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Message

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-oOo-

OFFICE OF THE CITY MAYOR



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The City Government is filled with gratitude for having acknowledged our support in your volume 1 publication and we congratulate your team on doing such a great job. The extra time and effort you have been putting in this publication has really paid off, and we believe that you have presented an ambitious and attainable set of goals for quality basic education.

It is with great pleasure that we know your volume 2 publication will be finalized by the end of 2021 and we thank you for the motivation you have brought to your team to work hard for the success of the publication. It is an example that great things happen when team work hard to reach the goals and make them more productive.

Our best wishes for the GEM Research Journal Volume 2 to be materialized as planned.

Congratulations!



EDGAR S. LIGNES
City Mayor

Message



Republic of the Philippines
DEPARTMENT OF EDUCATION
Region X - Northern Mindanao

Greetings from DepEd Normin!

At one time, DepEd Region X thanked and recognized the Division of El Salvador City when it successfully launched its *The GEM Research Journal Volume I* in the response to the Department's quality objectives to "provide research-driven intervention on the curricular and non-curricular programs that are responsive to the needs of the local and global communities".

Now that *The GEM Research Journal* is on the second volume, the Department wishes to congratulate and commend the Division for braving the challenge to continue innovating and discovering answers to countless issues particularly on effectively delivering quality basic education amidst the COVID-19 pandemic.

The inputs of the researcher-contributors are so significant that they do not only help strengthen the culture of research in the Region, but also enrich the greater body of knowledge.

May the Division continue its tradition of research excellence along the different areas of interests, such as teaching and learning, child protection, human resource development, governance and continuous improvement, among others.

Once again, thank you and congratulations!

Indeed, the Division of El Salvador City is a GEM!

DR. ARTURO B. BAYOCOT, CESO III
Regional Director





Republic of the Philippines
DEPARTMENT OF EDUCATION
Region X - Northern Mindanao



Message

It is with great pride and honor to publish this DepED El Salvador's The GEM Research Journal, Volume 2. The first attempt in 2020, the time when the COVID-19 pandemic disturbed the mindset of many people, made way to try out for this year 2021. The lessons learned in the previous school year opened doors for more investigations as to how teaching-learning practices were conducted amidst the health risks. Thus, it is fitting to have an avenue for communicating the research conducted by teachers, to share the practices to those interested in conducting research.

The GEM Research Journal attempts to inspire the teacher-researchers to have their research findings be communicated to the academe. This can provide baseline data for decision-making and serve as an eye-opener to fully understand the scenario experienced in this time of pandemic. Considering the practices in the implementation of the Learning Continuity Plan of the Department of Education, the effects of the adapted modality in different schools, can serve as identifying what works well in the teaching learning process. As always, research can be a very good way to improve the way people do things, which specifically applies in the field of educating the young.

With this publication of the GEM Research Journal, the effort of the teacher-researchers will be recognized for its contribution to the “fund of knowledge”, for which research aimed to. This journal would not be possible without the support of the Chairman of the Local School Board (LSB), the Honorable Mayor of El Salvador City EDGAR LIGNES, that through the Special Education Fund (SEF) this GEM Research Journal was published. May this serve as an inspiration in man’s continuous search for truth through Research to reach the source of Truth Himself. All Glory to HIM, our GOD.

Congratulations to the teacher-researchers,
the GEMS of El Salvador City!

OLGA C. ALONSABE, PhD.
OIC- Schools Division Superintendent
Division of El Salvador City





Republic of the Philippines
DEPARTMENT OF EDUCATION
Region X - Northern Mindanao



Research plays a fundamental role in our country's educational system. As underscored in the landmark Republic Act 9155 or the Governance of Basic Education Act of 2001, DepEd was mandated to enact policies and mechanisms for the continuous improvement in the delivery of quality basic education services. Contained within these responsibilities of the department is the undertaking of "educational research and studies" across all levels of governance which will serve as bases for reforms and policy development.

With the implementation of the Basic Education Learning Continuity Plans (BE-LCPs) in various levels, the department has manifested its concrete responses to the continuous delivery of basic education services amid the ongoing pandemic. Subsequently, field and office personnel were strongly motivated to continue conducting research and studies which aimed at finding solutions and addressing the issues and concerns that were encountered eventually by the school leaders, teachers and learners. Such move has provided assurance that the succeeding actions and decisions are anchored from sound and relevant evidences. This is aligned with the mandate of the department in addressing knowledge gaps which were expected to be more evident in this time of pandemic.

Relatively, the implementation of the Philippine Professional Standards for Teachers, School Heads, and Supervisors articulated the department's push for the promotion of research culture in the workplace. Hence, educational innovations must be data-driven and evidence-based. This must also be geared towards the improvement of the leadership and managements skills of school leaders, instructional competence of teachers and academic performance of learners.

This issue of GEM Research Journal showcases the findings of the implemented studies and innovations of our teachers and school leaders while we are adjusting in this new normal. Moreover, teaching and non-teaching personnel are strongly urged to reflect on the outcomes, learning experiences and realities in the adoption of the different distance learning delivery modalities.

I would like then to convey my felicitations and sincerest gratitude to the researchers, editorial board, members of the Schools Division Research Committee (SDRC), panel of experts from the different prestigious basic and higher education institutions, Schools Division Superintendent, Dr. Olga C. Alonsabe, CESE as well as to the ever supportive local government officials headed by Hon. Edgar S. Lignes. Your kind gesture of commitment and dedication are tantamount to your unquestionable and heroic contributions for the continuous improvement of our educational services for the benefit of our beloved Tagnipan-on learners.

May each of our teachers, school leaders and office personnel be more motivated to conduct research and contribute meaningfully in bridging the existing knowledge gap. Have a wonderful journey in writing research.



DIONESIO L. LIWAGON, JR., CESE
Chairperson, SDRC
OIC, Office of the Assistant Schools Division Superintendent

PREFACE

Research in times of the Pandemic

With the challenges brought about the pandemic which compromised certain face to face activities, the Division Research Committee continuously provide teachers and personnel with alternative platform to continue and sustain the research culture in the division. Research initiatives such as data gathering and conferences were done using the online platform amalgamated with the asynchronous activities to withstand the Division Research Agenda despite the present situation.

The second volume of the GEM Research Journal still underwent peer-review with researches focusing on innovations and breakthroughs in the schools and offices with findings directed towards the new educational landscape which highlighted effective governance, quality instruction and functional management.

This year's issue underscores the salient points and recommendations of the 11 researches quality assured by the internal and external peer reviewers. Further, the Division Research Committee assessed and monitored the utilization of these interventions subsequent with the standards set by the Department of Education and observed the protocols specified by the government.

Karen Rose A. Serrania
Division Research Coordinator

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Modelling through Digital Simulations: An Intervention to Enhance Students' Performance in Solving Optimization Problems in Basic Calculus

By: Jun Mark Rey O. Nob

ABSTRACT

Problem solving in Mathematics is a perennial problem. Problem-solving and critical thinking comprise the dual goal of Mathematics Education and there is much work to be done to resolve this issue. This observation remained true in one of the schools in the El Salvador City Division, especially for the General Academic Strand (GAS) students who regarded problem solving in Mathematics as a difficult task to accomplish. Hence, this study tested the effectiveness of integrating digital simulations in an attempt to minimize, if not completely eliminate, the problem. To do this, the GAS students were randomly divided into two (2) groups: 1) Digital Simulation by the Teacher (DST) group and 2) Digital Simulation by the Student (DSS) group. The DST and DSS` group were exposed to lessons with digital simulations created by the teacher and students respectively. The digital simulations served as visual representations to the Optimization problems. Further, this study is a quasi-experimental research which used pretest and posttest aside from observation and interview. Results showed that students of both groups obtained a significant improvement in their performance during the posttest after their respective interventions. Moreover, students in the DSS group obtained a greater learning on the concepts of Optimization than those of the students in the DST group. This only showed that the use of digital simulations as models can be an effective tool in discussing and solving Optimization problems.

Keywords: Digital Simulation, Basic Calculus, General Academic Strand Students (GAS)

INTRODUCTION

Problem solving and critical thinking are twin goals in Mathematics teaching. This means that under Mathematics Education, the school programs, activities, and instructions should lead to the development of these 21st century skills. However, researches have shown that students were having difficulties in problem solving. In the study conducted, it was found out that students lacked many mathematics-related skills such as number-fact, visual-spatial and information skills. Information skill was the most critical according to Tambychik & Meerah (2010) and many mathematics skills are involved in problem-solving. However, large numbers of students have not acquired the basic skills they need in mathematics according to Karoll (2008). As a result, many students were reported to face difficulties in mathematics particularly in mathematics problem solving based as underscored Heong (2005). This is also the same case for the academic students in one of the senior high schools in El Salvador City Division. As observed, many students are having difficulties in problem solving activities in Mathematics. When a focus group discussion was made, the students noted that problem solving in Mathematics is truly difficult and it takes time to answer. Others also noted that they don't see the connections in what they are solving. Given these remarks, if teaching and learning process is not equally effective for all students, the difficulties in acquiring mathematic skills by the students could get worsen. Understanding the students' difficulties in mathematics skills which are needed in problem solving is one of the ways to assist them.

