocated teaching through music and song to enable kindergarten pupils to develop enthusiasm in developing their reading skills.

According to D'Agrosa (2008), the relationship between music and reading can be a dynamic instrument in cultivating the child's knowledge and boosting reading performance. D'Agrosa supported that there is a credible implication that reading and music are connected. Mizner (2008) supported the concept that reading fluency could be strengthened through music utilizing alphabet recognition, pitch awareness, rhythm, and dynamics through word pronunciation, syllabication, and proper intonation.

Music can exhilarate the social, emotional, and academic aspects of the learners due to the positive learning environment; it contributes to the teaching-learning process and makes each lesson an enjoyable one (Paquette & Rieg, 2008). Likewise, music can intensify literacy skills such as pronunciation, auditory processing, good articulation, and vocabulary skills that will aid the children to become motivated to love reading (Frasher, 2014).

It appears that this research paper intends to develop a lesson plan which utilizes music as an intervention during the teaching-learning procedure that will perk up the reading readiness of the kindergarten pupils and that will boost the eagerness in the interaction during the carrying out of the lesson.

Furthermore, this lesson study intends to help improve the teaching style of preschool teachers and make each reading session an enjoyable one that will add zest to the performance of

the children who were enrolled at the kindergarten level. This also aims to determine how the integration of music into the reading subject helped in the development of phonological awareness and reading comprehension of the pupils at the said level.

This study primarily aims to explore Music integration in enhancing the reading readiness of kindergarten pupils through the conduct of a Lesson Study. This also intends to explore the role of Music in facilitating kindergarten phonological awareness. Specifically, this study seeks to answer the following:

- (1) To describe the reading level of phonological awareness of the kindergarten pupils in the pre-and post-oral reading test.
- (2) To describe other changes observed during the lesson and in the performance of the pupils after the posttest based on the field notes of observers.

The results of this study seek to furnish positive insights to preschool teachers, both in public and private schools, specifically, those who are teaching reading to adopt a strategy that will make the subject a fun-filled activity and at the same time will enhance the different kinds of skill that will stimulate the pupils to gain phonological awareness in decoding the sound of the letters and eventually read simple to complex words.

This study tends to help young learners to develop enthusiasm, interest, and alertness in classroom participation. Another significance of this study is to boost the self-esteem of kindergarten pupils to develop confidence in engaging themselves in the discussion was due to the relaxing and stress-free classroom setup while integrating music into the subject.

According to Piro and Ortiz (2009), based on this study's facts, this research could elucidate the function of music in cognition and will give an overview of the potential utilization of music to intensify the performance of the pupils in terms of language and literacy.

METHOD

This is a qualitative type of research that employed a method called "Lesson Study" which is engaged in observation and data collection about a carefully planned lesson through the collaboration of three to six teachers and gives them the opportunity to create a model for high-quality instructional practices.

The observation and data gathering took place in a private school in a rural area. The participants in this study were 21 kindergartens who are currently enrolled in the said level. There were eleven boys and ten girls involved in this study. From their reading background, only a few of them could recognize and produce the sound of the letters accurately, some of them manifest the signs of having difficulty in letter-sound cognition. The pupils in this study underwent pre-test and post-test to find out the level of phonological skills that each of them had. All of the pupils participated in the activities but not all of them passed the given examinations.

An observation guide in the form of a checklist was utilized as an instrument in rating pupils' performance during the presentation of the lesson and how they engage themselves in the classroom activity as well as the effectiveness of the instruction. Roller and Lavrakas (2015) stated that an observation guide is an important tool in recording the relevant information and the participation of the learners in the class. This can also help the observers to give suggestions and contribute some ideas for the improvement of the lesson. A checklist that describes the pupils' performance was used as an instrument in data gathering. The content of the checklist was validated by the four experts in the field of education. This is to ensure that the skills indicated are

appropriate for kindergarten pupils. The observation guide was revised according to the suggestions of the experts to ensure that each item will meet the needs of this study.

Pre-test, post-test, and oral reading activities were administered to the kinder pupils in the form of matching type-examination to determine if they can blend, read, and match the words to the correct pictures. Pupils are graded by putting a checkmark under the "Yes" column if the pupils performed and participated actively according to the listed criteria and "No" if they are not engaging themselves in the discussion.

The oral reading activity was facilitated by teachers 1 and 2 under the kindergarten department to ascertain if the reading skills of the pupils were enhanced and be able to comprehend the words that they read before and after, using music as instruction in teaching reading. This is to avoid being biased on the part of the teacher who executed the lesson. It means that being prejudiced in which the collection of data, theories, and other important details of the instructions are manipulated (McMillan, 2008).

The conceptualization of the lesson plan for the Lesson Study Method was completed after almost two months of preparation. This includes regular meetings with the preschool teachers to brainstorm and give suggestions on what will the objectives of the lesson be, the appropriate motivation and motivational materials to be used, the procedure of the lesson, and the activities that will be administered to evaluate the learning outcome of the pupils. Teachers 1, 2, and 3 were all preschool teachers and were chosen to become members of the team because of their skills in determining the strong and weak points of the learners and understanding the needs of the preschool pupils.

The lesson was facilitated by teacher 1 using music as a medium of instruction in teaching the reading subject. Findings showed that teachers played an important role in creating a music-friendly environment by facilitating music as an instruction to the reading subject that allows the learners to become active in classroom participation, Kelly-McHale (2013). The group decided to use the tune of the song "The Wheels on the Bus" and composed lyrics that will coincide with the content of the lesson in reading CVC words.

There were five observers during the implementation of the lesson to assess the teaching-learning process. The observers were chosen based on their experience as English and Preschool teachers. Their expertise can help in making the study more credible by giving their observations and suggestions. They were given an observation guide to evaluate and rate the performance of the kindergarten pupils during the course of the discussion.

This study utilized observation as a tool, and an observation guide was used in data gathering in obtaining the objectives of this research. Pretest, post-test, and oral reading activities were administered to find out the effectiveness of the instruction and the readiness of the learners to read. The pupils were given a six-item test using a matching type activity that will measure their ability to produce the sound of the letters and to form CVC words after combining and decoding the sound of the letters.

After the observation, a focus group discussion was conducted to evaluate the efficacy of the activity as well as the teaching instructions to gauge pupils' participation. Suggestions and recommendations were given based on what they observed during the discussion. Interviews are also a competent tool in performing a qualitative study that gives the researchers the researchers to investigate the people's outlook in a greater depth (Kvale 1996: 2003). The interview method is

used for exploring the construction and negotiation of meanings in a natural setting (Cohen et.al, 2007). The essence of this is not to create a comprehensive summary but to cater to a well-elaborated opinion of the person being interviewed and enable them to express their thoughts about the topic (Berg, 2007:96). Some of the observations from the performance of the pupils and the instruction were as follows:

Observer 1

"Put more emphasis on the sound of the letters to help those who are having difficulties in the letter and sound cognition."

Observer 2

"Repetition of the song should be done so that the pupils can master the sound of the letters and develop phonological awareness that is needed in reading simple words."

Observer 3

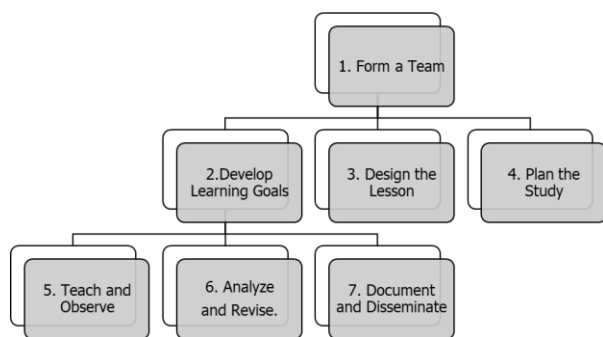
"The pupils who are having difficulties in identifying the letters and the sound should sit in front so that they will listen and actively participate in the discussion."

The team considered all the suggestions for enhancing the lesson. This is to ensure that all the comments will be put into action to meet the needs of the learners in enhancing their phonological skills and focus the attention on the struggling learners by putting more emphasis on the sound of the letters before reading CVC words.

Ethical considerations were also done during the course of the study. First, a letter was made to seek permission from the principal to conduct an observation during the reading subject discussion under the supervision of a preschool teacher. This is to record all the occurrences that enable the pupils to participate in the music-reading integrated instructions. Second, the preschool teachers (teachers 2 and 3) signed a letter of agreement that they are going to collaborate and give their ideas willingly in making the lesson study more meaningful by extending their precious time in the conceptualization of the lesson and conducting a post-reading evaluation to the kindergarten pupils but, they are waving the partnership as co-authors in this study.

Patterned after Cerbin and Kopp's (2011), to have a good framework of the lesson, the following steps/procedure have been assigned:

Figure 1
Lesson Study Phases



Forming a Team

A Lesson Study team should be formed to gather multiple perspectives from a group of teachers, usually consisting of 3-6 members of the same discipline. The success of this study lies in the dynamic participation of the members with a common goal to voluntarily achieve the objectives of the study, and will build classroom management and improve teaching pedagogy (Lewis & Hurd, 2011).

Develop Learning Goals

In this phase, the team works together to formulate learning goals based on the interesting topic that they have chosen. They will analyze the context through brainstorming and will end in a fruitful dialogue. The group will also discuss the strategies and methods to use during the presentation of the lesson that will aid the students in acquiring greater cognition on the topic presented.

Design the Lesson

Lesson planning is an innovative process that allows teachers to integrate the understanding and acquisition of knowledge among the learners. In this study, it is said that it is the "heart" of being an effective teacher who envisions the desired learning for their pupils based on the learning objectives of their chosen lesson and prepares activities that will meet these objectives.

Plan the Study

In this phase, the teachers plan the study by following a specific topic that is intended for the week and is based on the curriculum guide. The teachers allocate their time to conceptualize the lesson. The teaching process was organized and effective to hone the knowledge and skills of the learners, which will direct them to the ladder of learning and to determine the expected questions from their students (Verhoef and Tall, 2011) that will aid the teachers to prepare and plan for the gathering of data during the teaching-learning process.

Teach and Observe

After the team collaboration and planning of the lesson, one member of the group will execute the lesson while the rest are observing and collecting data on how the teacher presented the lesson and document the learning outcomes on how the students responded to the instructions, their enthusiasm, and the levels of motivation during the teaching-learning process, and the learning output gained by the pupils (Shaun, 2014).

Analyze and Revise

In this phase, the team will give their comments and suggestions and will reflect on the effectiveness of the lesson, how the pupils responded to the strategy, the learning that the pupils acquired, as well as their difficulties encountered throughout the lesson period.

Document and Disseminate

The team documents the lesson using video and observation guides through a checklist to find out the effectiveness of the instruction and the involvement of the young learners during the

discussion. After the documentation, the group formally shares the outcomes of what they have done, learned, and refined regarding the strategy that they established.

FINDINGS

This section presents the findings of the study organized according to the sequence of the objectives:

- (1) The pretest and posttest
- (2) Teachers' observation of pupils' performance

Pretest and Post-Oral Test Result

Table 1

Summary of the pretest results

Scores	Number of pupils who obtained the score	Verbal interpretation
0	1	<i>needs improvement</i>
1	2	<i>needs improvement</i>
2	4	<i>needs improvement</i>
3	7	<i>good</i>
4	1	<i>good</i>
5	1	<i>good</i>
6	5	<i>very good</i>
<i>total</i>	<i>21</i>	<i>100.00</i>

Oral reading activity: phonological skills check-up

Table 1 shows the accumulated scores of the kindergarten pupils before introducing the lesson using Music as a medium of instruction in the Reading subject. This is to test the phonological skills of the kinder pupils in segmenting the letters to produce the sound accurately.

Based on the reading assessment, 21 kinder pupils were given a pretest to find out their ability to blend, read the words, and comprehend what they had read by matching the words to the correct picture. As a result, only 5 pupils got a perfect score with a verbal explanation of "very good". Most of them belong to the achiever's circle at their level. Two of the pupils also passed the pretest with a score of 5 and 4, which indicates good performance in the reading activity. This showed that they can also read and perform the activity with comprehension. There were 7 who got 3, which means that their test result is borderline because some of them can recognize the sound of the letters but cannot read and blend the words when combined with other letters. These sets of learners need improvement in the acquisition of reading skills. Three out of 21 pupils failed the exam. The table indicates that more than one-half of these pupils need to show improvement in their reading and comprehension skills. This implies that they got low scores because the lesson had not yet been introduced to them.

From the pretest given, the teacher can easily identify the pupils who accumulated the highest score, those who passed the test, and those who failed. This can also determine the level of learning that the pupils achieved and improve the instruction by making revisions of the lesson to

assist the needs of those who manifested low scores. Another table shows a detailed presentation of the post-test results.

Table 2

Summary of post-test (Oral reading activity: comprehension check-up)

Scores	Number Pupils Who Obtained the Score	Verbal Interpretation
1	1	Needs Improvement
2	4	Needs Improvement
3	4	Good
4	1	Good
5	1	Good
6	10	Very Good
Total	21	

Table 2 shows the results acquired by the students after the lesson using music as a medium of instruction, as well as the verbal interpretation for every score.

The table illustrates that there is an improvement in their performance, whereas almost half of the class, or 10 pupils, got a perfect score compared to 5 during the pretest. This explains why they got a very good performance during the post-examination. One pupil got 5, another one got 4. This shows that kindergarten learners developed a good output in their reading and comprehension skills when music was used as an instruction in the lesson subject. There were 4 pupils who scored 3 out of 6 items which is the mid score and indicated that they also passed the activity. These pupils also showed good performance during the learning instructions. Only 4 pupils got a failing grade of 2 and 1 of them received a mark of 1, which indicates that they need to improve in the acquisition of reading skills.

Table 3

Comparison of pretest and post-test with field notes

No. of Pupils	Pretest	Posttest	Field Notes
Pupil 1	6	6	Phonological awareness is evident.
Pupil 2	6	6	Phonological awareness is evident.
Pupil 3	6	6	Phonological awareness is evident.
Pupil 4	6	6	Phonological awareness is evident.
Pupil 5	6	6	Phonological awareness is evident.
Pupil 6	5	6	An increase in score showed phonological awareness
Pupil 7	4	6	An increase in score shows phonological awareness
Pupil 8	3	4	Pupil 8 showed improvement in the test. This implies that letter-sound cognition is enhanced.
Pupil 9	3	6	Pupil 9 showed a big improvement in the post-test. This shows that phonological awareness is evident.

No. of Pupils	Pretest	Posttest	Field Notes
Pupil 10	3	5	Pupil 10 performed well and showed an increase in reading skills.
Pupil 11	3	6	There is an increase in the score during the post-test. Pupil 11 showed mastery in a letter to sound cognition that leads to phonological awareness.
Pupil 12	3	3	Student 12 got the same performance during the two exams. It means that what was learned during the pretest was retained during the posttest.
Pupil 13	3	6	Pupil 13 showed excellent performance during the post-test. This showed that readiness in reading is evident.
Pupil 14	3	3	Pupil 12 got the same performance during the two exams. It means that what was learned during the pretest was retained during the posttest.
Pupil 15	2	3	Pupil 15 showed the beginning of mastery
Pupil 16	2	2	Pupil 16 need to exert effort in letter-sound cognition.
Pupil 17	2	3	Pupil 17 passed the test but still needs to exert effort in letter-sound cognition.
Pupil 18	2	3	Pupil 18 needs to exert effort in letter-sound cognition.
Pupil 19	1	2	Pupil 19 showed an increase in score, but this does not mean that there is a mastery of letter-sound-to-word cognition.
Pupil 20	1	1	Pupil 20 got the same score. He was observed listening but not really in focus.
Pupil 21	0	1	Still struggling with the distinction between the letter sounds.

Table 3 indicates the summary of scores of the kindergarten pupils during the pretest and the posttest. The data illustrates the differences in the scores obtained by the pupils during the two exams.

The summary shows that there were 10 pupils who got the perfect score during the post-test compared to 5 in the pretest. This means that the pupils increased their skills in obtaining phonological awareness and comprehension skills when Music was used as a medium of instruction in reading CVC words. Some pupils retained their scores of 5 and 4 which means that they need to have an enhancement in reading the words to get a perfect score. From the posttest, only 3 pupils got 3 out of 6 compared to 7 during the pretest. This also indicates that most of their scores became higher during the last exam. There were still 4 pupils who got 4 and a pupil received a score of one.

This table explains that although 3 is considered mid-score, there is a need to supervise the pupils in enhancing their readiness to read. Those who got 2 and 1 need to improve more. They need to become familiar with the letters and their corresponding sounds in achieving their phonological skills and the ability to read simple words. This means that remediation teaching and follow-up at home are highly recommended to assess their reading readiness.

Table 4
Oral reading test results

Category	Showed Enthusiasm and Interest	Displayed Alertness	Followed Instructions	Pronounced words accurately	Blend words	Showed Comprehension
Needs Improvement	1	6	1	4	3	3
Good	10	5	10	7	8	8
Very Good	10	10	10	10	10	10
Mean	2.4286	2.1905	2.4286	2.4286	2.3333	2.3333
Std. Deviation	.59761	.87287	.59761	.78376	.73030	.73030

This table displays the Oral Reading test results of the kindergarten, which was facilitated by the preschool teachers. The Likert scale was used in evaluating the test results. This is to find out if the pupils can read and comprehend the lesson after integrating music into the reading subject, and to check the credibility of the lesson. The teachers used a rubric for grading the pupils based on the criteria listed in the upper part of the table in identifying the strengths and weaknesses of the kindergarten pupils in reading.

The data show that there is a development in the reading skills of the learners by acquiring phonological skills, can read CVC words, and match the words with the pictures correctly. It has been clearly stated from the evidence gathered by the teachers who administered the test.

First, 20 out of 21 kindergartens showed interest and enthusiasm while singing and at the same time develop their phonological awareness during the lesson. The teachers scored them on how they maintained their focus and positive reaction while singing, and at the same time enjoyed reading, blending the sound of the letters to form new words.

Second, the pupils' alertness was also displayed, and 15 of them are participating actively in the lesson. Each of them shows eagerness in answering the questions and responds to the given task without hesitation.

Third, 20 of them followed the instructions given by the teachers. This means that they comprehend the instruction and were able to answer the activities independently by matching the words that they read to the correct picture.

Fourth, since the kindergarten learners maintained their attention during the discussion where they enjoyed and felt relaxed for the duration of the lesson, 17 were able to produce and blend the sound of the letters correctly. This manifests that phonological awareness is evident to these learners by saying the sound of the letters correctly.

Fifth, after acquiring phonological skills, 18 kindergarten pupils can now read simple words using CVC patterns. This was shown when they were examined orally in reading from the activities prepared by the teacher.

Lastly, 18 pupils showed comprehension skills by reading the words correctly and at the same time were able to match them with the correct pictures. This shows that they clearly understand what they read.

The standard deviation in all aspects shows consistency of results, especially in their enthusiasm and interest in the evaluation and their understanding of following instructions. It can be stipulated based on the standard deviation that there is a close relationship between the pupils' scores exhibiting almost equal learning among the pupils.

The frequency exhibits that almost half of the class performed well in the oral reading activity. Most of them were given very good and good scores that signify the phonological awareness by blending the sound of the letters to form new words in reading simple words, and comprehension skills are evident among the kinder learners. Only a few of them failed and got low scores. It was expected that these students would fail due to special needs. This means that these pupils need extra time in reading through remedial teaching or a tutorial. Knowing the alphabet is a good start for those who are struggling, but there is a need for them to become familiar with the letter forms as well as the sound of each. It is not enough that they memorized it through the alphabet song; instead, they need to develop a deeper understanding of the individual letter.

DISCUSSION

"To learn to read is to light a fire; every syllable that is spelled out is a spark." — Victor Hugo, Les Misérables

The statement implies that reading plays a significant role in everyone's life, especially kindergarten pupils. Reading brightens up one's imagination and enhances creative thinking by allowing words to describe a certain image while the reader manipulates the image in the mind and leads them to different places through figments. It lightens up the fire when they can decode the sound of the letters, develops phonological awareness, read simple words, and comprehend what they read. Early childhood years need compelling importance in developing literacy skills. Rahim (2011) states that the advantages of reading are to acquire knowledge and new concepts which may increase intelligence, and they are better able to answer life's challenges in the future.

Part of introducing reading to the learners is the quest for a strategy that will make them learn easily and at the same time enjoy and participate actively in the instruction. The research was conducted on how to aid young learners to develop their skills and readiness for reading. One of these is the integration of music while teaching reading to the pupils. This instruction is already familiar to most children as music plays a universal medium of communication and played an essential part in most cultures (Cross, 2014).

Gardner's theory can be integrated into curriculum planning and instruction that was aspired in the development of the learners in acquiring self-esteem and potential in the subject area they are having difficulty with by applying the appropriate methods, activities, and assessments that may enhance their skills.

In this study, the researcher associated Music as a strategy for enriching the reading skills of preschool learners. This technique is acquired from Gardner's proposition (Musical Intelligence) to examine the effectiveness of music integration in the acquisition of phonological awareness, reading fluency, and constructing vocabulary. Gardner reiterated that musical intelligence and linguistic intelligence are correlated with one another (Smith, 2008a).

To discover the efficiency of the instruction, observation forms and rating sheets were given to the observers to assess the behavior and performance of the kindergarten pupils, as well as the teacher as the facilitator of the instruction. This study will also seek to give responses to the questions on how the integration of music enhances the reading skills of young learners.

Based on the findings and the summary of the pre-test, post-test, and oral reading examination, a music-integrated instruction for reading can answer the objectives of the study comprehensively. The pupils can easily name the letters through sound identification and repetition using music as an accompaniment.

According to Kelly (2020), a pretest can help the pupils to have a clue about the new concepts to be introduced. Pretests were administered to target the areas of weaknesses of the pupils and to develop an idea on how to improve the instruction to achieve the desired goal (Wiggins & McGighe, 2006).

The subject teacher, together with the other preschool teachers, collaborated to produce a lesson that has well-conceptualized objectives to achieve positive learning outcomes for the pupils. Lesson Study also gives the opportunity to the teacher to talk and discuss their concepts that lead to professional development at the same time until they can formulate an effective plan (Murphy et al., 2017).

Lesson study group are observing and jotting down their observations from the response of the class. It is relevant for the teachers to have the chance to teach and discuss a new topic with a new method but also determine the revisions that they are going to do after the lesson. (Doig & Groves, 2011).

The teacher used the tune of "The Wheels on the Bus" in teaching CVC words throughout the lesson. Introducing the words through the sing-song method was done where they decode individual sounds and segment the individual phonemes to form new words like /c/-/a/-/t/ = cat, /m/-/a/-/t/ = mat, /f/-/a/-/t/ = fat. From the observation gathered by the researcher during the first trial of the lesson study, it was ascertained that the kindergarten learners are enthusiastic during the flow of the discussion.

McIntire (2007) stated that by incorporating beat, melody, and movement, the information is transmitted to the brain which induces richer knowledge (p.46). The teacher let her pupils sing and blend the letters repeatedly following the melody of the song and put them together to form meaningful words.

Revisions were made to the lesson to assist the needs of those who got low performance. The teachers applied the suggestions given by the observers. After doing the improved lesson plan, the teacher reteaches the lesson using the same topic and this time focuses the lesson on those who are struggling with reading.

The indicators that showed pupils' learning using Music as a medium of instruction for the Reading subject are shown from the results of the post-test and oral reading examination. Post-test was made to evaluate and monitor the effect of the new teaching methodology on the group of learners (Kelly, 2020). The lesson was enhanced according to the result of their performance during the pretest. It has been anticipated that pupils can answer and accumulate high test results due to the increment in the understanding of the lesson, P.R. Kuenh (2011). A positive effect on integrating music into reading and phonological awareness were revealed. Sixteen pupils showed

phonological awareness by producing the sound of the letters correctly and blending in reading CVC words. With the integration of music, pupils are relaxed and free from any stressful classroom setup by perceiving a friendly environment. They engaged themselves actively in the learning process. Dyer (2011) mentioned in his study that music escalates the pupil's participation by showing enthusiasm, interest, and alertness and enhances phonemic awareness by segmenting the phonemes and combining the sound of the letters through repetition while singing during reading time. Boccia, Gromko, Hansen, Higgins, & Tortora (2009) studied that repetition of the song will make it easier for the learners to practice visual decoding during literacy instruction. Denac (2008), also agreed that music integration adds zest to the kindergarten pupils during classroom instruction and expounds their interest and potential in music.

From the results, most of them passed the posttest, but not all can read the words accurately. They can decode the sound of the letters individually but still have a hard time reading. Some were able to show comprehension by reading and matching the words to the pictures correctly.

The evaluation of the table noted that there were still a few kindergarten pupils who needed assistance in developing their reading skills. They got poor performance in the acquisition of phonological skills and reading comprehension. One of the possible reasons that hinders them learning is the lack of focus or inattentiveness. This is due to some behavioral problems and special needs. Another factor that can affect their learning is the different phases of development that each of them possesses. This may be due to a lack of follow-up at home or over-exposure to gadgets. Lastly, one reason that should also be taken into consideration is their learning.

In general, music integration into reading is recommended as a strategy to use in developing phonological skills because the learners are enjoying and at the same time learning to decode the sound of the letters and become familiar with them due to repetition while singing. After learning the sound of the letters from the song, the pupils will start blending and associating them together to form words and eventually leading them in acquiring reading comprehension.

Conclusions

It has been realized after conducting this research using Music as a medium of instruction for Reading displayed that learning is effective because of the stress-free and relaxing classroom set-up that enhanced the pupils' participation to become more active, enthusiastic, and interested in the lesson. The learning experience of these pupils is more effective when they acquire simple to complex skills while having the lesson, like the pronunciation of the correct sound of the letters and blending them to form simple words.

The role of music in establishing reading skills played a significant role because phonological and comprehension skills were obtained by the learners while following the melody of the song and the repetition in reading the words. Through this, the sound of the letters is retained in their memory and as a result, they can easily identify, produce and associate the individual sound of the letters forming CVC words.