According to Lee & Hollebrands (2006), technology can be used to influence students' learning on mathematical problem solving by allowing them to explore mathematical concepts through an interactive manipulation of the Mathematical simulations which can be presented in various applications such as Geogebra, Desmos, and other Graphing Calculators. Other researchers such as Clements (2000), Underwood et al. (2005) and Yerushalmy (2005) supported the previous result and have suggested on the development of technological tools to support students' learning of mathematics and students' mathematical problem solving since they can be used for students to check mathematical ideas, receive instant feedback, engage in playful mathematical exploration through simulation, and directly manipulate objects. The previous results presented above inspired the researcher to replicate the same study and see if the use of technology is indeed effective in discussing even the most difficult topics in Mathematics. Thus, this research is conducted to determine whether the integration of digital simulation strategy in solving optimization problems in Basic Calculus

will create a befitting impact to students' learning in the said topic. The use of digital simulation is based on the Visual Learning Theory and Constructivism Theory where students learn through visual representations and at the same time construct knowledge based from active interaction of the of the information.

RESEARCH QUESTIONS

This study sought to determine whether the integration of digital simulation as models in solving optimization problems in Basic Calculus will create a befitting impact to students' learning in the said topic. Specifically, this research would seek to answer the following research questions:

1. What is the performance of the students both DST and DSS group in the pretest and posttest on solving optimization problems?
2. Is there a significant difference between the performance of the students in the pretest vs posttest for both groups?
3. Is there a statistically significant difference between the performance of the students in the DST and DSS during the posttest across groups?
4. What are students' perceptions on the use of digital simulation activities in modelling mathematical concepts?

METHODOLOGY

Sampling Method

The participants of this study were the General Academic Strand students (GAS) from one of the Senior High Schools in El Salvador City Division of SY 2019-2020. They were purposively chosen since this class deemed to have difficulty with Basic Calculus as their elective subject in the Senior High School curriculum. The GAS students were randomly divided into two (2) groups: 1) Digital Simulation by the Teacher (DST) group consisting of 15 students and 2) Digital Simulation by the Student (DSS) group consisting of 15. In this study, the DST group is considered the control group being able to manipulate digital simulations created by the teacher while the DST group is considered the experimental group being able not only to manipulate digital simulations but created them with the teacher's guidance. To control

the validity threat, the groups were assigned to separate classrooms in the delivery of the interventions. The digital simulations served as visual representations to the Optimization problems in Basic Calculus. In the latter intervention, students are being facilitated in the creation of this powerful simulation outputs. Through hands on activities with computer, students will not just solve the problem, but will also be able to connect with the Mathematical concepts including those that are learned in the previous years.

RESEARCH DESIGN

The GAS students were selected purposively since they are deemed to have difficulty with the topic on optimizations. Thus, this study used the quasi-experimental research design with the control group (DST group) involving students exposed to teacher-made simulations while the experimental group (DSS group) involving students who made personal simulations of the optimization problems. Students in the DST group will be able to manipulate the digital simulations created by the teacher unlike those students in the DSS group who do not only know how to manipulate digital simulations, but created them through teacher's guidance. Both groups underwent the pretest and posttest before and after the lessons on Optimizations were introduced to the class.

Statistical Treatment

The performance of the students in the pretest and posttest were gathered and tallied for statistical treatment. The giving of scores was based on the rubric created.

Descriptive statistics was used to measure the performance of the students for both groups in the pretest and posttest. Paired sample t-test and Wilcoxon Sign Rank Test were used to measure if the pretest vs posttest performance differ significantly for the DST and DSS group respectively. The difference between the paired observations in the DST group satisfied the normality assumption based on the Kolmogorov-Smirnov Test for normality unlike those paired observations for the DSS group.

The Analysis of Covariance (ANCOVA) was employed to test if there is a significant difference between the performance of the students in the posttest across groups.

Research Instrument

To ensure triangulation, the instruments used in the study were pretest and posttest, observations, and interview. In the pretest and posttest, each item has the maximum score of 5 points. The giving of points is based on the rubric which is adapted from Howard (2014) as shown in appendices labelled as attachment #2. Students' performance in the test is categorized as either outstanding with 21 to 25 points, very satisfactory with 16 to 20 points, satisfactory with 11 to 15 points, unsatisfactory with 6 to 10 points, and failed or needs improvement with 0 to 5 points.

RESULTS AND DISCUSSION

1. What is the performance of the students both DST and DSS group in the pretest and posttest on solving optimization problems?

Groups	\bar{x}	SD	Qualitative Description
DST	2.47	2.23	Failed/Needs Improvement
DSS	3.13	2.42	Failed/Needs Improvement

The table above showed the performances of the students in the DST and DSS group during the pretest on solving optimization problems. The data showed that students in both groups have more or less the same performance in the pretest as shown in their mean scores categorized as failed or needs improvement.

Groups	\bar{x}	SD	Qualitative Description
DST	19.03	2.57	Very Satisfactory
DSS	20.88	1.35	Very Satisfactory

The table above showed the performances of the students in the DST and DSS group during the posttest on solving optimization problems. The data showed a positive change in the mean scores of the students' performance for both groups which is a clear indication of an increase in performance during the posttest. There is no difference between the students' level of performance in the posttest between the two groups as both are categorized under "Very Satisfactory".

2. Is there a significant difference between the performance of the students in the pretest vs posttest for both groups?

<i>Variables</i>	\bar{x}	<i>SD</i>	<i>t</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
DST group						
Pretest	2.47	2.32	-20.69	0.000	Reject	Significant
Posttest	19.03	2.57			H ₀	

The table above showed the paired sample t-test of the students' performance in the DST group during the pretest vs posttest on solving Optimization problems. The said test which is parametric by nature was used since the difference between pairs of observations satisfied the normality assumption based on the Kolmogorov-Smirnov test for normality with a p-value of 0.116. Now, in the table since the p-value is less than 0.05, this indicated that there is a significant difference between the students' performance in the pretest vs. posttest. Furthermore, this implies that students in the DST group learned the concept on solving Optimization problems through manipulations of Digital Simulations which were provided by the teacher.

<i>Variables</i>	\tilde{x}	<i>Estimated Median</i>	<i>Wilcoxon Statistic</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
DSS group						
Pretest	2	-15.50	0.0	0.003	Reject	Significant
Posttest	20				H ₀	

The table above showed the Wilcoxon Sign Rank Test of the students' performance in the DSS group during the pretest vs. posttest on solving Optimization problems. The said test which is nonparametric by nature was used since the difference between pairs of observations does not satisfy the normality assumption based on the Kolmogorov-Smirnov test for normality with p-value of 0.028. Now in the table, since the p-value is less than 0.05, this indicated that there is a significant difference between the students' performance in the pretest vs. posttest. Furthermore, this implies that students in the DSS group learned the concept on solving Optimization problems through the integration of digital simulations they personally created.

3. Is there a statistically significant difference between the performance of the students in the DST and DSS during the posttest?

<i>Variables</i>	\bar{x}	<i>SD</i>	<i>F</i>	<i>p-value</i>	<i>Decision</i>	<i>Interpretation</i>
Groups						
DST	19.03	2.57	5.418	0.028	Reject	Significant
DSS	20.88	1.35			H ₀	

The table above showed the Analysis of Covariance of the students' performance in the posttest on solving Optimization problems across the two groups. Note that the p-value is less than 0.05 which means that the difference is significant. Considering the greater mean, then this sample tells us that students in the DSS group gained more and better understanding on solving Optimization problems through the integration of digital simulations students created than those of the students in the DST group. This result is being supported by previous studies of Benakli et al. (2017) which found out that through the use of interactive computer activities, students became more motivated and showed active participation in problem solving activities in mathematics and thus, developed better intuition about Mathematical concepts. Throughout the intervention period, students are observed to be very eager to perform simulation activities and showed very active participation. Not only that the students were able to solve the optimization problems through simulations but the experience allowed them to review Mathematical concepts previously learned from Junior High School. This is another good feature of simulation which allowed them to connect with previous learnings. Thus, simulation as an instructional tool may help promote a deep conceptual understanding in Mathematics based on Hodgson & Burke (2000).

4. What are students' perceptions on the use of digital simulation activities in modelling mathematical concepts?

<i>Item</i>	\bar{x}	<i>SD</i>	<i>Qualitative Description</i>
1. I like using digital simulations in learning optimization problems	4.64	0.58	Strongly Agree
2. Digital simulations help in learning Mathematics concept	4.23	0.60	Strongly Agree
3. I feel confident when doing the simulation activities in answering optimization problems	4.20	0.64	Agree
4. I learned a lot about Mathematics through digital simulation activities	4.31	0.80	Strongly Agree
5. I can think creatively and critically when doing the digital simulation activities	3.93	0.84	Agree
6. I prefer learning Mathematics through modelling using digital simulations	4.68	0.76	Strongly Agree
7. I am excited when asked to explore the Mathematical concepts using digital simulation activities	4.51	0.65	Strongly Agree
8. The use of digital simulation help increases my achievement in Mathematics	4.25	0.75	Strongly Agree
9. I am happy if the teacher uses digital simulations in teaching Mathematics	4.78	0.92	Strongly Agree
10. Learning Mathematics is interesting and fun with the use of digital simulations	4.82	0.75	Strongly Agree
Overall Mean	4.44	0.73	Strongly Agree

The table above showed the perceptions of the students towards the use of digital simulations in answering optimization problems. It is clear from the table that students generally gave a positive feedback towards the use of digital applications. Students strongly agree with the following statements “Learning Mathematics is interesting and fun with the use of digital simulations”, “I am happy if the teacher uses digital simulations in teaching Mathematics”, and “I prefer learning Mathematics through modelling using digital simulations”. These results were supported by the results of Prima et al. (2018) where it was found out that learning Solar system using PhET simulation improved students’ motivation and conceptual understanding than those not exposed to PhET simulation as teaching media. Hsu (2020) found out that students exposed in virtual reality (VR) has improved students’ learning motivation and learning effectiveness in the digital teaching of mathematics. Wah (2015) also proved that instruction using the arc model and Geogebra simulations has improved the upper secondary students’ motivation and achievement in learning combined transformations. Thus, the results previously presented simply showed that digital simulations can be an effective tool in developing the students’ motivation and conceptual understanding in learning Mathematics.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of the study, the researcher came up with the following conclusions.