Lesson study also contributed a lot to the success of this research. It helped the teachers to improve their teaching style, which will assess the needs of the learners. The use of this method also aids the teachers to see the deficiency of the instruction and find a solution on how to enhance the lesson to attain its objectives. The collaboration of the team adds flavor to the success of this method.

Recommendation

To continue utilizing the study, preschool teachers should apply the music integrated instruction to the Reading subject by introducing the sound of the letters. The strategy will help enhance the phonological and comprehension skills of the pupils by repeating the sound of the individual letters through songs that will eventually lead them to read simple words.

The teacher should also use a variety of melodies and add creativity in writing the lyrics to entice the pupils to participate and maintain their focus in the lesson.

Lesson study should also be used to determine the weaknesses and strengths of the lesson and to put revisions and enhancements in producing an improved lesson plan that will be utilized in the lesson. This will benefit the young learners to improve more because they already had a background of the previous lesson, but this time, it was enhanced to double their knowledge and skills to the revised lesson.

The results of the study should benefit not only the school where the study was conducted but also the other schools both public and private to see the beauty of integrating music as a medium of instruction in teaching preschoolers to acquire different skills in reading.

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Outstanding school principals' experiences in the old normal: Avenues for developing novice leaders' managerial skills in the new normal

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Abstract

This qualitative study described the leadership styles and experiences of outstanding school principals during the old normal in the performance of their managerial functions in terms of school leadership, management and operations, and creating student-centered learning climate as basis for the crafting of leadership and development program for novice and would-be school leaders. Through in-depth interviews, data were elicited from 14 full-fledged principals in the public elementary and secondary schools who were pre-qualified based on their years of experience as principals, position/ rank, outstanding achievements through the years, and consistent high performance of their respective schools. Findings show that the expert leaders practice exemplifying leadership style: impetus for change, leading with values: walk the talk and reframing challenges as opportunities for collaboration and growth among others, with the latter as one of the best ways of influencing teachers to obey orders and follow instruction. The attainment of objectives and goals of education is significantly affected by the professional practices of school leaders. Humility, positivity, communication, transparency and valuing active participation of stakeholders are found to be effective leadership tools in reaching out to stakeholders and resolving conflicts. On management and operations, three themes emerged: Prioritization based on accountability and policies; convergent and divergent strategies in managing school programs and managing oneself as a key for peak performance. Lastly, their learner-centeredness is manifested in their practice of commitment of teachers on learner-centric environment, fostering accountability to learning; sustained positive climate through rewards and engagements of stakeholders and building connections toward positive school culture. Novice school leaders could take these themes as useful tips in nurturing their leadership values and skills.

Keywords: *effective leadership, school management, school operations, student-centered learning climate, school positive climate*

INTRODUCTION

"Management is an art of getting things done through people."

- Mary Parker-Follet

School leadership is an essential feature of educational system. Professional practices of school leaders significantly affect the entire school operations necessary for the attainment of objectives and goals of education. Strong leadership is a key contributing factor in the success of school performance. Leadership is a critical element of education's success or failure. School leaders perform mandates that are uniform in nature but respond differently based on internal and external factors enabling them to do so (Louis et al., 2010).

It is stipulated in the Chapter 1 Section 7 of the Republic Act No. 9155, (Basic Education Act of 2001) the powers, duties and functions of the elementary school principals. In accordance with the national educational policies, plans and standards, the school heads shall have the

authority, accountability and responsibility in setting the vision-mission, goals and objectives of the school, creating conducive place to teaching and learning, implementing the curriculum and the like.

Hard et al. (2013) said that schools require effective leaders and believe to escalate learning outcomes. Teachers need trainings to be more effective in classroom instruction but there is also an increasing recognition that school necessitates highly competent principals. Educational leadership and management gained much value as an essential component in ensuring excellent learning outcome.

School leaders influence people to become better towards the attainment of the common goal or target. Personal and professional values are the cornerstones of successful leaders. The learnings from experiences, formal schooling, and personal perspective affect leadership styles and management. It is appropriate that careful analysis of these experiences will result to the discovery of best managerial practices (Ibrahim, Ali & Abdalla, 2018).

In the Philippines, the duties of the school principal are all encompassing in the National Competency-Based Standards for School Heads (NCBSSH). The competencies are based on the mandate for school heads indicated in the RA 9155, its Implementing Rules and Regulations (IRR), and on the National Competency Standards for School Heads contained in the DepEd Order No. 32 series of 2010, "The National Adoption and Implementation of the National Competency-Based Standards for School Heads."

The role of the principal includes many important managerial tasks. Effectiveness is constantly concerned with neither the things we are doing continue to be right. One way of looking at the role as a manager is to classify what principals do into their competencies in the seven domains for school leadership of management.

Similarly, as cited in Fullan and 塩崎 (2016), Hughes and Ubben (1989) recognized the value and importance of distinctly knowing the principal as a person and the principalship as merely a collection of important functions and responsibilities. On the perspective point of view, many others like Hughes believed that the task of the principal is multitudinous, enormous and encompassing.

Kumar Sharma and Shilpa Jain (2013) highlighted the influence of a leader through three actions. The goals and performance standards established by the school leaders encourage followers to strive and take all efforts to achieve goals with quality. On the other hand, the values established in the working environment as manifested on the operations of the organizations define leadership. The third one is the established culture of operation and products.

Various contemporary leadership theories and researches on leadership propose leadership standards on the importance of preparations, trainings, continuing professional development and recognition of school leaders' strengths and needs. These components are very crucial in leading all educational efforts towards academic excellence (Ingvarson et al., 2006).

According to Bateurs, 2017, the Dewey's philosophy of experience and Peirce's communicative theory of signs strengthen the connection of experiences to reflection and learning. These experiences lead to learning and offered more tangible patterns of behavior that contribute to one's success or failure. People learn from reflecting what was done and how it was done. The know-how of these experiences may provide learnings and better understanding of situations to develop solutions to dilemmas.

Moreover, Singh and Allison (2016) pointed out that it is indispensable to conduct a study that will carefully analyze the experiences of well-experienced school heads that demonstrate high regard for educational excellence. Professional interaction among school heads provides opportunities for coaching, mentoring and learning.

In the assessment to identify the competency levels, leadership styles and training needs of the newly assigned school heads, results showed that school heads excel on Instructional Leadership. This may be attributed to their position as Master Teachers and Head Teachers. It is in their KRA to observe classroom instructions and to give technical assistance to teachers pertaining to instructions. However, during the assessment, it was found out that they need to improve on school leadership, management and operations and creating a student-centered learning climate.

On the other hand, one of the dramatic changes in the educational landscape is the issuance in the field about the DepEd Order No. 24, series 2020 titled National Adoption and Implementation of the Philippine Professional Standards for School Heads (PPSSH). The changes brought about by various national and global frameworks such as K to 12 Basic Education, ASEAN integration, globalization and the changing character of 21st century learners necessitate a call for rethinking of the National Competency-Based Standards for School Heads (NCBSSH).

Spotlight (2020) posits that leading through uncertainty, requires leaders to adopt quickly to a rapidly changing situations and to draw on different skills and types of leadership. "Some activities differentiate effective leaders from the rest of the world when faced with adversity. What is required is a proactive, inclusive and transparent approach that does not downplay information or delay a response" (Kerrisey & Edmondson, 2020).

In her article, Pont (2020) expressed that even many challenges in the education system have been raised by the COVID 19 pandemic, it still presents opportunities for those in educational leadership positions to re-consider the delivery of education and schooling. This time is more relevant for school leadership teams because of the vital role they play in creating environments that support teachers, students and their families to remain connected and learn during the pandemic, whether in school or at home.

Along with that notion, Pont (2020) reiterated that those in educational leadership positions must be capable of providing support, technology and guidelines in preparation for the next steps. Educational leaders also have the responsibility to provide clarity and vision in terms of learning and curriculum requirements, health and safety guidelines, training and resources to be able to define learning solutions that will allow their schools to flourish in times of uncertainty.

Henebery (2020) expressed that the COVID 19 pandemic created a renewed sense of collaboration, shared resources and mentoring, not only among educational leaders in positions, but also among teachers and other professionals particularly on curricular structure. Even by moving to online learning, the Learning Intention and Success Criteria were still made very clear and easily understandable for students learning remotely.

Asonye (2020) characterized the new normal as an organized language used in suppressing any doubt caused by covid 19 pandemic. This is somehow being used by many in describing the present situation around the globe brought about by the lack of cure or no cure in sight for corona virus infection.

The situation might have been different and more challenging than before and it entails even greater challenge in educational leadership. Fulan (2002) specified that in sustaining the need for innovation in education, principals must be instructional leaders themselves in order to achieve the present goals in education and sustain their respective teachers' technological innovation and increase student learning.

Moreover, Chaplin (2020) emphasized that as organizational priorities shift to create the next new normal, the leadership capabilities required to accommodate those shifts and execute new strategies will also change. This would then lead to development and organization of new strategies relevant to the present needs.

In the new normal, as expressed in an article titled: "The Role of School Leadership in Challenging Time (August, 2020), the leader's ability to shift and adjust leadership approaches based on the need is the key to being an effective leader. Effective leaders, like effective teachers, must know how to adjust and draw on a range of skills and approaches depending on the context.

Significantly, in such disruptive times, Harris and Jones (2020) noted down that school leaders cannot emulate the state of leadership practices they witnessed or enjoyed in a period of stability, continuity, and relative calm. School leaders cannot emulate the leadership practices they witnessed or enjoyed in a period of stability, continuity, and relative calm.

On the other hand, as claimed by another article on Meeting the Challenges of the New Normal in School Education: An Online Workshop for Policy Makers, Teacher Educators and School Leaders, educational leaders' response to the crisis brought about by the pandemic have exposed weaknesses in educational systems, however creating opportunities to redesign school education to a more resilient and robust new paradigm.

According to Singh and Allison (2016) as cited in Leithwood and Sung (2012), school leaders who prioritize organizational management and establish school conditions towards academic excellence have significant impact on students' scholastic achievement. Ensuring structured school policies, planning, operations that promotes collaboration among stakeholders and provides more opportunities for teachers to be more competent and productive.

Creating a Student- Centered Learning Climate is the domain that requires that effective school leaders set high standards and create high expectations for learners at the same time recognizing their achievement.

The overarching objective of this study is to determine and gather in-depth understanding on the leadership styles and experiences of school principals in the performance of managerial functions. These managerial practices serve as basis for the crafting leadership and development program for novice and would-be school leaders.

Specifically, the study sought to describe the participants' managerial experiences on: (1) School Leadership; (2) Management and Operations; and (3) Creating Student-Centered Learning Climate.

The participants' rich responses may contribute to the development of the concepts and experiences in the practice of duties and responsibilities as school principals in terms of school leadership, management and operations and creating student-centered learning climate.

The managerial experiences of the participants which clearly define classification as professionals and managerial practitioners were reflected as best practices worth to be emulated by novice school principals. The managerial experiences and level of mastery as experts on their managerial function qualify the participants as reliable sources of primary data.

The study intends to determine the significant experiences of the principals on School Leadership, Management and Operations and Creating Student-Centered Learning Climate. These managerial expertise and sound practices are believed to be contributive in improving school's achievement and may be employed as benchmarks in the performance of the managerial functions especially for the novice school principals.

Distinctively, this research is anchored on the recent bid of the Department of Education which issued D.O. # 24, s. 2020 entitled, National Adoption and implementation for the Philippine Professional Standards for School Heads which was released in September 2020. Moreso, the basis of this paper emanated from the domains stipulated in the National Competency-Based for School Heads. Nevertheless, the three domains from the PPSSH which comprise of a) Leading Strategically, b) Managing School Operations and Resources, and c) Focusing on Teaching and Learning were connected with the current research.

Likewise, this pointed out the strengths and weaknesses of principals in carrying out managerial functions in their respective schools. Likewise, it may also be used in designing professional development plan for school principals and provide basis for greater efforts to redirect management practices to greater efficiency and effectiveness.

Furthermore, the results may be beneficial for the newly assigned school heads for the improvement of their competencies on the three Key Result Areas as principals as mentioned in the National Competency Based Standard for School Head.

Lastly, this paper is centered in describing the managerial experiences and leadership practices of 14 public elementary school principals as experts in terms of mastery on their managerial function in the 3 out of 7 competencies as stated in the National Competency Based standards for School Heads (NCBS SH) in their performance of their managerial functions. These three (3) domains namely: School Leadership, Management and Operations, and Creating Student-Centered Learning Climate were assessed as priority areas to improve managerial proficiency among school principals.

METHOD

This research utilized qualitative method through in-depth interviews as the primary data gathering scheme to explore participants' experiences, attitudes and practices. As cited in Singh and Allison (2016) in Cohen, Manion and Morrison (2011), the study determined the experiences of the 14 elementary and high school principals in the public school on School Leadership, Management and Operations and Creating Student-Centered Learning Climate.

The participants of this study were fourteen (14) full-fledged principals in the public elementary and secondary schools. They are considered expert in terms of mastery on their managerial function. Their expertise manifests in the number of years they have been serving their respective institutions as principals. The purposive sampling technique was utilized to capture the data that answered the research objectives.

The inductive reasoning in analyzing the data was used to search for relationships and themes. The study selected school heads that provided rich information on management practices that are worth emulating by novice and future school heads. In this study, a researcher-made semi-structured interview guide was developed and content validated in order to produce more in-depth description of the participants' practices in their competencies on the three domains as principals. Open-ended questions were asked to elicit unbiased responses from the participants and allowed the smooth inflow of in-depth knowledge of human's perceptions and experiences.

The assistance of three experts was sought for the validation purposes. Their suggestions were integrated to strengthen the clarity and trustworthiness of the instrument. The experts evaluated the crafted research questions on the following criteria: alignment of the research questions to the research objectives, grammatical soundness and language accuracy.

The study was conducted as soon as the consent had been obtained. The researcher requested from the division superintendent a permit to gather data. The school heads as participants were given guide questions by the researcher to ensure the profoundness of rich responses. The researcher scheduled the interview of the participants.

Ethical consideration was observed in the conduct of the research. Research ethics was strictly observed to establish the academic soundness of the study. The results of the interview were confidential and were only used for the intended purpose of the study. Names and the school of the participants were not revealed so as to protect and ensure honest responses from the participants. The gathered responses from the participants were analyzed and categorized to highlight the expressed management practices.

FINDINGS

Participants' Experiences on School Leadership

Leadership Style

Exemplifying Leadership Style: Impetus for Change

The outstanding school heads influenced people through their behavior. Relevant commonalities of their responses defined their exemplified leadership styles. Four participants led their teachers by example.

Leading with Values: Walk the Talk

The participants aligned their values with their practices. Their values manifest in their actions. Their guiding philosophy in leading the school was categorized as leading with values. Seven out of the 14 participants lead their people with integrity.

Reframing Challenges: Opportunities for Collaboration and Growth

Challenges bring about innovations on the part of the participants. They rethink and envision things to address challenges. Five participants are positive that challenges only make them stronger in leading their respective schools.

Management and Operations

In the over-all responses of the participants, it can be drawn that outstanding principals manage school resources based on existing policies and guidelines. They have implemented divergent and convergent strategies in managing school programs.

Prioritization Based on Accountability and Policies

One of the essential responsibilities of the school heads is the effective management of school resources. The unique needs of the school that they handle has to be considered. As leaders, two participants reported the importance of honesty in managing school resources.

On the other hand, participants believed on the principle of accountability on the resources entrusted to them. It was implied that their being accountable to the school resources yields greater efficiency and productivity. Two of the participants admitted that in managing the school resources, one has to consider also the needs of the learner.

Participants realized the essence of participatory leadership in the effective management of school resources. Participants believe that effective management of school resources need careful planning of projects and prioritization in the fulfillment of needs of the school.

Convergent and Divergent Strategies in Managing School Programs

Programs that were implemented by the participants are found to have convergent and divergent strategies. Several approaches were suggested by the participants but all of them aimed for effective and efficient outcomes.

Participants expressed their strategies on implementing school programs based on their context. Overall, school programs are geared towards cascading DepEd related programs, initiating fundraising projects, conducting SLACs and Feeding program, initiating remedial program and coaching, forming/ building character and promoting of school through mottos, acronyms, research and initiated policies.

Managing Oneself: Key for Peak Performance

Responses about the participants' time management and their performance as school leaders revealed that they practiced managing themselves well. Their ultimate performance is based on prioritization of mandates, delegation of work and time management. Participants identified their priorities. They have to identify what is urgent and necessary.

One of the keys revealed in the performance of the multi-faceted functions as school leaders and managers of the participants is knowing how to delegate work with the right people. Delegation is carried out through some of the participants' responses.

According to the participants, success in leadership can also be attributed to proper time management. Every minute counts in their leadership performance.

Under the new normal, school heads are more inclined to be at their best both in implementing strategies to enhance education tasks and proper time management. Predominantly at the onset of online education when everyone was caught unaware that a big change is about to happen, school heads are left with no choice but to demonstrate their unique abilities to embrace innovation.

Creating Student-Centered Learning Climate

Participants depicted their description of an engaging learning environment. For the participants, an engaging learning environment is one that is learner-centric where students are engaged in classroom and extra-curricular activities and teachers are highly motivated to teach and collaboration takes place be it in online teaching and face to face teaching.

Commitment of Teachers on Learner-Centric Environment, Fostering Accountability to Learning

Participants have agreed that their main aim is to serve the learners, thus they need to provide activities that are student centered. They described what an engaging environment is. On the other hand, participants created innovative ideas and adopted active learning strategies to learners.

Sustained Positive Climate Through Rewards and Engagements of Stakeholders

The participants pointed out their experiences in establishing and maintaining student-centered learning climate. Three of them believe that motivation and recognition play vital role for a positive learning climate. Participants have also responded that they coordinate and monitor the progress of their programs that contribute to maintenance of having a student-centered learning climate.

Building Connections Toward Proactive School Culture

Responses of participants' experience in building a positive school culture scored the importance of open communication, active participation of stakeholders' transparency and giving of importance to people/ officials/stakeholders. They pointed out the essence of open communication in engaging stakeholders.

DISCUSSION

In this study, school leadership is further understood as how participants describe their leadership style, their philosophy in leading the school and the strategies of participants in handling leadership challenges. Under school leadership, three themes have emerged.

In this research, the participants identified different leadership styles which they practice in accomplishing their goals in their respective areas. Leading by example was stressed that this is still one of the best ways of influencing teachers to obey orders and follow instructions.

Leading by regulations through strict implementation of DepEd orders and pronouncements was also identified as an effective leadership style. This style is used as an indicator in assuring oneself for a job well done because of adherence to orders. Transformational leadership on one hand allows leaders take on creative ways in delivering leadership tasks. Equally significant leadership styles include democratic leadership and participative leadership styles which call for a more participative engagement of the people or the staff.

Equally noteworthy is transparent leadership style which bestows trustworthiness. The specified leadership style was supported by Louis et.al. (2010) in expressing the fact that school leaders perform mandates that are uniform in nature but respond differently based on internal and external factors enabling them to do so.

One important leadership quality transforming leaders to become impetus of change is setting the organizational framework through management by objectives. According to Islami, Mulolli and Mustafa (2018), management by objectives (MBO) is defined as "parameters of strategically planning which means that harmonizing manager' aims with the employees in order to reach the objectives introduced by organization".

Otherwise known as management by results or leadership with goals, it is clear to all the participants that they have objectives and goals to achieve as leaders and managers of their

respective schools, regardless of their individual leadership styles. Ofojebe (2014) emphasized on the educational context of MBO relating stream of objectives, decisions and actions of the leaders leading to the formulation of an operational strategy in achieving educational objectives.

Another emerging theme is Leading with Values: Walk the Talk. It can be stated that the participants of this research have a wider and deeper perspective on leadership. It can be implied that they possess reflective attitude as expressed in their personal and professional guiding philosophies.

As delivered in several contexts, servant and collaborative leadership with integrity are integral and crucial in developing one's guiding philosophy in leading a school. According to Greenleaf (2016), *"the servant-leader is servant first...It begins with the natural feeling that one wants to serve, to serve first"*. Greenleaf (1977) as cited in Focht and Ponton (2015) stated that servant leadership "begins with the natural feeling that one wants to serve, to serve first. Many find it hard to accept the phenomenon of servant leadership because they do not understand how a servant can be a leader and how a leader can be a servant; that is, it seems to be an oxymoron (Russell & Stone, 2002, p. 145; Sendjaya & Sarros, 2002, p. 57; Wong & Page, 2003, p. 2; Focht and Ponton, 2015, p.1).

Laub (1999) argued that servant leaders value their people by serving other's needs before their own. Focht and Ponton (2015) citing Greenleaf (1977) stated that a servant leader must serve first and then make a conscious choice to aspire to lead. Bandura (1977) as cited by Corwin (2018) was the first one who introduced the concept of self-efficacy and focused on whether individuals believed that they had the capabilities to meet the demands of a specific task. Further, Corwin citing McCormick, Tangum and López-Forment (2002) suggested that "research findings have demonstrated a consistent relationship between self-efficacy and work-related performance". That work-related performance can contribute to a more productive and innovative school climate.

Meanwhile, Yukl (2013) defined integrity as *"honesty and consistency between a person's espoused values and behavior"*. Van Aswegen and Engelbrecht (2009) elaborated on this definition, seeing a person with integrity as honest and trustworthy. The philosophy of servant leadership, according to Savage-Austin (2011), is often compared to two other approaches to leadership: the transformational approach and the authentic approach. An excerpt derived from work by Avolio and Gardner (2005) as cited in Savage-Austin helps researchers understand the attributes of the two approaches to leadership.

Meanwhile, collaboration is one of the 21st century skills. Defining and examining collaboration is complex as it is simultaneously, a concept, an action and a form of leadership (Timothy (2016) cited in Planche (2004), involving macro-social, institutional, structural, and interpersonal contexts, power dynamics and subjectivities. Big picture thinking, coaching, mediation, negotiation, risk analysis, contract management, strategic thinking, interpersonal communications, and teambuilding, are some of the skills identified as necessary to successfully lead collaboratively (Goldsmith & Eggers (2004) cited in Timothy (2016). Other core collaborative leadership competencies include ability to resolve conflict, communication skills, ability to understand other perspectives, and expertise in the problem area (Timothy (2016) cited in Foster-Fishman et al. (2001). In addition to encompassing listening skills (Timothy (2016) cited in Bardach (1998), collaborative leadership is also conceptualized as the ability to convene others to solve problems jointly, to energize around a problem, to facilitate the work of others, to create a vision and solve problems (Chrislip & Larson (1994) cited in Timothy (2016). Likewise, Cooper, Gustafson and Salah (2014) exemplified the idea of collaborative leadership.

Positive leaders, according to Kahneman (2011), possess the ability to think without restraints who consider the possible options in facing relevant challenges effectively. Cameron (2012) pointed out that positive leadership emphasizes what elevates individuals and organizations. Goldman, Boyatzis and McKee (2004) suggested to work around a positive leader for you to grow positive.

One way to unleash positivity in schools is by being grateful. According to Wilson (2015), professors at the University of California – Berkeley's Greater Good Science Center share the good effects of sincere gratitude. Awolugutu (2016) emphasized that challenges and obstacles are the driving forces to success.

According to Frantell (2016), leaders help shape the group climate through their leadership style and behaviors, and group climate, in turn, may influence group member outcomes. This is consistent with research of Kivlighan and Tarrant (2001), who found that a positive therapeutic relationship of leaders to group members was related to increases in engagement, therapeutic work intentions of the leaders were related to increases in engagement, and greater group structure intentions were related to decreased conflict. Lev Vygotsky suggested that human development occurs on two levels: socially (intermental) and psychologically (intramental) (Tran, 2008).

Under KRA 2, the first emerging theme is prioritization based on accountability and policies. According to the International Academy of Education, there are three main types of accountability systems that are sometimes applied simultaneously in the field of education: a) compliance with regulations, b) adherence to professional norms, and c) results-driven (Anderson, 2005).

The next merging theme is convergent and divergent strategies in managing school programs. Educational management is a complex process which is influenced by different factors. Specifically, they targeted cascading DepEd related programs, initiating fund raising projects on, conducting SLACs and feeding program, initiating remedial program and coaching, forming/building characters and promoting school culture.

In character formation, the participants dwelled in building a strong community relationship among the stakeholders. In this program, everybody is considered a family which includes the leader, teachers, students and parents. Development of leadership, integrity, faith and excellence qualities of students is also aimed in the said programs.

Remediation and the reading skills of the students are the main focus in improving the academic program of the participants. Teachers are capacitated with seminars and trainings on remedial instruction to save students from the risk of dropping.

The participants also organize activities or school programs for the improvement of the school facilities. Such improvement in the physical facilities of the school must also correspond to the performance level of the students in academic subjects.

It is reiterated that school programs are geared towards facilities improvement, academic performance and character formation as reflected in various activities and programs implemented by the participants in their respective schools. In the field of character education, Vos (2017) advocated role-modelling is as an important pedagogical strategy.

California State University stressed out that academic excellence is more than just making good grades. It is the maximum development of your intellectual capacities and skills in service to humanity (California State University, 2018).

According to McGowen (2007) citing Blair (1998) and Chan (1996), when the learning process is at the three core of design priorities, there is a significant likelihood that the facility will positively influence performance. The correlation appears to be positive between facility design and learning.

Another theme under KRA 2 is managing oneself: key for peak performance. Effective time management help leaders to meet the demands of the job and improve performance of tasks, and time management was identified as the essential characteristics of a leader in an organization.

Prioritization also spells efficiency as it helps the leaders set order in the organization and promptness in the delivery of services. As described by the participants, prioritization is set by identifying the tasks that are urgent in accordance with deadlines.

As highlighted by the participants, success in leadership is attributed by proper time management. It reiterates that every minute counts despite the huge administrative and supervision tasks and responsibilities that they have, they must see to it that a 'short talks' to the staff must also be afforded.