1. Both groups are of the same level of understanding in solving Optimization problems prior to the conduct of the interventions. Categorized both as “failed/needs for improvement”. However, after the integration of digital simulation activities, both groups have “very satisfactory performance”.
2. The increase in the students’ performance from pretest to posttest is statistically significant for both groups.
3. DSS group obtained a greater learning on the concepts of Optimization than those of the students in the DST group
4. Students generally gave a positive feedback towards the use of digital simulations. Moreover, the used of digital simulation is found to improve students’ motivation and conceptual understanding in learning Mathematics.

It is recommended to explore on digital simulation strategy as a tool in helping students develop a deepened understanding in learning problem solving in Mathematics. Further research should be conducted to fully ascertain the possible positive impact of this intervention to the learning of the students. For future researchers, they may integrate the same intervention to other subjects not just in Mathematics class.

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Teachers Teaching Experiences in Times of Pandemic

Liberty E. Taneo*, Marie Jade A. Cacayan, Vencent P. Chua

ABSTRACT

During the Covid-19 emergency, distance learning modalities became a widespread approach and it is becoming increasingly important to understand the experiences of teachers with a focus on the El Salvador City Division as a place of exploration. This study explored the teachers' teaching experiences in times of pandemic. The phenomenological approach of qualitative research design was used in the study employing interviews. The participants in the interview were the secondary teachers in different filed of teaching specializations and have been in the field of teaching for at least three years. The study showed that participants are having challenges in adjusting to the new learning delivery modalities. The teachers are aware that the validity of assessment for the performance of the student was difficult to determine, and they believed that communication was very challenging with the poor internet connection. Further, it was revealed that teachers lack printing resources and had issues in self-learning modules. Moreover, the result showed that teachers resorted to upskilling and retooling themselves through training and webinars, managing their time properly, engaging partnership with stakeholders, and unpacking broad competencies to cope with the new normal. The education system in the Philippines needs to engage in the professional development activities of teachers, particularly on ICT and effective pedagogy, considering the present scenario. This would help and prepare the educational system for such uncertainties in the future.

Keywords: distance learning modalities, experiences, challenges

INTRODUCTION

During the COVID 19 emergency, distance learning modalities became a widespread remedial approach to support the students learning in times of closure of schools due to the COVID 19 pandemic. In the Philippines, various learning modalities were implemented to sustain the delivery of quality instruction to every school. The Department of Education (DepEd) has issued DepEd Order No. 12, s. 2020, titled “Adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in Light of the COVID-19 Public Health Emergency to sustain the Education System. This guideline allows educational institutions to operate classes and organize lessons through radio, television, modules, and online addressing the diverse needs of students.

In basic education, modular learning was mostly adopted by public schools all across the country. In modular learning, students were given self-learning kits and self-learning modules for them to answer and return weekly with the help of their parents and guardians. These modules took into account individual differences and permitted students to work at their own pace. However, the effectiveness and delivery of these different types of learning modalities are still in the adjustment period. Teachers and students alike are still adjusting and coping with these changes. The degrees, to which teachers have handled these problems, as well as the most important factors, are unknown.

In this context, this article explores the experiences of secondary high school teachers as they implement the different modalities of teaching in the time of the COVID 19 crisis. In specific, this phenomenological study explores the teaching challenges and difficulties teachers encountered while switching from face-to-face to distance learning and how school teachers are coping with this teaching and learning situation. In this way, teachers will be guided on how to adapt to the new normal way of teaching to provide and deliver quality education amidst exceptional times, like the COVID 19 pandemic. It will also provide guidance as to what extent the teachers are going to become prepared when another crisis comes in the future.

METHODS

The phenomenological approach of qualitative research design was used due to the lack of previous studies on the topic for the Philippines. The use of the phenomenological approach helped explore and understand teachers’ perspectives and descriptions of the events from their lived experiences.

This approach was also instrumental in identifying key topic areas and interview guides for data collection based on the preliminary interactions with the research participants. This study was conducted from October to December 2020.

Study Population and sampling technique

As per the COVID-19 Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-MEID) Resolutions' prohibition on large gatherings of people at a place as a preventive measure for the COVID-19 outbreak, data were gathered through online and face to face interviews. The selection of the participants focused on secondary teachers assigned in the Division of El Salvador City. Following the protocol, a letter was sent to the Schools Division Superintendent for the approval of the conduct of the study. Once the permission was given, a letter of invitation was sent to the participants bearing the objectives and the nature of the inquiry. The communication also included information on the participants' expectations, as well as the day and time of the interview.

Criteria for sample selection

Among the respondents to our call, the researcher registered all teachers who were willing to participate in the study and provided written informed consent for the study. Teachers who were more than 22 years or less than 50 years of age and have been in the field of teaching for at least three years.

Data collection methods and technique

The interview was conducted using open-ended questions on personal experiences of teaching during the pandemic. After obtaining informed consent, the interview was conducted at a convenient time for the respondent. A total of 30 interviews were conducted, with each lasting 25-30 min on average.

The data were collected for 3 months. After completion of the data collection, and interviews were transcribed and analyzed. The interview guide was validated by a panel of experts comprised of the Learning Resource Management Coordinator, Master Teacher, and School Principal.

Data Processing and Analysis

The collected data from the interviews were transcribed verbatimly. The researchers listened to the recorded interview. It was repeatedly done to ensure the accuracy of information. This was done repeatedly to ensure

that the original descriptions were revealed in the extracted significant statements.

Colaizzi's phenomenological analysis method was used to analyze the transcript. The analysis included steps such as familiarization, identifying significant statements, formulating meanings, clustering themes, developing an exhaustive description, producing the fundamental structure, and seeking verification of the fundamental structure. Three researchers were involved in independently reviewing the data and formulating the themes after summarizing and extracting the meaningful contents, bracketing the presuppositions of the researchers.

RESULTS

The interview was conducted in the Division of El Salvador City comprising of 13 males and 17 females above 22 years or less than 50 years of age. The baseline characteristics of the participants are given in Table 2.

The responses from the interview were classified into 9 broad themes. Within each broad theme were several subthemes. The themes and subthemes are summarized in Table 3.

Table 2: The baseline characteristics of the participants

Variable	Participants
Age group	
22– 30	13
31 – 40	12
41 – 50	5
Sex	
Male	13
Female	17

Table 3: Teachers Experiences in Times of Pandemic

Themes	Subtheme
Delivery of instruction using varied Learning Delivery Modalities	Hands-on activities delivery
	Effective delivery strategies
	Internet connections and technology skills
Assessment	Learners' reliance on internet sources
	Learning shortcuts
	Validity of Assessment
Communication	Communication gap
	Lack of gadgets and poor internet connections
Lack of printing resources	Lack of printers
	Printers Not working well
	Lack of colored printers and ink
Self-learning modules issues	Grammatical errors
	Limited information
	Appropriateness
Upskilling and retooling	Importance of training
	Keeping abreast
	Learning new ideas
	Learning online applications
Time management	Importance of time management
	Relieving stress though time management
	Efficiency
Partnership with stakeholders	Partnership with LGU, TV and radio Stations
	Parents Support
	School Head support
Unpacking competencies	Selection of activities
	Simplification of written works
	Contextualization

DISCUSSION

This study explored the experiences of teachers teaching in times of pandemic and their difficulties encountered, and how they coped with those challenges. The study showed that participants were having problems in adjusting to the new learning delivery modalities. They were aware that the validity of assessment for the performance of the student was difficult to determine, and they believed that communication is very challenging with the poor internet connection. They also acknowledged that they lack printing resources and had issues in self-learning modules. However, teachers tried their best to deal with these challenges by building several coping strategies such as upskilling and retooling themselves through training and webinars. They claimed that time management helped them adapt and complete their assignments. They emphasized the importance of the stakeholders diminish their stress and lift their ability to give their best. The findings of this research are discussed below.

Theme 1: Delivery of Instruction using varied Learning Delivery Modalities

Teachers found it hard to adjust to new learning delivery modalities using effective delivery strategies. Research participants admitted that the teaching and learning scheme under the new normal was quite stressful. According to a Ramberg report conducted in Stockholm, Sweden in 2019 on the stress levels of teachers, any abrupt shift in the learning atmosphere creates inequality and even depression among teachers.