According to Wilhelm (2015), effective delegation is an essential skill set for any principal's efficiency and even survival. Basically, operational duties are optimal for delegation, including schedules, logistics, ordering and handling materials, reports, record keeping, and discipline referrals.

In a study conducted by Xiyang et al. (2017), it was pointed out that feedback is helping out employees in facilitating an evaluation and improvement of performance. However, there were no proven specific actions or investigations to explicitly show how to encourage employees seek feedback.

As deliberated by Muir (1995), jobs are done efficiently and objectives are met within the laid down time-scale by pulling together the resources. Human resource is the vital force in effective management, specifically in taking full advantage of their skills and aptitudes.

The third KRA as the basis of the study is creating student-centered learning climate. As illustrated in the findings, learning environment is one that is learner-centered wherein students and teachers are engaged in different school activities and functions and are motivated to portray their roles and fulfil their tasks.

The first emerging theme under this KRA is commitment of teachers on learner-centric environment, fostering accountability to learning. Teachers' commitment to set instructional programs centered on the learner entails to put the learner at the core of instruction which entails planning, monitoring and reflecting.

Student-centeredness climate is also spelled by making the students feel that they are part of the plan. Therefore, it is necessary that they are also included in the formulation of the activities for the school.

Literature support in this study indicate that creating student-centered learning climate is further understood on how the participants describe an engaging learning environment, how a student-centered learning climate is established and maintained, and the steps to be taken to engage stakeholders in building a positive school culture that promotes student-centered learning. To achieve this, the following themes emerged: there is a need for inclusive and transparent leadership, program evaluation, and such learning environment must be learner-centric and collaborative.

Particularly at this time when the world is beset by the pandemic which has turned everything upside-down, a more tedious and mundane challenge was posed in the academic industry. As pointed in one of her articles, Pont (2020) delivered that even the education system has been defied by the COVID 19 pandemic, it must still be seen as an avenue for those in the educational management as an opportunity to reconsider the delivery of education and schooling.

According to Le, Janssen and Wubbels (2016) cited in Johnson and Johnson (1999), collaborative learning (CL) can be defined as a set of teaching and learning strategies promoting student collaboration in small groups (two to five students) in order to optimize their own and each other's learning.

The second theme is sustained positive climate through rewards and engagements of stakeholders. Communication and active participation of stakeholders are reiterated in building a positive school culture.

Education empowers. It must be inclusive and through transparent leadership everyone is encouraged to take part and contribute towards building a positive school culture that promotes student-centered learning. Yi (2017) found out that leaders' transparent behavior influences employee creativity.

In the same way, Bourke and Espedido's (2019) thoughts on inclusive leadership support the findings generated from this research. One point stressed is how inclusive leadership was defined as a way that assures that all members feel they are treated respectfully and fairly, valued, and make them feel that they belong; more so allowing them to be more confident and inspired.

Another relevant insightful result from Norman, Avolio and Luthans (2010) were generated to support the claims within the context stated from the research findings. As mentioned in the different literatures cited from Norman's et al (2010) paper, authentic transparent leadership has been described as "representing the extent to which an individual displays a pattern of openness and clarity in his/her behavior toward others by sharing the information needed to make decisions, accepting others' inputs, and disclosing his/her personal values, motives, and sentiments in a manner that enables followers to more accurately assess the competence and morality of the leader's actions".

A critical theme that emerge is building connections toward proactive school culture. Participants remind and motivate teachers to be at their best because they become the students' source of inspiration in any school program.

No matter how good a program is, without proper monitoring, such program will not continue. Program monitoring is imperative to effectively establish a learning environment that is child-centered and child-friendly. Metz (2007) stressed the importance of program evaluation as a valuable tool in strengthening the quality of school leaders program who in obtaining improved

outcomes for the students. Program evaluation is a systematic process of collecting, analyzing and using information to answer questions about projects, policies and programs, particularly about their effectiveness and efficiency (Administration for Children and Families, 2010). The term program is used broadly in this guide to represent activities, small interventions, classroom-based projects, school wide programs, and district or state-wide initiatives (U.S. Department of Education, 2011).

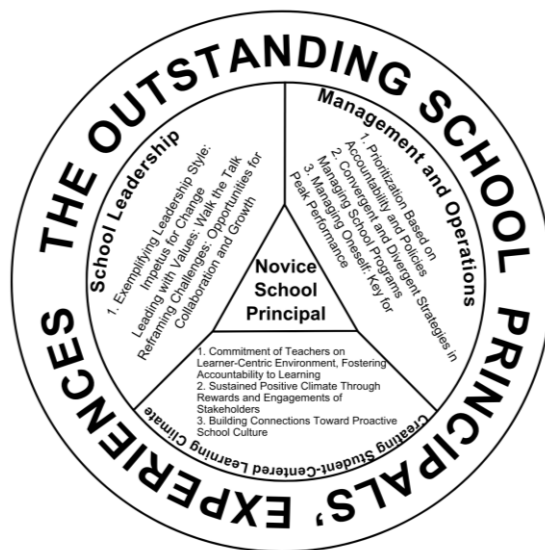
Jinabhai (2007) highlighted that monitoring and evaluation (M&E) helps program implementers to: 1) determine the extent to which the program/project is on track and to make any needed corrections accordingly; 2) make informed decisions regarding operations management and service delivery; 3) ensure the most effective and efficient use of resources; and 4) evaluate the extent to which the program/project is having or has had the desired impact.

An engaging learning environment to be effective, it must be collaborative. Goleman et al. (2002) treat leadership as a function of the group as opposed to that of the individual.

In a study conducted by Roxas (2018), School Learning Action Cell (SLAC) was highlighted as a significant program which can enhance the knowledge and skills of teachers for the institution in order to provide basic and quality education. Previously, educators tend to address students' needs based on the model of teaching and learning that focuses primarily on memorizing facts because that is how they were taught themselves. The aforementioned insights are depicted in Figure 1 which presents the emerging framework.

Figure 1

Outstanding school principals' experiences in the old normal: Avenues for developing novice leaders' managerial skills in the new normal



Emerging Framework

Encapsulated in the circle are the different managerial skills of the principals. The researcher purposively selected a round image to describe the managerial skills of the principals since the identified themes and categories were inseparable with one another. The circle is also a graph that represents the totality of the study, but can be subdivided into different sectors in order to fully grasp the interrelated ideas and principles. In connection, the emerging framework was subdivided into three sectors: School Leadership, Management and Operation and Creating Student-Centered Learning Climate.

As seen from the first part which is the School Leadership, three themes have emerged: Exemplifying Leadership Style: Impetus for Change; Leading with Values: Walk the Talk and Reframing Challenges: Opportunities for Collaboration and Growth.

The next section of the circle is management and operations. The present study defines the management and operation as the ability and skill of the school principal on how to manage their school resources, how do they implement school programs, and how do they manage their time and perform multi-tasks as school leaders. Furthermore, three themes emerged under this category: Prioritization based on accountability and policies; convergent and divergent strategies in managing school programs and managing oneself as a key for peak performance.

The last part of the section is the Creating Student-Centered Learning Climate. The aforesaid category is being defined as the skill by the principal to create student-centered learning climate.

Recommendations

After thorough analysis of the findings of the study, the researcher would like to underscore the following recommendations:

- 1.) School leaders be outstanding and novice are recommended to be adoptive, resilient and proactive in managing changes brought about by the challenging circumstances/ situations.
- 2.) Building community of networks, partners and stakeholders is a must undertaking for both leaders to generate the needed resources for the school.
- 3.) The learners, no matter what curriculum changes will be made, will always be the center of the educative process, thus, school heads and partners should take into account innovations/ creative programs/activities which will develop the competencies, skills and values for their holistic growth.
- 4.) It is highly recommended that school heads give utmost priority to programs that would foster development of learners' skills, talents and strengths thereby equipping the teachers to facilitate such development.
- 5.) Committee in program evaluation may be created to properly document, organize and assess each program.
- 6.) The Department of Education (DepEd) may provide unified guidelines and process in program evaluation and assessment. Capacity building may also be given among school heads not only on program evaluation but also how to enrich educational practices into more creative and innovative ways that may address the Volatile, Uncertain, Complex, Ambiguous and Disruptive (VUCAD) educational world.
- 7.) Programs for the meticulous observance of the three domains stipulated in

the Philippine Professional Standards for School Heads such as Leading Strategically, Managing School Operations and Resources, and Focusing on Teaching and Learning should be imposed to assure quality management practices.

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Exploring the implementation of the basic education learning community plan (BE-LCP): Challenges and opportunities from the lenses of select stakeholders researcher

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Abstract

This qualitative case study aimed to derive research-based inputs for a policy review in enhancing the Basic Education Learning Continuity Plan (BE-LCP) in public schools. Select stakeholders from two large schools in a City Division in Pampanga that were regionally recognized for having a meritorious partnership with internal and external communities were virtually interviewed on their experiences about the BE-LCP implementation. Thematic analysis of the data led to the emergence of seven themes regarding challenges and problems met: policies on crossroads, technological discrepancies, limitations triggered by health constraints, dynamics of education, training inadequacy for facilitators of learning, barriers to building stakeholders' partnership, and imbalanced between curriculum and instruction. Meanwhile, from the described strategies and best practices of the schools, seven themes were also formed: flexibility and adaptability of DepEd authorities, schools address the deficiencies in digital resources, advocating a safe and healthy safe environment, consideration of individual learning needs, provision of limited transition programs to teachers, stakeholders' willingness to participate in the implementation of BE-LCP, and constant monitoring and evaluation of the plan. Recommended ways offered to triumph on post-COVID-19 education include a thorough review of plans and decisions before its implementation and purveying robust e-learning infrastructure and sustaining financial resources to address the discrepancies in digital resources, among others.

Keywords: *Basic education learning continuity plan, case study, implementation, opportunities, stakeholders, thematic analysis*

INTRODUCTION

Every challenge, every adversity, contains within it the seeds of opportunity and growth.

- Roy T. Bennett

The above quotation highlights the challenges, adversities, and opportunities for growth. United Nations Secretary-General Antonio Guterres uttered during the launching of a new United Nations campaign titled: Save Our Future, "Now we face a generational catastrophe that could waste untold human potential, undermine decades of progress, and exacerbate entrenched inequalities" (Green et al., 2020).

Opportunities can be drawn from the challenges posed to bring back the dream of reaching and increasing human capital, which is the quality of education. Meanwhile, several initiatives have

been advocated to recover from sudden disturbance to avert generational catastrophe (UNESCO, 2021). On a positive note, prioritization of health and wellness has been given attention, and resiliency is manifested in facing the world's challenges. As people, this crisis poses a genuine challenge and responsibility to all levels of stakeholders (UNESCO, 2020).

Coronavirus disease (COVID-19) outbreak turned into a global pandemic by March 11, 2020, and later became a worldwide health crisis. Inter-Agency Task Force introduced Non-Pharmaceutical Interventions (NPI) on Emerging Infectious Diseases (IATF-EID) as vaccines are not yet available, public health standards designed to ease and impede the transmission of infectious diseases (World Health Organization, n.d.).

Understanding its context, learning impacts, and unexpected education disruptions caused by COVID-19 were reviewed and analyzed. Across the globe, individuals live in a dynamic, unpredictable, highly unstable, and fast-changing environment. COVID-19 pandemic has surfaced as an ideal paradigm of a Volatile, Uncertain, Complex, Ambiguous, and Diverse (VUCAD) environment where swift changes took place on economic, political, social, and technological faces (Nangia & Mohsin, 2020).

According to Bennett and Lemoine (2014), volatility is dealing with instabilities and confusion; uncertainty reflects our inability to forecast and understand the essence of what is happening in real-world; complexity involves confusion as affected by multiple aspects that mingle to one another; ambiguity is the absence of clearness due to incoherence in ideas that leads to trouble in recognizing threats from opportunities.

In any organization and sector, VUCAD is applied to classify challenging circumstances and situations. The pandemic crisis turns into a dilemma for the various sectors such as health, education, and the like. Hence, the world's economy shuts down since most companies, firms, industries, enterprises, corporations, and the like have stopped alleviating the potentially dreadful consequences of virus transmission.

In the educational context, VUCAD is manifested in various ways. For instance, government leaders mandated the schools to have a partial or complete school shutting down to impede the spread of the virus. The COVID-19 pandemic has caused an enormous disruption across all grade levels in several countries to contain the dispersion of the virus. Undeniably, in history, it created a most severe global education discontinuance (UNESCO, 2021).

Aside from worsening education outcomes brought by an economic crisis, school closures have unfavorable effects on all learners. Cognitive domains and socioemotional are greatly affected since learning would stop. Learning inequality would manifest since the most affluent family can cope with the challenges in the new normal education. In addition, learners may be exposed since they are vulnerable to various forms of violence, including physical, verbal, emotional, and the like. Unwantedly, children, and youth can voluntarily participate in criminal acts due to risky behaviors and the abovementioned causes (World Bank, 2020).