Teaching involving experimentation and hands-on activities is difficult to deliver as stated by the participants another urgent issue is carrying out laboratory lessons (Mahlangu, 2018). In comparison to adult learners, young children need more experiences and hands-on exercises to concentrate and understand. Online learning does not have adequate and effective opportunities for them to participate.

Participants claimed that learning was a bit harder for learners without face-to-face interaction with the teachers and addressing learners' queries and providing explanations on their clarification is a challenge especially because of poor internet connection. Teachers' geographical location like rural areas had no stable internet connections than urbanized cities which were more ready for online distance learning education (Rizva and Bogdan, 2020).

Theme 2: Assessments of Student's Performance

This study showed that Teachers doubt whether students still read their modules or they may just directly answer the activities and assessment part. Teachers were overwhelmed with the tasks of checking the outputs and activities of the learners. Teachers were doubtful if the ones answering the activities were the learners or internet sources. Teachers found it hard to retrieve the outputs on time. The Department of Education explicitly stated the importance of assessment in all stages of teaching-learning engagement. The learning outcomes in the form of knowledge, skills, attitudes, and values shall be assessed," according to DepEd Order No. 12. S. 2020, issued June 19, 2020. Learners must include written works, performances (and services) in their portfolio/e-portfolio, whether hardcopy, softcopy, or a combination of these. Rubrics that capture evidence of learning will be used to assess the content of the portfolio/e-portfolio. Apart from teachers, the assessment may take into account the testimony of parents and other adults, such as community leaders." DepEd (2020).

According to Sahu (2020), students faced mental health issues as well as concerns about the effect on appraisal and evaluation as a result of the shift from face-to-face to online distribution. Students are more concerned with getting a pass/fail score than with studying. If the goal of learning is simply to learn (rather than to receive a certain grade), students may need extra guidance and education to ensure that they do not lose sight of the value and true purpose of remote learning experiences.

Participants claimed that learning is a bit harder for learners without face-to-face interaction with the teachers and addressing learner's queries and providing explanations on their clarification is a challenge especially because of poor internet connection. Teachers' geographical location like rural has no stable internet connections than urbanized cities which are more ready for online distance learning education (Rizva and Bogdan, 2020).

Theme 3: Communication

This research highlighted the importance of communication. Participants have a hard time contacting the students to access their needs since some of the students do not have cellphones and others have poor signals. Some of the parents also forgot to relay the instructions given by the teaches to the students on how to answer the module.

Many students' special learning needs were unmet by teachers due to a lack of school capacity, internet access, and a diversity of students' special needs, as well as by parents due to a lack of time, material, knowledge, and pedagogy, connectivity, and finances. Many that do not have the required technical equipment will be left behind. Learning is a bit difficult for learners that can't communicate with their teachers. Student-teacher relationships have declined, according to a recent study examining the effects of the online learning system generated in response to the pandemic. Since mediated interaction raises the possibility of miscommunication and poor partnerships, both parties are frustrated. As a consequence, maintaining a stable and supervised learning atmosphere for students is important (Moawad, 2020). A local study of how teachers in the Philippines cope with anxiety found that the most fundamental change teachers made was to learn new and innovative teaching styles. Even if connections are small, this made them feel more connected to their students (Talidong et al., 2020).

Theme 4: Printing Resources

Research participants indicated that the lack of printing machinery delayed the distribution of modules. Additionally, participants said that some printers are not working well and most of the printers are using toner and it can only print black and white, that's why some modules that have images and pictures are not emphasized due to lack of colored printer and it can cause confusion to the reader.

Participants also shared that aside from the lack of printers, there is also a shortage of ink, toner, and drum. The lack of necessary equipment brought hardship to the schools, teachers, and students. There are still more basic education schools that are not equipped with the facility and training to distance learning education during difficult times (Lapada et.al., 2020). These results backed up Granthorn's research (2020), which revealed that teachers in the Philippines are mostly and adamantly depressed due to a shortage of funds. Teachers are distressed, according to the report, and are searching for solutions to ensure that the funds provided by their local governments can cover all of their students' needs.

DepEd is gradually supplying laptops, tablets, and smartboards to schools that are designated as centers of excellence or core schools. These technologies are needed for distance learning education and for promoting the Education 4.0 movement, which encourages the use of the E-instruction framework, allowing learners' autonomy, and introducing a task-based and

performance-based approach to achieving a particular learning target (Chen & Huang, 2018; and Hussin, 2018).

Theme 5: Self- learning modules issues

Research participants indicated that there are competencies in the module that are broad and students find it difficult to answer since no one in their family facilitates them at home. Moreover, the participants expressed that there are lots of activities in the modules and the discussion or the information of the topic is very limited that makes the learners and parents have a hard time understanding and answering the module. Participants also notice some grammatical errors in the module and some of the activities in the module are not appropriate and many activities are repetitive that make the students bored.

The learning module introduces innovative approaches and learning experiences for students, enhancing their skills and assisting them in overcoming deficiencies (Gordon, 2014). Teachers should be mindful of the prerequisite subjects so that intervention can be made to resolve students' least mastered skills (Herrera & Dio, 2016). The majority of parents, teachers, and parents reported minor errors such as logical, factual, grammatical, and computational errors, as well as the use of outdated knowledge and other mistakes (i.e. illustrations, diagrams, pictures, maps, graphs, and tables). According to Metcalfe et.al. (2017), small mistakes should not be emphasized, but rather treated sensitively, and teachers and students should be open to mistakes and consciously use them in preparing for the exam that matters. Minor errors can also be used to aid new learning, improve recall for the generation of accurate answers, promote active learning, and guide the learners' interest while allowing the instructor to be mindful of the topic under discussion.

Theme 6: Upskilling and Retooling

This research also emphasized that upskilling and retooling through training and webinars were the most common coping mechanism of the teachers. This was due to the sudden shift of the forms of learning to emergency remote teaching (ERT) as a response to the call for continued education despite the global health threats. Due to the circumstances, teachers were required to look at new ways of continued education without face-to-face instruction.

The participants believed that webinars help them learn different online applications that can make studying and teaching exciting and easy. Research respondents suggested that attending training assist them in keeping abreast with current developments and gives them new ideas and strategies to deal the current situation. Teachers should be trained with expertise and skills in distance learning education to remain engaged with distance learning education trends (Fatmasari & Suropto, 2018)). Audio-visual materials are thought to be very useful in improving student success (Tang & Intai, 2017; and Lapada, 2017). Institutions will achieve this by offering a variety of courses and workshops; DepEd on the other hand can spend more on distance learning facilities and equipment. It is always changing, and it is essential to keep it up to date to meet the needs of a changing learning world (Bozkurt, 2019).

Theme 7: Time Management

The strategy on time management was also perceived mostly by the teachers. They claimed that being able to handle their time helped them adapt and complete their assignments in the most stressful situations of their careers. It also assists in their physical well-being.

Participants believed that time management is important in adjusting to new normal. Good time management relieves stress. Teachers find time management as a good strategy to meet deadlines and accomplish work in a short period.

The COVID-19 pandemic prompted educators to prepare for online learning. Education, temperament, technical skill, time management, pedagogy, and philosophy were among the main distance learning education elements to cope with the developments in distance learning, according to Phan & Dang (2017). Furthermore, the majority of the responses in a survey of 205 online instructors from higher education institutions in the United States in terms of preparation, personality, and capacity to teach online in terms of course design, course communication, time management, and technical aspects were ranked high in terms of course design, course communication, time management, and technical aspects (Martin, Budhrani & Wang, 2019).

Theme 8. Partnership with stakeholders

Schools' partners are the most influenced during this season of the pandemic. They are generally the ones at a misfortune and are relinquishing, either scholastically, monetarily, or both. Teachers gave emphasis too on the

importance of the support of the local government, which is also one of the stakeholders. They mentioned that the support given by the office of the city mayor helped very much in the preparation of modules. Participants also indicated that the school ties up with the TV and radio stations to deliver lessons to the students especially located in the rural areas and to cover a wide range of audience and listeners. Granthorn (2020) claims that Teachers in the Philippines are often and adamantly depressed due to a lack of budget, and it has been discovered that those in poverty are searching for ways to ensure that the funds provided to them by their local governments fulfill the needs of all of their students. They are also very grateful for the support given by the parents of my students. Through them, I was able to implement my intended activities. Without their support, their child's learnings will be limited. Another teacher noted that parental engagement is an important factor in students' distance learning success. In a virtual learning environment, parental assistance has been demonstrated to have a favorable influence on student achievement (Borup et al., 2014; Feng & Cavanaugh, 2011; Lee & Figueroa, 2012; Makrooni, 2019; Woofter, 2019).

Research respondents also stated that the school heads' support and effort empowered them to pursue their work and feel motivated and more driven to face challenges. The positive working environment helped teachers overcoming difficulties and challenges at work. According to an article on ways to reduce teacher stress and improve their capacity to perform at their best. School pioneers can help reduce teacher stress by strategizing working conditions that help educators. Educators experience less pressure and resolve to occupations all the more regularly under agreeable working conditions. Schools can also aid in reducing educator stress by fostering effective school principal relationships. One way to accomplish this is to implement mechanisms that encourage good subordinate behavior. Educators must also take care of themselves in order to be able to work with others. Without effectively thinking about themselves, educators lose the ability to think about others (Ketchell,2018).

Theme 9. Unpacking Competencies

Participants reflected that due to repetitive to answer activities in the module, they selected the activities that are very essential for the students not to be tired in answering all the activities in the modules. They also used simplified written work to minimize the confusion of the students on too many activities. Participants also shared that they make use of integrative performance tasks that are applicable to all subject areas and used mini-

dictionary and vocabulary words to unlocking the difficulties to help students in understanding terminologies.

Respondents stated that they unpacked that broad competency to a simpler objective to understand the topic easily. They also contextualized the activities so that they can be easily understood by the students. Contextualization can help enable the transformation and construction of a larger motivational environment for students (Weinberg, Besile, & Albright, 2011). Contextualization consumes much time for preparation with the unavailability of the local materials and difficulty in pedagogy. Not all topics are applicable and students' differences pose a challenge to contextualization. However, contextualization still increases the learning engagement wherein students have better retention of concepts and conceptual understanding.

Strength and Limitation

The use of the phenomenological approach was instrumental in translating messages from teachers' lived experiences in times of pandemic in this research. This study has a wide coverage of schools in the Division of El Salvador City. The use of qualitative methods may render the findings not generalizable, however, the evidence generated is useful to design quantitative research to understand the challenges and the coping mechanism of teachers in the new normal in the education sector at large. Other limitations include the possibility of having interviews and data collection being influenced by the experiences of the research team regarding teaching in new normal. Due to different stages of lockdown and disease outbreaks in different parts of the country, people were hesitant to participate in interviews, and somewhere they were discouraged by the authorities. To address this issue, government-set rules and regulations for the public gathering were followed, that is, maintenance of 1-meter distance, use of masks and sanitizers; and they were guaranteed safety and the ability to leave at any moment. Moreover, this was a short-term study conducted over a period of 3 months. The long-term experience of the participants may provide a better understanding of teachers' experiences during the pandemic.

CONCLUSION

The pandemic situations present a unique challenge for all teachers. They revealed that in the new normal situation, they are adjusting in the delivery of instruction using varied learning delivery modalities, hands-

on activities, poor internet connection which motivates them to enhance their technology skills and finding ways for effective delivery strategies. Similarly, assessment of the performance of the learners, communication gap, lack of printing resources, self-learning module issues are challenges faced by the teacher during this pandemic. There is a need for an adapt quickly response to effectively manage the situation. Despite the challenges encountered; teachers upskilled and retooled themselves by attending training and webinars. They also manage their time efficiently and partners with stakeholders to help them with their needed resources and unpacked competencies to contextualize learning.

The findings from this study can contribute to planning policies and generating guidelines that can improve the physical as well as mental health of the teachers. Further research on what kind of training, particularly in terms of technology use, would be most beneficial to teachers and students. Another area of investigation might be on effective pedagogy for online teaching and learning and developing methods for authentic evaluations and timely feedback. Department of Education might revisit the module's content, errors, and activities in various academic fields to meet the learning needs of the students, as well as how the learning delivery modalities of education fit within the parameters of distance teaching and learning. The education system in the Philippines needs to engage in the professional development of teachers, particularly on ICT and effective pedagogy, considering the present scenario. This would help and prepare the educational system for such uncertainties in the future.

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Prevalence of Cyberbullying Among Senior High School Students

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ABSTRACT

Cyberbullying is a global concern because of the increase internet use and social media platforms. The use of this social media such as Facebook, Twitter, Messenger, and others among students are so familiar because they use it as a media for learning and teaching. Hence, this could also be a possible avenue for cyberbullying among students. The aim of the study is to determine the prevalence rates of cyber victimization and cyber perpetration among Senior High School Students. A survey questionnaire adapted from Joice (2015) was used in this study with a reliability of 0.905 – 0.935 for victimization and 0.935 – 0.969 for perpetration. The questionnaire was floated to 90 senior high school of Molugan National High School, El Salvador City Division. Using google form, data were analyzed using descriptive-comparative statistic such as frequency mean, t – test and One Way ANOVA. Findings indicate that majority of the respondents were females 58.9 %. Also, very few from the respondents have experienced cybervictimization and have engaged in cyberperpetration. In addition, the study also showed that students who have more hours of internet use have higher rate of cybervictimization while those have less hours of internet use have lower rate of cyberperpetration. Students were equally vulnerable to cybervictimization and cyberperpetration regardless of the number of hours of internet use.

Keywords: cyber bullying, victimization, perpetration

I. INTRODUCTION

The advancement of technology has led people to connect online and access the internet or social media excessively. The change of educational landscape has also brought increase on the use of internet among the learners since communication takes place in the different internet and mobile platforms. The prevalence of cyberbullying cases has also emerged and is now growing concern of the parents, educators and researchers. Cyberbullying is a form of harassment and humiliation associated with significant psychosocial problems. It is cited in the study of Safaria (2016) that the harmful effects of cyberbullying include increased social anxiety, low self-esteem and depression. According to Zahreni (2016) that cyberbullying can occur through electronic communications media in schools, but in general cyberbullying can also happen outside the school environment.

Cyberbullying involves two groups of perpetrators and victims. Cyberbully is an individual who deliberately and repeatedly hurt other using technology such as phones and computers while cyber victims are individual, who receive repeated harmful behavior while using technology such as phones and computers. It was cited in the study of Vitto (2018) that in Philippines, it was reported that 80% of teenagers aged 13-16 had experienced cyberbullying in social media. In the study of Witkus (2012) on a sample of 579 Filipino adolescents it reveals that 29 percent students had experienced cyber victimization. Frequency of online use has also been identified as a risk factor for experiencing cyberbullying (Sticca et al., 2013). Factors that have been used in the past to predict incidences of cyberbullying and victimisation include age, gender, and intention of internet usage (Li, 2007; Slonje & Smith, 2008).

The researchers conducted a survey on the prevalence of cyberbullying among senior high school students. The survey generated that out of 120 respondents, there are 90 have direct involvement in cyberbullying whether a victim or perpetrator. Consequently, the purpose of the study was to examine the prevalence of cyberbullying whether victimization and perpetration and assessed whether sex and internet use are contributing factors to cyberbullying. The study helped the researchers to provide appropriate intervention and strategies to ensure safety of the learners.

OBJECTIVES OF THE STUDY:

The main objective of the study was to assess the cyberbullying encountered by the senior high school students at this time of the pandemic. Specifically,

it answered the following research objectives:

Objective 1. Determine the profile of the respondents in terms of

- 1.1. Sex
- 1.2 Internet use

Objective 2. Find out the level of cyberbullying encountered by the respondents in terms of

- 2.1 cyber victimization
- 2.2 cyber perpetration

Objective 3. Test the significant difference on the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according.

- 3.1 Sex
- 3.2 Internet usage

II. METHODOLOGY

The study utilized the descriptive comparative research design. It involved 120 senior high school students of Molugan National High School wherein 90 of them are used as purposive sample which have an engagement in cyber victimization and cyber perpetration.

The researchers used the adapted survey questionnaire of Joice (2015) after permission was granted by the author. It is noted that the Cronbach alpha value of the questionnaire is 0.905 – 0.935 for victimization and 0.935 – 0.969 for perpetration indicating that is valid and reliable. Also, modification of some questions that suit in the Philippine setting was done.

Descriptive statistics were also given importance as mean and frequency to describe the profile of cyber victims and cyber perpetrator. Whereas, T test was used to test the significant difference on the levels of cybervictimization and cyberperpetration encountered by the respondents when grouped according to sex and internet use. Also, F-Test Analysis (One-Way ANOVA) was used for the significant difference on the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according to internet use.

III. RESULTS AND DISCUSSION

Objective 1. Determine the profile of the respondents in terms of

- 1.1. Sex
- 1.2 Internet use

1.1 Sex

Table 1

Frequency Distribution of the Profile of the respondents in terms Sex

Sex	Frequency	Percent
Male	37	41.1
Female	53	58.9
Total	90	100.0

Table 1 presents the Frequency Distribution of the Profile of the respondents in terms Sex. As shown in the table, 58.9% of the respondents were females while 41.1 % were males. The data revealed that majority of the respondents in this study were females.

1.2 Internet Use

Table 2. Frequency Distribution of the Profile of the Respondents in terms of Internet Use per Week

Internet Use	Frequency	Percent
0 to 5 Hrs	36	40.0
5 to 10 Hrs	28	31.1
10 to 15 Hrs	8	8.9
15 to 20 Hrs	7	7.8
20 Hours and Above	11	12.2
Total	90	100.0

Table 2 shows the Frequency Distribution of the Profile of the respondents in terms of internet use per week. As depicted in the table, 40.0% of the respondents used internet from 0 to 5 hours, 31.1 % used internet from 5 to 10 hours, 12.2% used internet from 20 hours and above, 8.9% used internet from 10 to 15 hours, and only 7.8% used internet from 15 to 20 hours. The data implied that the respondents vary in their internet use wherein majority used internet from 0 to 10 hours. The data also implied that, at this time of the pandemic, students have access and using the internet in aid of answering their learning tasks in the modules.