From a global perspective, the progression of inclusive and equitable quality education was too slow even before COVID-19. According to the Sustainable Development Goals Report 2020, above 200 hundred million children will still be out of school ten years from now. With the advent of COVID-19, inequalities in education had intensified. Children's school completion rate is only 79% in the richest and 34% in the poorest of the low-income countries.

United Nations Children's Fund (UNICEF) Regional Office for South Asia (2020) provided a guide on distance learning modalities to reach all types of learners, especially the most marginalized, focusing on low- or no-tech, or offline modalities. These are categorized into five areas, namely: (1) distance learning in the time of COVID-19; (2) ensuring continuity of learning; (3) combining modalities; (4) supplementing learning opportunities via basic mobile phones; and (5) printed self-learning kits and reading resources.

First, in school closures due to COVID-19, distance learning has adapted different learning modalities. These are summarized into Home Learning Modalities Matrix across the four learning distinctions. The four classifications are high-tech modalities versus low-tech and self-learning versus teacher-guided. It is beneficial to distinguish the appropriate modality adapted by the school considering each background. Low/no tech, offline, is highly recommended for disadvantaged children and youth, including printed materials, books, radio, TV, home visits, calls, and SMS (UNICEF, 2020).

On the other hand, high tech online is best suited for the advantaged, which has access to technology, modalities relative to digital books, feature phone apps, other apps or platforms, digital classrooms, video conferencing, and social media. Parents ideally support self-learning, guardians and or caregiver, and teacher-guided are by their respective teachers. In any case, teachers' continuous engagement and interaction with students and providing timely feedback is critical (UNICEF, 2020).

As reflected in Article 26, Section 1 of the Universal Declaration of Human Rights (UDHR), "Everyone has the right to education." Education is a powerful tool; it enables the realization of other remaining human rights. Therefore, it is both a fundamental, empowering, and enabling right. Article 26, Section 2 supports this claim, and it states that "Education shall be directed to the full development of the human personality and the strengthening of respect for human rights and fundamental freedoms" (United Nations, n.d.).

At the height of the pandemic, the Basic Education Learning Continuity Plan (BE-LCP) was the response to deliver quality education amid the threat, challenges, uncertainties, and restrictions brought about by COVID-19. Moreover, it aims to allow Filipino learners to continue learning and for teachers to provide instruction in a safe learning and work environment (Department of Education, 2020). Verily, BE-LCP has guaranteed the abovementioned legal bases, Article 26, Section 1 of the Universal Declaration of Human Rights (UDHR), Sustainable Development Goal 4, Article 14, Section 1 of the 1987 Constitution of the Republic of the Philippines, and Section 6, Chapter 1 of Republic Act No. 9155, or the Governance of Basic Education Act of 2001. DepEd's BE-LCP would serve as the means in providing an accessible and responsive new normal education.

Moreover, the BE-LCP framework was crafted based on the inputs gathered from the consultative discussions of various stakeholders. These involve senate committees on basic education, legislators, executives from several units, and field offices. Likewise, a survey form was forwarded to teachers, parents, and learners across the country to assess the department's readiness in terms of remote education (Cahapay, 2021).

The components of the BE-LCP strictly revolve around the above principles. Certainly, as far as the health crisis is concerned, its focus is on safety measures in implementing the continuity

of education (Employers Confederation of the Philippines, 2020). Second, in the curriculum and instruction phase, the K-12 curriculum was reviewed to address the congestion and meet the required competencies (Hernando-Malipot, 2020). Third, choosing and adapting the appropriate modality. Fourth, delivering training workshops to teachers in the new modes of teaching and learning process. Fifth, providing orientation for both parents and learners in the safest way and finally bridging the “*Sulong Edukalidad*” framework to the new normal education. “*Brigada Eskwela*,” “*Oplan Balik Eskwela*,” and partnerships are other vital components mentioned in the said plan (Hernando-Malipot, 2020).

Generally, this study aimed to collect research-based inputs for a policy review in enhancing the BE-LCP in public schools. The study sought to describe the stakeholders' experiences on the operationalization of the BE-LCP in terms of (1) challenges faced by the participants and (2) best practices and strategies of the school.

After exploring the Basic Education Learning Continuity Plan (BE-LCP), it is hoped to benefit the DepEd central office, DepEd field offices, internal stakeholders, external stakeholders, and potential researchers.

The study was conducted to collect research-based inputs for a policy review in enhancing the BE-LCP in the Schools Division Office of the City of San Fernando, Pampanga. The participants were select stakeholders from two big schools in the division. Stakeholders' experiences on the operationalization of the BE-LCP in terms of challenges faced and best practices and strategies of the school were elucidated.

METHODS

The study engaged a qualitative approach to research. According to Crossman (2020), qualitative research is a type of social science research that collects non-numerical data through in-depth perceptions and descriptions of targeted populations. In line with the qualitative approach, the study utilized a case study research design in identifying the challenges and opportunities from the lenses of the select stakeholders relative to the operationalization of BE-LCP.

The participants were select stakeholders from the two very large public schools: one elementary and one secondary level in the Schools Division Office of the City of San Fernando, Pampanga. These schools have meritorious stakeholders' partnerships, both internal and external.

To determine the actual participants and ensure that these individuals exhibit recognized qualifications and are the right persons to provide inputs to reach the objectives raised in the study, this study employed non-probability sampling, specifically homogenous purposive sampling. Select schools in the Schools Division Office of the City of San Fernando, Pampanga were purposively selected and considered credible participants who can shed light on the problems raised in the study.

In determining the schools as participants, the research made use of the following criteria: (1) a public school in the Schools Division Office of City of San Fernando, Pampanga; (2) a very large school which consists of above 1,451 enrollees; (3) has recognized by Division or Regional, and or Central Office in terms of stakeholders' partnership; and (4) has the willingness to participate in the study.

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Schools are classified into sizes, and these were identified by having a projected data of enrollment. For the elementary level, very large school has 1,451 and above. On the contrary, Junior High School has 1,251, and Senior High School has 1,241 projected enrollees (Division Memorandum No. 344 Series of 2020). Two very large public schools in the Schools Division Office of the City of San Fernando, Pampanga, satisfied the criteria set in defining the participants in the study. Moreover, they were awarded from the Regional Office as Top Performing Schools relative to Local Stakeholders Convergence and Recognition of Government and Community Stakeholders (DepEd Region III, 2020).

In addition, actual participants in select schools are stakeholders who are at the same as school community representatives, namely: (1) school head; (2) teacher representative as designated by any faculty officer; (3) guidance counselor; (4) student representative as designated by any supreme pupil/student government officer; (5) parent representative as designated by any parent teacher association officer; and (6) barangay representative as designated by committee on education.

In order to perform thematic analysis on the data accumulated, this study utilized semi-structured interview guide questions in collecting the necessary qualitative information from the participants. The interviewer asked only a few preset questions, while the rest of the questions happened naturally in a free-flowing discussion. Hence, the interview guide was constructed based on the research objectives posed. Further, it was used to gather responses from the lenses of select stakeholders.

Questions concerning the Basic Education Learning Continuity Plan (BE-LCP) operationalization by select schools were created. Inputs collected from the interview were coded to facilitate the development of themes for analysis. The themes served as the development of inputs for a policy review in enhancing the Basic Education Learning Continuity Plan (BE-LCP) in the public schools as an expected output of this research-based study.

Three experts in educational research validated the instrument to ensure the validity and reliability of the self-made semi-structured interview guide questions. Validation of instruments implies how items on a tool gauge the concept being measured in the research study. They were requested to assess the questions as to relevance, responsiveness, and comprehension.

The research secured necessary permissions to conduct the study and endorsement from the Schools Division Superintendent, with the recommending approval of the Schools Governance and Operations Division Chief in the Schools Division Office of the City of San Fernando Pampanga through a request letter. This request cited the nature, objectives, and significance of the study.

Next, informed consent letters attached with the endorsement letter from the Division Office were also given to the key participants, along with a copy of the semi-structured interview guide. The schedule of the interview was set based on the agreed availability of the participants. Moreover, participants had enough preparation for the interview proper.

The actual conduct of interviews were recorded with the consent of the participants using Google Meet as the online platform due to stricter health protocols as face-to-face interviews are strictly not encouraged. During the interview, critical follow-up questions were given to substantiate the narratives and reach the saturation point.

The recorded interviews were converted to transcripts of responses. Likewise, to ensure the correctness of the data being transcribed, a review was done. Inputs collected from the interview were analyzed following the thematic analysis.

Ensuring the entire research is within ethical limits, the following activities were observed. The participants were duly informed of the nature and purpose of the study and signed the consent provided. Unfortunately, one of the key participants withdrew from the study, and his decision was highly respected. Participants' availability for the interview proper was followed to avoid any form of inconvenience. During the interview proper, briefing and an environment of trust and sensitivity were given. Lastly, participants were assured that all information collected were treated with the highest confidentiality and respect.

This study performed thematic analysis to describe the stakeholders' experiences on the Basic Education Learning Continuity Plan (BE-LCP). Moreover, to decipher the inputs collected from the interview.

Thematic analysis entails several steps to identify the cluster of themes. In the data analysis, the following steps were observed: (1) converted the recordings into transcripts; (2) identified key points; (3) coded the key points; (4) group similar codes; and (5) assigned themes (Braun and Clarke, 2006, as cited in Caulfield, 2020). Thus, the data were presented in a meaningful and logical way.

Before moving to the analysis of qualitative data, transcriptions were made ready. In doing so, transcripts were reviewed thoroughly to capture the essence of the participants' valuable insights and be familiarized with the data's patterns and relationships.

Next, assigning codes through reading the key points and familiarizing them with the data was occurred. In the grouping of codes, descriptions were carefully reviewed and analyzed. Finally, themes were assigned following the inductive process of thematic analysis. These themes supported the study's main output, which are the inputs for a policy review in enhancing the Basic Education Learning Continuity Plan (BE-LCP) in the public schools.

The discussion was supported by participants' actual responses, as revealed in the interview transcript, and related literature to prove the validity of the results.

FINDINGS

Description of Participants' Experiences on Encountered Challenges on the Implementation of Basic Education Learning Continuity Plan

Participants were very open in sharing their experiences relative to the ongoing implementation of BE-LCP. BE-LCP was launched in School Year 2020 up to the present, and it is its first time of execution, and "birth pains" were stated keenly by select stakeholders.

After a thorough analysis from the experiences given by the key participants, seven themes emerged: ***Policies on Crossroads, Technological Discrepancies, Limitations Triggered by Health Constraints, Dynamics of Education, Training Inadequacy for Facilitators of Learning, Barriers to Building Stakeholders' Partnership, and Imbalanced between Curriculum and Instruction.***

Policies on Crossroads. Due to unusual practice in delivering instruction, trial and error and inconsistency of decisions and commands led to confusion to sole implementers. Lack of student's and parent's handbook, which represents the prescribed conduct on the use of gadgets and learning method. Likewise, endless paper works of teachers were just a few among those mentioned problems in line with the various policies that need to be reviewed.

Technological Discrepancies. In the absence of a normal learning experience at school, technological advancement played a vital role in continuing education, specifically in distance learning. However, in the Philippines, some controversial issues include internet performance and poverty among Filipino families. Undeniably, most families belong to a low-income class, and fewer are part of the middle-income and high-income class.

Limitations Triggered by Health Constraints. Participants were unanimous in safeguarding their health amid the COVID-19 outbreak. Although, this was put into an obstacle where participants experienced paranoia on getting infected by the virus. Hence, the distribution and retrieval of learning modules were affected. In addition, teachers who are senior citizens and with comorbidities cannot perform their tasks well.

Dynamics of Education. The Department of Education aimed to offer learning opportunities for all despite the crises. However, learners encountered difficulties as the recipient of Most Essential Learning Competencies and teachers who act as facilitators of teaching and learning experience.

The presence of having privileges to digital resources brought to exclusivity, which they believe should be adequately addressed to attain the maximum percentage of inclusive education.

Regardless of the modalities adapted by respective schools, Self-Learning Modules (SLMs) are handed over to learners as main learning resources. Also, SLMs guide both learners and parents through the content and learning activities for each subject matter. Participants confessed the lapses that appeared in SLMs, such as complexity of activities, ambiguous directions, improperness, lack of uniformity, and printing. This results in a lack of thorough quality assurance as a clamor of participants to deliver quality learning resources.

One of the significant challenges in distance learning is the growing number of students who lag academically. They lose interest and motivation to continue learning in a distance education system and later become non-compliant. In addition, some are poor in comprehension and cannot carefully follow instructions.

Traditional face-to-face classes gaining unfair academic advantage is a pressing problem in the school. Learners who are caught doing such acts are subjected to due process and given positive disciplinary actions. Academic misconduct doubled the numbers before as teachers' cannot directly monitor learners' academic behavior at home nowadays. Besides, this investigation is limited due to the Data Privacy Act of 2012.

The teacher's role in this new normal education is more convoluted than before. Some individuals neglect their prevailing sacrifice on doubled duties and responsibilities they perform. However, teacher's limitations are manifested.

Training Inadequacy for Facilitators of Learning. At present, teachers are not currently in front of the class imparting the necessary knowledge, skills, and values. Instead, parents and guardians performed the teachers' tasks and now act as learning facilitators at home. Incontestably, parents and guardians did not receive adequate units of teaching methodology, unlike the teachers in the profession. In brief, whichever program has not clearly and systematically explained would not produce a maximal efficacy. It was not easy to teach the children if parents themselves did not receive an adequate education.

Smooth adjustment in the new normal education dramatically impacts the effectiveness of educational continuity. Rapid change of technology range over the traditional classes. Teachers who are digital immigrants find it hard to master the new teaching and learning methodology through various online platforms.

Barriers to Building Stakeholders' Partnership. Internal and external stakeholders in every school are part and parcel of the victory of BE-LCP's operationalization. School's defense in making the learning continuity plan animated is through the commitment of stakeholders in recognizing the DepEd's vision and mission. A lack of involvement, cooperation, engagement, sensitivity, communication barriers, and openness have been mentioned as difficulties in establishing human connections during the continuing implementation

The government's insufficient budget in education was also carried out and counted as contributory factors in blocking the realization of BE-LCP's goals and targets. Certainly, a need to re-consider the funding in education is deemed necessary to support the educational plans.

Without a doubt, most learners have a parent or a guardian who guides their child at home. Although this may be true, some parents and guardians lack support and even resulted in close-mindedness, leading to a lack of awareness and involvement.

Imbalanced Between Curriculum and Instruction. Communication plays an essential role in bridging connections to learners, parents or guardians, and other individuals in a distant world where physical distancing is strictly observed. Teachers, as expected, shall communicate clearly and promptly the progress of their learners to whomever it may concern. Moreover, providing feedback is necessary as far as acquiring the MELCs is concerned. On the contrary, some teachers have missed to give feedback mechanisms.

In the Philippine, K to 12 basic education was launched to develop globally competent Filipino citizens who can cope with international standards. K to 12 curriculum is on its way to reassessing vastly to give solutions to the recent Program for International Student Assessment (PISA) results. In the new normal education, learning competencies were streamlined to be congested, and emphasis would be given. However, the challenge remains still. A thorough review of its plan may bring effectiveness in the delivery of quality education.

In the meantime, independent learning happens as there is no education happens within school grounds. Distance learning sets a barrier for those learners who cannot do self-study. A comprehensive evaluation of adapted modalities may derive a win-win situation between the learner and the school. Self-directed learning is ineffective for the learners and parents or guardians, especially when both are struggling academically.

Description of Participants' Experiences on School's Best Practices and Strategies on the Operationalization of Basic Education Learning Continuity Plan

Despite the barriers, obstacles, and challenges encountered by the school frontliners in implementing BE-LCP, opportunities and the school's best practices and strategies are still being reflected, contributing to its operationalization, seven themes were derived: ***Flexibility and Adaptability of DepEd Authorities, Schools Address the Deficiencies in Digital Resources, Advocating a Safe and Healthy Safe Environment, Consideration of Individual Learning Needs, Provision of Limited Transition Programs to Teachers, Stakeholders' Willingness to Participate in the Implementation of BE-LCP, and Constant Monitoring and Evaluation of the Plan.***

Flexibility and Adaptability of DepEd Authorities. The importance of BE-LCP was seen as deemed necessary in continuing education despite the pandemic crisis. Besides, considering the safety and convenience of school staff, learners, and parents are part of the main goals of BE-LCP. Stakeholders considerably recognize the foreseeable consequences if the education gap happens.

Respective field offices in the Department of Education have complied with the mandate of establishing continuity of learning for each school. School planning ensured to follow the several DepEd orders in line with the implementation of BE-LCP. Inclusive education was strictly adhered to in mapping the learners' resources and in choosing appropriate learning modalities.

Schools Address the Deficiencies in Digital Resources. Digital resources have a huge role in delivering instruction in a digital world. Schools extended their available resources to teachers and learners to cope with the in-demand needs of the educational system in the new normal.

Advocating a Safe and Healthy Safe Environment. Physical and mental health is the utmost priority of the schools in this time of COVID-19. Health protocols prescribed by the Department of Health were strictly abided by. These are seen in several schools to impede the possible transmission of the virus during the distribution and retrieval of modules.

Undeniably, mental health is heavily affected by this surprising pandemic crisis. Individuals across the globe are suffering from stress, anxiety, and depression. Every school has its own Guidance Offices, which continuously share its assistance, time, and effort to reach out and listen to those experiencing mental health crises. In addition, DepEd released an order in line with academic ease to lessen the burden of every student.

Safety measures are firmly observed by school staff and learners until this point, so learning happens at their homes, respectively. As a result, schools are vacated, especially the physical facilities such as classrooms and laboratories. The school takes this opportunity to enhance the said facilities that need improvement.

Consideration of Individual Learning Needs. Mapping of available resources of learners at home took place before the school year began. This was made possible to know the appropriateness of the learning delivery modality which the school will offer. Furthermore, considering the individual preferences and situations of learners and parents or guardians is a manifestation of the fulfillment of inclusive education.

Resources are essential for the delivery of quality education programs, either human, material, or financial. Teachers made various supplementary resources to augment the needs of each modality. In addition, teacher-made resources directly follow the prescribed MELCs to focus on the most substantial competencies.

In the digital world, several online platforms appeared where communication and information dissemination become more accessible and faster. On a positive note, the school utilized the Facebook application and video conferencing software. These were positively employed in reaching out to learners and parents or guardians. Likewise, important announcements are posted for the stakeholders informed.

Certainly, many students struggled with the new learning modalities where they cannot see their teachers and classmates personally or vice versa. With teachers' maximum consideration, patience, sensitivity, and tolerance, academically challenged learners were helped in meeting their unique needs. Moreover, learners received rewards to finish their modules.

Provision of Limited Transition Programs to Teachers. All over the world, usual routines have been disrupted. Usually, school administrators, teachers, and teachers received seminar training workshops via face-to-face interaction in the old normal. Undisputedly, activities are now totally being performed virtually. Nevertheless, continuous professional growth did not end. Learning Action Cells (LAC) and Integrated Teachers' Quarterly Mentoring (ITQM) are only a few of DepEd programs for the professional enhancement of teachers. Hence, countless webinars happened at the beginning of the preparation for the school year. Topics such as BE-LCP features, unpacking of most essential learning competencies, self-instructional packets (SIPacks) development, learning modalities, and online platforms contributed to the smooth transition of the school year.

Stakeholders' Willingness to Participate in the Implementation of BE-LCP. The research title itself speaks on this theme, reflecting the lenses of each stakeholder. School stakeholders have significant contributions to every program or plan being implemented. Along its way of implementation, stakeholders' support is evident to fulfill the principles of BE-LCP. In the following presentation of the stakeholders' partnership, these were grouped into groups: school, administrators, faculty, guidance office, faculty, parents and learners, student council, administrators and faculty, parent representatives, and local government unit.

Overall, in the school, participants are involved in the decision-making process until execution. However, not all schools give an orientation relative to BE-LCP to all stakeholders internally and externally. Some schools gave deeper discussion limited only to school administrators and teachers. Although, any concerns raised by parents and learners were accepted and provided immediate actions through the unified efforts of one another.

Constant Monitoring and Evaluation of the Plan. Monitoring and evaluation happen for the whole duration of any plan, program, or activity. However, it is still in the first year of its implementation. A full review is not yet explicitly maximized on the learners' effectiveness in learning modalities and learning achievement. Yet, constant monitoring was done by the respective school. In fact, in any implementation, there are always obstacles that hamper it from realizing its aim. After all, an implementer always stands on the ground and is ready to accept and not resist change. One of the participants believes that sustainability for effective ones can curb any ineffectiveness.

DISCUSSION

The introduction section opens with the quote by Roy T. Bennett that goes, "Every challenge, every adversity, contains within it the seeds of opportunity and growth." This was applied to underscored right at the beginning of this study the inescapability of the demand to fly high as we grow up amid adversity and challenges in today's volatile, uncertain, complex, ambiguous, and diverse world. This goes with the quote George S. Patton publicized: "Accept the challenges so that you can feel the exhilaration of victory."

On the first objective, indisputably, numerous challenges and barriers were faced by the Philippine education system, specifically in various school contexts in line with the implementation of BE-LCP. The following are key challenges and problems in the findings: policies on crossroads, technological discrepancies, limitations triggered by health constraints, dynamics of education, training inadequacy for facilitators of learning, barriers to building stakeholders' partnership, and imbalanced between curriculum and instruction.

Filipino's trademarks are flexibility, adaptability, and creativity. These exceptional values allow Filipinos to adapt to several unforeseen circumstances and stand on the ground in any situation. During this public health emergency, resilience is being manifested, particularly in the education system. However, due to flexibility, inconsistency of decisions and plans have arrived. This led to poor implementation since other aspects were triggered and severely affected. In the workplace, inconsistency leads to confusion, paralysis of ambiguity, and in the end, it kills the process (Mautz, 2015).

Around the world, the internet has become one of the highly fundamental and most important infrastructures. Technology is vigorous; therefore, education must also be. The provision of digital technology should be considered to acquire digital skills and become digital literate. It is proven that the skills gap is akin to the hole in digital skills (Bauer et al., 2020). This incredibly puts a barrier between the privileged and the underprivileged, especially those in remote areas. Thus, a poor internet connection puts rural students at the rear (Shenglin et al., 2020).

Relative to the adoption of self-learning modules, it is tantamount that learners learn autonomously. Self-learning is also called "independent learning" or "individualized method of learning." As the name entails, it is self-paced, which requires the learners to study at their convenience. On this basis, teachers do not directly supervise the learners face-to-face (Sequeira, 2012). With or without direct supervision, the presence of academic misconduct is exhibited. Based on the prevailing literature, a study on academic dishonesty is comparatively uncommon (Chen et al., 2020).

Indeed, putting all barriers together relative to the implementation of learning modalities resulted in learners not meeting expectations. The following findings shed light on this specific problem. First, some learners are not submitting their outputs or noncompliant learners. Next, some learners cannot follow the instructions given. Third, some learners answered the modules incompletely. Lastly, learners get tired quickly due to a lack of interest and motivation. This poses a challenge to instructional leaders if they also meet the expectations needed. Those who did not meet expectations (DMEs) in any learning areas should go through remedial classes. The opportunity drawn from this is to sustain the child's interest by giving reward mechanisms to beat the individual's academic struggle. Using the lenses of theorists on motivation, specifically on

incentive theory of motivation, teachers can provide this theory by offering rewards rather than negative punishment to learners not meeting expectations (Cherry, 2020).

As a preparation for the new normal education system, schools adhered to the second principle of BE-LCP. The conduct of proper orientation to parents and guardians of every learner. Other parents' mindset is far from the goals that DepEd wants to achieve for their children. To have a stable partnership with the parents and barangay representatives, it is highly suggested that they should also undertake a transition program. The said program involves a detailed discussion on BE-LCP features and components, their duties and responsibilities as an educator on behalf of the teacher, and mental and emotional health awareness. Institutionalizing of parent's handbook is also a vital need during this crisis. On the learners' side, they should be familiarized with the norms regarding their chosen modality. For instance, learners who opt to have online classes should know various online platforms' features. In the barangay unit, an orientation regarding their role in partnership with the barangay schools must be provided. Besides, they need to have proper guidance on what to do during this new normal to faithfully accomplish their duties and responsibilities. Summing up, in raising a child, community partnership is deemed crucial to realize their full potentials (Waters, 2000).

Pertinent to the disadvantages of independent learning, first-generation learners find it difficult since their parents have not received enough education. Hence, they also find it difficult to guide and teach their children. The study of Soria and Stebleton (2012) claimed that first-generation students have lower academic engagement and retention as equated to non-first-generation. Other challenges were also raised in the study relative to parent's factors. Aside from the parents and guardians who are not educated, others cannot attend to their children's educational needs because they are working, solo-parent, and close-minded. In the effect of having school closures, it is evident that parents and guardians had to take up the full-time responsibility of teaching their children (Azubuike & Aina, 2020).

In response to the second objective, the schools could contend with the enduring public health crisis. This may be ascribed to the major strategies and best practices of the respective Regional Office, Schools Division Office, down to school levels. These were identified by the participant stakeholders, as revealed in the findings: flexibility and adaptability of DepEd authorities, schools address the deficiencies in digital resources, advocating a safe and healthy safe environment, consideration of individual learning needs, provision of limited transition programs to teachers, stakeholders' willingness to participate in the implementation of BE-LCP, and constant monitoring and evaluation of the plan.

To attain SDG 4, "ensuring an inclusive and equitable quality education and promoting lifelong learning opportunities for all," it is critical to secure adequate and financial stability. In the advent of the pandemic crisis, financial resources help bridge the challenges in implementing BE-LCP. Basic education services are delivered through DepEd, and this the sole responsibility of the national government through the partnership with the local government units (LGUs) (Manasan et al., 2011).

Finally, birth pains were sensed since the implementation started last year, 2020. In consonance with DepEd Order No. 012, Series of 2020, every school shall conduct monitoring and evaluation to obtain pertinent pieces of evidence as to the significant progress, issues, and intervention as far as the implementation of the BE-LCP is concerned. The schools covered in the study conduct regular meetings with various stakeholders to discuss the arising concerns and plans.