Objective 2. Find out the level of cyberbullying encountered by the respondents in terms of

2.1 cyber victimization

2.2 cyber perpetration

2.1 cyber victimization

Table 3. Mean on the Level of Cyberbullying Encountered by the Respondents in terms of Cybervictimization

Indicators	Mean	SD	Verbal Description
1. I have seen other people being cyberbullied	2.86	1.11	A few times
2. In my lifetime, I have been cyberbullied	1.92	1.03	Once
3. I have been cyberbullied in these ways...Someone posted mean or hurtful comments about me online	1.63	.840	Once
4. Someone posted a mean or hurtful picture online of me	1.47	.752	Never
5. Someone posted a mean or hurtful VIDEO ONLINE of me	1.07	.269	Never
6. Someone created a mean or hurtful WEB Page about me	1.14	.487	Never
7. Someone spread rumors about me ONLINE	1.45	.721	Never
8. Someone threatened to hurt me through a CELL PHONE TEXT MESSAGE	1.50	.810	Once
9. Someone threatened to hurt me ONLINE	1.53	.889	Once
10. Someone pretended to be ME ONLINE and acted in a way that was mean or hurtful to me	1.38	.870	Never
Overall Mean	1.60	0.77	Once

Legend:

Scale	Range	Verbal Description
5	4.50-5.00	Many Times
4	3.50-4.49	Several Times
3	2.50-3.49	A few times
2	1.50-2.49	Once
1	1.00-1.49	Never

Table 3 presents the Mean on the Level of Cyberbullying encountered by the Respondents in terms of Cybervictimization. As depicted in the table, the highest mean is for item number 1 “I have seen other people being cyberbullied” with a mean of 2.86 followed by item number 2 “In my lifetime, I have been cyberbullied” with a mean of 1.92. On the other hand, the lowest mean is for item number 5 “Someone posted a mean or hurtful VIDEO ONLINE of me” with a mean of 1.07 followed by item number 6 “Someone created a mean or hurtful WEB Page about me” with a mean of 1.14. The

overall mean is 1.60 verbally described as once. The data revealed that the respondents have experienced cybervictimization to the minimal extent.

This observation is supported by the study of Peled (2019) which revealed that cyberbullying continues to be disturbing not just in adolescents but as well as undergraduate students. Fifty seven percent of the undergraduate students who participated in this study had experienced cyberbullying at least once in college life.

Moreover, the findings are supported by the study of Goshe (2016), which stipulated that 32% of the participants of 388 have been cyberbullied in their entire lifetime. In the study of Aniq (2016), which revealed that 60% of 490 students had never done cyberbullying and 37.1% subjects have committed cyberbullying also supported the findings of this study.

2.2 Cyber Perpetration

Table 4

Mean on the Level of Cyberbullying Encountered by the Respondents in terms of Cyberperpetration

Indicators	Mean	SD	Verbal Description
1. In my lifetime, I have CYBERBULLIED others	1.51	.824	Once
2. I posted mean or hurtful comments about someone online	1.34	.705	Never
3. I posted a mean or hurtful PICTURE about someone online	1.23	.561	Never
4. I posted a mean or hurtful VIDEO about someone online	1.14	.487	Never
5. I created a mean or hurtful WEB page about someone online	1.13	.501	Never
6. I spread rumors about someone online	1.28	.604	Never
7. I threatened to hurt someone through a CELL PHONE TEXT message	1.22	.666	Never
8. I threatened to hurt someone ONLINE	1.16	.455	Never
9. I pretended to be someone ONLINE and acted in a way that was mean or hurtful	1.21	.550	Never
Overall Mean	1.25	0.59	Never

Legend:

Scale	Range	Verbal Description
5	4.50-5.00	Many Times
4	3.50-4.49	Several Times
3	2.50-3.49	A few times
2	1.50-2.49	Once
1	1.00-1.49	Never

Table 4 presents the Mean on the Level of Cyberbullying Encountered by the Respondents in terms of Cyberperpetration. As shown in the table, the highest mean is for item number 1 “In my lifetime, I have CYBERBULLIED others” with a mean of 1.51 followed by item number 2 “I posted mean or hurtful comments about someone online” with a mean of 1.34. Meanwhile, the lowest mean is for item number 5 “I created a mean or hurtful WEB page about someone online” with a mean of 1.13 followed by item number 4 “I posted a mean or hurtful VIDEO about someone online” with a mean of 1.14. The overall mean is 1.25 verbally described as never. The data revealed that the respondents in general almost did not engage in cyberperpetration.

The result of the study is in contrast with the study of Black (2014) that about a third of the students reported taking part in cyberbullying.

Objective 3. Test the significant difference on the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according

- 3.1 Sex
- 3.2 Internet usage
- 3.1 Sex

Table 5. T-Test Analysis for the Significant Difference on the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according Sex

Variable	Sex	N	Mean	T	Sig. (P-value)	Interpretation
Cybervictimization	Male	37	1.54	0.86	0.394	Not Significant
	Female	53	1.63			
Cyberperpetration	Male	37	1.32	1.12	0.266	Not Significant
	Female	53	1.21			

Table 5 presents the T-Test Analysis for the Significant Difference on the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according Sex. As shown in the table, females (M=1.63) have higher mean for cybervictimization as compared to males (M=1.54) while males (M=1.32) have higher mean for cyberperpetration as compared to females (M=1.21). However, the P-value (0.394 > 0.05) for cybervictimization and cyberperpetration (0.266 > 0.05) were lower than the alpha value of 0.05. This implied that there is no Significant Difference on

the levels of cybervictimization and cyber-perpetration encountered by the respondents when grouped according to Sex. This means that both males and females are equally vulnerable to cybervictimization and cyberperpetration.

This is in contrast with the article of Notar, et.al (2013), which cited adolescent girls are more likely to have experienced in cyberbullying than boys. Girls are more likely to spread rumors while boys are more likely to post hurtful pictures or videos. Girls are more likely to become victims of cyberbullying whereas boys are more inclined to engage in electronic bullying.

3.2 Internet usage

Table 6. F-Test Analysis (One-Way ANOVA) for the Significant Difference on the Levels of Cybervictimization and Cyber-perpetration Encountered by the Respondents when Grouped according Internet Use

Variable	Internet Use	N	Mean	F	Sig. (P-value)	Interpretation
Cybervictimization	0 to 5 Hrs	36	1.67	0.878	0.481	Not Significant
	5 to 10 Hrs	28	1.48			
	10 to 15 Hrs	8	1.48			
	15 to 20 Hrs	7	1.61			
	20 Hrs-Above	11	1.76			
Cyberperpetration	0 to 5 Hrs	36	1.33	0.598	0.665	Not Significant
	5 to 10 Hrs	28	1.19			
	10 to 15 Hrs	8	1.18			
	15 to 20 Hrs	7	1.13			
	20 Hrs-Above	11	1.25			

Table 6 presents the F-Test Analysis (One-Way ANOVA) for the Significant Difference on the Levels of Cybervictimization and Cyber-perpetration Encountered by the Respondents when grouped according to Internet Use. As shown in the table, students who have 20 hours and above internet used have the highest cybervictimization with a mean of 1.76 while students who have 0 to 5 hours of internet used have the highest cyberperpetration with a mean of 1.33. However, the P-value for cybervictimization (0.481 > 0.05) and cyberperpetration (0.665 > 0.05) are greater than the alpha value of

0.05 which implied that there is no Significant Difference on the Levels of Cybervictimization and Cyber-perpetration Encountered by the Respondents when Grouped according to Internet Use. This means that the students are equally vulnerable for cybervictimization and cyberperpetration regardless of the number of hours of internet use.

In the study of Senturk (2016), it was found out that cyberbullying of the students connected to internet at home were found to be high, and it has also been found that the students connected to internet from the cafes were exposed to more bullying. The students having mobile phones show more cyberbullying tendency and they are exposed to more cyberbullying.

IV. CONCLUSIONS

From the noted findings, the study revealed that cyber victimization is related to cyber perpetrators. It can be drawn that the respondents of the study vary in terms of sex and the number of hours of internet use per week whereby females dominate the males and students spent only few hours using the internet per week. Further, in terms of cybervictimization and cyberperpetration, the rate is very minimal which means that only few from the respondents were exposed to these forms of cyberbullying. Finally, students' sex and number of hours of internet use are not differentiating factors to the cybervictimization and cyberperpetration forms of cyberbullying.

V. RECOMMENDATIONS

Based on the findings of the study, the following recommendations can be presented:

1. Parents are encouraged to regularly monitor the internet activities of their children.
2. School officials and teachers may conduct series of webinar to their respective students on how to prevent and cope with cyberbullying at this time of the pandemic.
3. Teachers in the senior high school may incorporate discussion of cyberbullying in their lessons and modules.
4. Senior high school administrators may conduct an orientation to the teachers on the nature and prevention of cyberbullying under the new normal.

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Learners' Satisfactions and Feedbacks in the Implementation of Modular Distance Learning in MAPEH

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ABSTRACT

The study focused on learners' satisfactions and feedbacks on module quality and teachers' assistance in MAPEH. Respondents of the study were 120 junior high school learners in one of the public schools in El Salvador City Division, selected using quota sampling technique. This study utilized sequential explanatory design of mix-method.