Monitoring and evaluation are different concepts but intertwined. Monitoring is an organized assessment based on the targets set during the planning phase. On the contrary, evaluation deals with the overall analysis based on the set objectives and plans. Putting these together, they are geared towards gauging the common goals such as relevance, efficiency, effectiveness, impact, sustainability, causality, and alternative strategy. As a striking point, schools conduct a participatory evaluation, whereas it involves collective efforts where stakeholders are represented (iEduNote, 2021). The matrix below is developed as a summary of challenges and opportunities, supported with related literature, and inputs for policy review as shown below.

Table 1
Tolentino's matrix on summary of challenges and opportunities

Objectives	Findings	Related Literature	Conclusions	Inputs for Policy Review
1. To describe the stakeholders' experiences on the operationalization of the BE-LCP in terms of challenges faced by the participants.	Policies on Crossroads	In the workplace, inconsistency leads to confusion, paralysis of ambiguity, and in the end, it kills the process (Mautz, 2015).		A thorough review of plans and decisions before its implementation.
	Technological Discrepancies	It is proven that the skills gap is akin to the hole in digital skills (Bauer et al., 2020). This incredibly puts a barrier between the privileged and the underprivileged, especially those in remote areas. Thus, a poor internet connection puts rural students at the rear (Shenglin et al., 2020). A new world of learning relies on high-caliber resources that can be found on the web (Lake & Makori, 2020). Pondering on the connectivity performance of the Philippines, we are far from other countries such as Singapore, Brunei, and Malaysia who have 80% internet penetration (Jalli, 2020). According to the Ookla report, in January 2021, the Philippines has remarkable improvements compared to previous years (Maala, 2021). Hopefully, to uphold the inclusivity of online classes to all learners, the State should consider the clamors of every citizen (DICT, 2021).		Purveying robust e-learning infrastructure and sustaining financial resources to address the discrepancies in digital resources.
	Limitations Triggered by Health Constraints	The supply side entails a reduction of government spending on education; deteriorating quality of education; teaching quality declines as many teachers are suffering from physical and mental health issues; and private school learners are being transferred to public school, which results in the closure of private schools (World Bank, 2020).	The epidemic has turned into a pandemic crisis caused by Coronavirus disease (COVID-19). Several sectors were greatly affected, involving social systems and most especially in education. Indeed, the current situation depicts a genuine challenge, accountability, and responsibility to all concerned individuals. Across the globe, an increasing number of cases is still evident. As a result, limitations and restrictions were further imposed to obstruct the transmission of the virus. Given these times of crisis and uncertainty, a health crisis has gone into a learning crisis. Its impact on education was destructive due to enormous school closures, as face-to-face is not recommended and further mitigates the spread of the virus. The major challenges and problems across the themes presented above faced by the school were policies on crossroads, technological discrepancies, limitations triggered by health constraints, dynamics of education, training inadequacy for facilitators of learning, barriers to building stakeholders' partnership, and imbalanced between curriculum and instruction.	Propose ways in safeguarding the health and safety of internal stakeholders.
	Dynamics of Education	Accuracy and quality of learning resources were gearing towards confusion to learners (Gatchalian, 2020). Self-learning is also called "independent learning" or "individualized method of learning." As the name entails, it is self-paced, which requires the learners to study at their convenience. On this basis, teachers do not directly supervise the learners face-to-face (Sequeira, 2012). Based on the prevailing literature, a study on academic dishonesty is comparatively uncommon (Chen et al., 2020). Using the lenses of theorists on motivation, specifically on incentive theory of motivation, teachers can provide this theory by offering rewards rather than negative punishment to learners not meeting expectations (Cherry, 2020). They can be critical thinkers who can thrive in the 21st century and threats posed by the pandemic crisis (Center for Inspired Teaching, 2018).		(1) Ensure the quality learning resources by undergoing exhaustive quality assurance; (2) Come up with various ways for the learners who lag academically for them to be engaged in learning; (3) Devise ways on how to inculcate the value of academic honesty; and (4) A systematic review of teacher's duties and responsibilities.
	Training Inadequacy for Facilitators of Learning	Summing up, in raising a child, community partnership is deemed crucial to realize their full potentials (Waters, 2000).		Devise a comprehensive adjustment program for teachers, learners, and parents.
	Barriers to Building Stakeholders' Partnership	The study of Soñe and Stoblet (2012) claimed that first-generation students have lower academic engagement and retention as equated to non-first-generation. In the effect of having school closures, it is evident that parents and guardians had to take up the full-time responsibility of teaching their children (Azubike & Aine, 2020). From then on, a robust collaboration can be achieved that could contribute to the children's academic formation (Seale, 2020). Creating a conducive learning environment is possible by giving every learner psycho-social health (Harrington, 2020).		(1) Foster an open line of communication among the internal and external stakeholders; (2) Re-consider the funds allocated in education to support the educational plans; and (3) The local government unit and community partners may have a strong, sustained, and engaged partnership with the schools.
	Imbalanced Between Curriculum and Instruction	There is no concrete assessment tool to recognize the effectiveness of the modular approach (Estrada, 2021). Various studies show that positive feedback makes the learners succeed academically and feel a supportive learning atmosphere (Sword, 2020). To offer a quality, accessible, relevant, and liberating basic education curriculum for all (Briones, 2016) it is suggested to have a thorough evaluation on each bureau after a one-year implementation of BE-LCP, specifically on learning modalities, competencies, and resources. Indeed, each school has diverse learners, and these learners have individual differences (Hernando-Malipot, 2020).		(1) Schools must ensure feedback mechanisms relative to the performance of every learner; (2) Review and modify the K to 12 curriculum as to the quality and relevance to the context of post-COVID-19; and (3) Offer other ways of learning who are incapable of self-directed learning.

Objectives	Findings	Related Literature	Conclusions	Inputs for Policy Review
2. To describe the stakeholders' experiences on the operationalization of the BE-LCP in terms of best practices and strategies of the school.	Flexibility and Adaptability of DepEd Authorities	Central office down-to-school learning centers are committed to delivering education amidst the generational catastrophe. As the battle cry of DepEd states that "learning must continue" (DepEd, 2020).	As a response to the call of learning must continue, government leaders worldwide proposed various ways to continue education amid the threat of crisis. Hence, the futures of education were given much consideration not to incur the academic gap. An education recovery was made possible by having a resilient mindset, ready to embrace changes posed by the current threat. Notably, the valuable strategies utilized by the respective school participants were flexibility and adaptability of DepEd authorities, schools address the deficiencies in digital resources, advocating a safe and healthy safe environment, consideration of individual learning needs, provision of limited transition programs to teachers, stakeholders' willingness to participate in the implementation of BE-LCP, and constant monitoring and evaluation of the plan.	Uphold the individual's right to education despite of VUCAD world.
	Schools Address the Deficiencies in Digital Resources	Considering the challenges of the technological divide, these learning productions aimed to ensure that learning will never stop (UNESCO, 2020).		Continue to identify and resolve the issues, problems, concerns, and needs of every learner to ensure inclusivity.
	Advocating a Safe and Healthy Safe Environment	In this time of COVID-19, the guidance office extensively reaches out to every learner (DepEd, 2021).		(1) Strengthen the implementation of safety protocols inside the school; and (2) Intensity the safeguarding of one's mental health of teachers and learners.
	Consideration of Individual Learning Needs	Identifying the appropriate multiple learning delivery modalities suited to the situation of every learner's household are sought. Luckily enough, all modalities suggested by the central office were adapted in the Schools Division Office of the City of San Fernando, Pampanga (SunStar, 2020).		Consistently involve the parents and learners in the mapping of appropriate modalities and resources.
	Provision of Limited Transition Programs to Teachers	Communities of Practice (CoPs) (Li et al., 2009) through a professional learning community improves the teaching practices and success of the learners' academic performance (DepEd, 2016).		Sustain the teachers' professional development by providing sufficient and relevant transition program.
	Stakeholders' Willingness to Participate in the Implementation of BE-LCP	Basic education services are delivered through DepEd, and this the sole responsibility of the national government through the partnership with the local government units (LGUs) (Manasan et al., 2011). Joint Circular No. 2, Series of 2020 highly supports this in assisting the educational needs through the partnership of DepEd with the Department of Interior and Local Government (DILG) and Department of Budget and Management (DBM) (DepEd, 2020). However, considering the participants' responses in the study, maximum engagement still needs to be considered (Almario & Austria, 2020).		(1) Reinforce the partnership of every stakeholder to foster schoolwide community engagement; (2) Deepen and nurture a sensitive and supportive relationship among teachers and parents; and (3) Heighten the financial resources from the LGU and private partnerships.
	Constant Monitoring and	As a striking point, schools conduct a participatory evaluation,		Improve the monitoring and evaluation mechanisms

Conclusions

The epidemic has turned into a pandemic crisis caused by Coronavirus disease (COVID-19). Several sectors were greatly affected, involving social systems and most especially in education. Given these times of crisis and uncertainty, a health crisis has gone into a learning crisis. Its impact on education was destructive due to enormous school closures, as face-to-face is not recommended and further mitigates the spread of the virus.

The major challenges and problems across the themes presented above faced by the school were policies on crossroads, technological discrepancies, limitations triggered by health constraints, dynamics of education, training inadequacy for facilitators of learning, barriers to building stakeholders' partnership, and imbalanced between curriculum and instruction.

Notably, the valuable strategies utilized by the respective school participants were flexibility and adaptability of DepEd authorities, schools address the deficiencies in digital resources, advocating a safe and healthy safe environment, consideration of individual learning needs, provision of limited transition programs to teachers, stakeholders' willingness to participate in the implementation of BE-LCP, and constant monitoring and evaluation of the plan.

Remarkably, as presented in the matrix, there are 14 ways recommended to triumph on the challenges and problems posed. To further sustain the best practices and strategies employed in the first year of its implementation, ten recommendations were also offered. (

Commented [AU5]: pandemic

Commented [KT6R5]: epidemic has turned into a pandemic

Finally, amid the barriers and obstacles encountered by school leaders, they persistently implore the unified spirit in the workplace. Threats and weaknesses ahead of the implementation were substantially transformed into opportunities. Furthermore, its significant contribution to its operationalization, though it has not yet fully reached its first year of implementation, is the gift of vision among the school frontliners. In conclusion, DepEd's BE-LCP brings education to learners constructively and pivotally.

Recommendations

The national government may guarantee a solidified protection on the right to education regardless of socio-economic background to achieve the "No Filipino Learner is Left Behind." Likewise, they may review the budget allocation and distribution to the education sector. Besides, all learners and school personnel may be provided digital resources to bridge the technological gap in learning continuity.

The central, regional, and division offices may strictly be committed to equitable and inclusive education. The concerned offices may modify the K to 12 curriculum as to the quality and relevance to the context of post-COVID-19 is concerned. Likewise, they may integrate special lessons on fighting against misinformation and digital citizenship since we are in the digital world of learning. Relative to implementing learning modalities, the central office may provide uniform self-learning modules and strictly observe a thorough quality assurance. Furthermore, the offices may think of possible ways to keep an engaged learning modality rather than compliance based.

Moreover, consistency of decisions and plans may be observed to avoid confusion. In addition, independent learning is the counterpart of the adapted modality, and it may be reviewed to assist the low performer learners. Transition programs were provided to school personnel. Instead of orientation, the offices may devise a comprehensive adjustment program for both learners and parents. Also, the central office may formulate contextualized manual relative to duties and responsibilities of internal and external stakeholders in this new normal education.

The school may provide quarterly rewards and incentives for frontline educators, parents, learners, and community partners. It is highly advocated to maintain the best practices employed in the new normal. Likewise, the school may engage in holistic partnerships with internal and external stakeholders to build a resilient system.

The school leaders may sustain a win-win situation for all concerned individuals and groups. They may advocate for a happy and unified workplace to make situations lighter and more comfortable.

The teachers may cultivate deeper the communities of practice in the workplace. Hence, the culture of innovation would be attained most especially during this unprecedented learning crisis. Likewise, they may consistently sustain their immense patience, consideration, and sensitivity to all learners, parents, and guardians. Equally, teachers may revitalize the means of communication to all stakeholders.

The learners may establish a home learning routine, maintain balanced health in all aspects and accept change wholeheartedly. Similarly, learners may nurture a clairvoyant mindset as a coping mechanism.

The parents and guardians may foster a growth mindset amid the threats and uncertainty. They may offer extensive support to their child's welfare and education. Equally important, the home should be the best place to intensify the values of their child.

The local government unit and community partners may have a strong, sustained, and engaged partnership with the schools. In addition, during this pandemic, they may furnish a remote learning hub to reach out to those who are financially challenged and actively involved in the teaching-learning process.

For future researchers, they may conduct a quantitative study as a basis for triangulation and mixed-method. They may include one integrated school to facilitate corroborative and in-depth analysis. They may also emphasize one component of the BE-LCP to make it limited and propose a substantive evidence-based output.

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