Results showed that the respondents in Junior High school were satisfied to the module quality and teachers' assistance in MAPEH except, respondents in Grade 9. The following were the learner's feedback on module quality: (1) modules need improvement in layout and design; (2) needs improvement in assessment activities; (3) need enhancement in supplemental (4) need content clarification and (5) modules are presentable and comprehensible.

Furthermore, lack and availability of teachers' assistance and communication; appreciation of teachers' performance; and provision of feedbacks were highlighted by the learners on feedbacks for teachers' assistance. Plan for intervention to address learners concerns and difficulties were highly recommended.

Keywords: Learners' Satisfaction, Feedback, Module Quality, Teacher Assistance

INTRODUCTION

The Department of Education (DepEd) mission is to encourage learning and continuously nurture all learners by providing a healthy and inspiring atmosphere for learners and a welcoming environment for successful learning to take place. Learning is considered one of the most significant characteristics and features that play an important role in a country's advancement. At the same time, it has a positive and detailed effect on the growth of new generations, albeit depending on modern and advanced scientific foundations (Alelaimat et al., 2012). Feedback is one of the most powerful factors in learning (Panhoon & Wongwanich, 2014).

DepEd has faced several challenges in delivering its mandate, and yet, DepEd remains confident that quality education can be achieved through its Sulong Edukalidad program and KITE as its four key reform areas: (1) K to 12 Curriculum review and update; (2) Improvement of the learning environment (3) Teachers' upskilling and reskilling; and (4) Engagement of stakeholders for support and collaboration (Mark, 2019). Unfortunately, the global pandemic struck the world and have a significant impact not just on the global economy but also on the world's education system. It forces the world to run and implement education in a new normal way.

The COVID-19 pandemic did not spare the Philippines. The Philippine education system endeavors to adapt to the "new normal." The biggest challenge for DepEd is to find a balance between securing its mandate and the safety and health of its learners and teachers. Despite the COVID-19 pandemic, DepEd still must ensure access to basic education for learners. While different measures and solutions are made to adapt to the "new normal," for this unprecedented moment, a one-size-fits-all fix is not applicable. To ensure that education continues despite the COVID-19 pandemic, DepEd needs to develop and provide Self-Learning Modules (SLMs). As per the latest data from DepEd, 3, 885, 427 learners chose a modular approach as the preferred learning modality over others offered modality under the 'new normal' of this country's education system (Malipot, 2020). Using the modules, students learn at their own pace and are responsible for their learning (Torrefranca, 2017; Columbano, 2019). Therefore, since the modular approach is more on a self-learning, it is critical that the modules developed and provided to the learners are of good quality.

MAPEH is a four-in-one subject in junior high school that comprises Music, Art, Physical Education, and Health. This subject focuses on developing learners' skills in practical application. Based on the K-12 Curriculum Guide,

music and arts are performance-oriented disciplines. According to the Department of Education (2016), effective learning occurs through active experience, participation and execution, creative expression, aesthetic valuation, critical response, and understanding. The developed abilities incorporate reading/analyzing, listening/observing, performing, singing, using musical instruments, movement, acting, playing, and utilizing diverse craftsmanship materials, techniques and processes, reacting, composing, and creating.

According to the Department of Education (2016), move to learn is the concept of active work as learning. On the other hand, learning to move encapsulates the learning of skills, techniques, and understanding that are necessities for various physical participation, including exercise, games, sports, dance, and recreation. The Health Education from Kindergarten to Grade 10 centers on the physical, mental, emotional, and social, moral, and spiritual dimensions of holistic health. It helps students acquire critical information, attitudes, and skills required to promote healthy nutrition, prevent and control diseases, prevent drug misuse and abuse, reduce risk behaviors related to health, and prevent and control accidents to preserve and enhance personal, family, community, and global health. Thus, it is considered a great challenge among MAPEH teachers to deliver the capabilities in a new normal way of conveying directions and exercises through distance learning.

However, the implementation of modular distance learning is not that perfect as the expression “building the plane as you fly.” There is no single shot solution to the complex challenges in education as it requires a complicated transformation of operating system, culture, and beliefs. Meanwhile, a transformation system is a simultaneous process of creating plans, designing strategies, and implementing them. All of this system may works while troubleshooting in the middle of the operation and making some adjustments. In the process, the most important is the cycle of learning and revising. If something wrong happens and does not work, that would be the moment to revise the plans and strategies then learn from them to implement them effectively.

Furthermore, in our current situation in the amidst of a global pandemic where the flight pace of education need to be revised in the middle of the process where we called it “New Normal.” The majority becomes new since mostly everything goes to distance learning, and the majority are learning how it works, just like experiment and adjustment. With this, feedback involving students as collaborators is also a vital strategy for enhancing the

teaching and learning process (Fluckiger et al. 2010; Bennet and Nair 2011; Carless et al. 2011). However, Gruger et al. (2010) suggest that because the quality cannot be objectively assessed, perceived performance can only be calculated by contrasting customer service expectations with their perceptions of actual performance. Ried (2010), in any case, reminds us that it is vital that “the action is carried out and this action is carried out based on the opinions of the students.”

In addition, customer satisfaction has long been recognized as a central concept in all business activities. Satisfaction, both in the past and present, can serve as an indication of the company’s success and an indicator of future performance. (Mihanović et al., 2016). With this, Researchers believed that the learners are the main client of the Department of Education. With this, the business of DepEd is to deliver efficient services and quality education to learners. Per R.A 11032 (Ease of Doing Business and Efficient Government Service Delivery Act 2018) stated that it is mandated to provide government services regularly to undertake cost compliance analysis, time and motion studies, to evaluate and improve their transaction systems and procedures, and to re-engineer the same, if deemed necessary, to reduce red bureaucracy. With this, feedbacks and satisfactions from learners play a vital role in improving the implementation of modular distance learning to address the challenges in the teaching and learning process of MAPEH.

There are many definitions and conceptualizations of student feedback in the literature. Plimmer (2001) describes student feedback as the “students’ expressed opinions on the service they receive as students.” Ory (2000) and Joseph et al. (2005) view it more broadly as they explain that the evaluation of teaching in higher education has evolved from a primary reliance on a chair’s assessment to a formal, systematic, and multiple approaches which incorporate various methods such as student ratings and peer reviews. In line with this, Mihanović et al., (2016) suggest that customer satisfaction has long been recognized as a central concept of all business activities. Moreover, satisfaction, both in the past and present, can function as an indicator of a company’s success and a symbol of future performance. The concern of this research is the feedbacks of the learners regarding the implementation of modular distance learning.

Modular learning is a form of distance learning provided by DepEd that uses Self-Learning Modules (SLM) based on the most essential learning competencies (MELCS) (FlipScience, 2020; Estarada, 2020). The modules include sections on motivation and evaluation that serve as a complete guide

to the desired capabilities of teachers and students. Teachers will monitor the learners' progress through home visitations (following social distancing protocols) feedback methods and guide those in need of special attention. (FlipScience, 2020). Workplans will also be distributed to the students along with the SLMs. However, unlike SLMs, work plans will be given to the students weekly, as this shows the timetable of lessons and exercises to be done each week (Magsambol, 2020). The key point of this research study is the assurance of module quality and exemplary implementation.

According to Estrada (2020), the modular learning approach is hanging by a thread, and it cannot blame the teachers or the students. The plan seems to be flawed from the beginning. Factors such as the number of students, especially in public schools, who need equal and undivided attention, were not thoroughly considered. Instructors often struggle to reach out to all of their students but fall behind as economic and social factors hinder them. Further, modular learning is highly reliant on the More Knowledgeable Others (MKOs) capacities, otherwise known as the adult figures in the homes of these students. The module depends on their knowledge and patience to understand the concept they do not comprehend. In most middle-class homes, where at least one person has access to data or an internet connection, this might not pose much of an issue. In addition, in middle-class families, at least one person has attended college, which implies that education and resources are available. However, for lower-income families, this may not be the case. In households where both parents are absent, struggling to make ends meet, and nobody has gone to college because of poverty, modular learning may not work by any means. Lessons are limited to what is written on the paper. The student would probably have trouble taking in their lessons without another more experienced individual who can illustrate these complex concepts. Despite DepEd's efforts to fulfill its mandate to provide extra-ordinary quality education, problems and difficulties are still possible in this "new normal" way of education. Further, the involvement of the clients is discussed by collecting feedback, suggestions, and satisfaction.

However, Learners' Feedbacks have been the practice in higher education to improve the quality of the service and education. Although it is accepted that student feedback provides valuable feedback at Loughborough University (2010), they warn that student feedback should be used as only one of a range of measures to assess the quality of teaching. For example, the number of campuses with student rating systems with available procedures that faculty should follow or people to contact to request assistance after receiving low

ratings should be considered. Ory (2000) notes that assessment results have been restricted on most campuses to support the decision-making process only. Even though students are given a chance to be heard, the learners' voice must be used for the betterment of the institution. This is the opportunity for junior high school learners to voice out and be heard to improve the implementation of modular distance learning.

One of the critical problems that arose during the implementation of Modular Distance Learning is a large number of activities in each module. The Department of Education should discuss this subject, events should be minimized, and unnecessary topics are taken out to gain mastery as much as possible (Dangle & Sumaoang, 2020).

Provision of sources and books that enrich the subject of science and help execute the modules' strategy (Alelaimat et al., 2012). Although MAPEH subject is known to be a practical course, sufficient resources are still vital to supplement the lessons in MAPEH. The move from teaching-learning delivery in schools to modular distance learning has undoubtedly made it more difficult for school staff to provide basic quality education. That is why DepEd leaders are always finding ways to solve the problems and training their teachers and heads of school to become more successful for modular distance learning in their field. They have undergone numerous training and seminars as frontlines in the educational system to be more qualified to provide quality education amid the COVID-19 pandemic. It is a standard of the department to train teachers not only for professional growth but also for unforeseen circumstances. (Bagood, 2020).

Furthermore, Estrada (2020) has highlighted that modules are not replacements for teachers. The student would not understand it, just like what has been described above, without a knowledgeable person who can clarify complicated concepts written in the module. Second, it is limited to cases. Modules are not perfect themselves. They vary from institution to institution, and their content depends on the teachers who created them. Because of a well-explained module, some students may not have a problem understanding their lessons, but others might not be as fortunate. The level of learning varies with the lack of regular books used. Thirdly, students are left in the darkness. For this school year, those who do not have access to electronic devices and the internet do not even know their classmates. This school year, the only point of communication that students have with their teachers is via the modules. Between students and teachers, social ties do not form.

According to Alelaimat et al. (2012), there are many potential sources of teaching feedback and assessment results. The most common source of information for teaching assessment is student feedback. In reality, student reviews are a vital source of proof of teaching effectiveness, and in most institutions, collecting student input is standard practice.

Feedback from students is an important method for assessing instructors, resulting in the growth of the faculty. However, for the overall evaluation of an instructor, other forms of input can also be used. Further, a significant role in shaping academic institutions' image is the relationship between the aspirations of students and their satisfaction with the quality of service offered by educational institutions. Academic institutions are becoming aware of student satisfaction because their decision to pursue their education at this institution and the positive word of mouth that will attract prospective students are positively affected by satisfaction. Satisfaction can influence the motivation of students, and thus their success (Mihanović et al., 2016).

Thus, this study aims to assess the learners' satisfaction and gather learners' feedback with implementing modular distance learning and teachers' assistance in MAPEH to plan interventions to improve the implementation.

Research Questions

1. What is the satisfaction level of the respondents on Modular Distance Learning and Teachers' Assistance in MAPEH?
2. What are the feedbacks of respondents on Module quality and Teachers' assistance in MAPEH?

METHODS

This study employed the Sequential Explanatory Design of Mix-Method. The study involved the use of both quantitative and qualitative data and was analyzed sequentially. Creswell (2013) defined this as being characterized in the first phase of research by collecting and analyzing quantitative data, followed in the second phase by the collection and analysis of qualitative data, based on the findings of the initial quantitative results. The quantitative data is usually assigned weight, and the data mix happens when the initial quantitative results guide the secondary qualitative data collection. The two types of data are therefore different but related. The study respondents were the 120 junior high school learners in a public secondary school of El Salvador City Division, located in the western part of the Province of

Misamis Oriental. The participants were selected using the quota sampling technique. Further, 30 learners were allocated per grade level. This study adapted the Student's Satisfaction Survey Questionnaire from Open University with some modifications integrated by the researchers to be contextualized. Further, the survey questionnaire consists of 14 items, 7 of which in the first part are for module quality satisfaction, and the remaining seven items in the second part are for satisfaction with teachers' assistance. In-Depth Interviews (IDI) and Focus Group discussions (FGD) were utilized using semi-structured questions formulated by the researchers. Before the conduct of the study, permission to conduct the study was obtained from the school head. Further, the researcher secured inform and parental consent from the respondents relative to the conduct of the study. The researchers disseminated the Satisfaction Survey Questionnaire during the distribution of MAPEH modules and retrieved the Satisfaction Survey Questionnaire and the modules. After retrieving and analyzing the satisfaction survey questionnaire, interviews were conducted in two modes. (1) one-on-one interviews via phone and (2) focus group discussions with a limited number of learners in an open space while adhering to health protocols such as wearing a facemask, one point five (1.5) to two (2) meters social distancing, and hand sanitizing. The study used descriptive statistics (mean, frequency, percentage, and standard deviation) to determine the respondents' level of satisfaction. Thematic analysis was utilized in formulating themes from the respondents' feedbacks.

RESULTS AND DISCUSSION

The following summarizes the results of this study:

What is the satisfaction level of the respondents on Modular Distance Learning and Teachers' Assistance in MAPEH?

Table 1 presents the satisfaction frequency, percentage, the mean and standard deviation of respondents on module quality. The data in the satisfaction result on module quality shows that Grades 7 ($\bar{x}=4.41$; $SD=0.35$); 8 ($\bar{x}=4.14$; $SD=0.79$); and 10 ($\bar{x}=4.08$; $SD=0.55$) were satisfied with the quality of modules in MAPEH in the implementation of modular distance learning. Further, great number of respondents in Grades 7 ($f=30$); 8 ($f=21$); 10 ($f=24$) responded satisfied and highly satisfied to the module quality. It implies that respondents in Grades 7, 8, and 10 found the module materials satisfying in terms of content, workloads pertain to the activities and instructions on the activities, and the physical appearance of the module.

The prints and layouts are clear and readable as well as the opportunities given in the modules were helped to maintain the interest and enhance the learners' understanding.

Table 1. Frequency, Percentage and Mean Distributions of Respondents' Satisfaction Results on Module Quality (n=120)

Range	Description	Grade 7		Grade 8		Grade 9		Grade 10	
		f	%	f	%	f	%	f	%
4.21-5.0	Highly Satisfied	19	63.3	17	56.6	0	0	14	46.6
3.41-4.20	Satisfied	11	36.7	5	16.7	6	20	11	36.7
	Neither Satisfied Nor								
2.61-3.40	Dissatisfied	0	0	8	26.7	21	70	5	16.7
1.81-2.60	Dissatisfied	0	0	0	0.00	3	10	0	0
	Highly								
1-1.80	Dissatisfied	0	0	0	0.00	0	0	0	0
Total		30	100	30	100.00	30	100	30	100
Overall Mean		4.41		4.14		3.15		4.08	
Interpretation		Satisfied		Satisfied		Neither Satisfied Nor		Satisfied	
Standard Deviation		0.35		0.79		Dissatisfied		0.55	
						0.54			

However, Grade 9 respondents' overall satisfaction falls in the interpretation of "neither satisfied nor dissatisfied" ($\bar{x}=3.15$; $SD=0.54$). Further, most of the Grade 9 (70%) responded neither satisfied nor dissatisfied with the module quality. It implies that module materials are neither good nor bad in content, delivery, and physical appearance. On the other hand, modules are average only as it is not satisfying nor dissatisfying, in which there are some confusing and unclear instructions found in the module in grade 9, the module activities provided in the module are slightly difficult but, module content topics help the learners to learner independently. According to the grade 9 respondents, those modules are average in overall aspect. With this, the outcome confirms the report that the educational modules have serious problems. Some of them are reported to be so rife with errors that are far more severe than mere typographical or editing mistakes that they are unusable; supervisors have allegedly advised several teachers not to use the defective modules (The Manila Times, 2020).

Table 2 presents the frequency, percentage, and mean result on respondents' satisfaction with teachers' assistance. The data in the satisfaction result on teachers' assistance shows that Grades 7 ($\bar{x}=3.59$; $SD=0.1.11$); 8 ($\bar{x}=4.47$; $SD=0.53$); and 10 ($\bar{x}=3.82$; $SD=1.03$) were satisfied with the assistance provided by MAPEH teachers in the implementation of modular distance learning. Further, a great number of respondents in Grades 7 (16); 8 (28);

10 (24) responded satisfied and highly satisfied with the assistance given to them by their respective MAPEH teachers. It implies that during the implementation of the modular distance learning, their individual MAPEH teachers must be kept in touch every time they need their assistance. Furthermore, MAPEH teachers in Grades 7, 8, and 10 provide feedbacks to learners' performance and updates relative to the module activities.

Table 2. Frequency, Percentage and Mean Distributions of Respondents' Satisfaction Results on Teachers' Assistance (n=120)

		Grade 7		Grade 8		Grade 9		Grade 10	
Range	Description	f	%	f	%	f	%	f	%
4.21-5.00	Highly Satisfied	9	30	21	70	0	0	16	53.3
3.41-4.20	Satisfied	8	26.7	7	23.3	1	3.3	2	6.7
2.61-3.40	Neither Satisfied Nor Dissatisfied	4	13.3	2	6.7	1	3.3	7	23.3
1.81-2.60	Dissatisfied	9	30	0	0.0	5	16.7	5	16.7
1-1.80	Highly Dissatisfied	0	0	0	0.0	23	76.7	0	0.0
Total		30	100	30	100	30	100	30	100
Overall Mean		3.59		4.47		1.59		3.82	
Interpretation		Satisfied		Satisfied		Dissatisfied		Satisfied	
Standard Deviation		1.11		0.53		0.61		1.03	

However, Grade 9 respondents overall responses fall in the interpretation of "Dissatisfied" ($-x=1.56$; $SD=0.54$). Further, majority of the respondents in Grade 9 (93.4%) responded dissatisfied and highly dissatisfied to the assistance of their respective MAPEH teachers relative to the implementation of modular distance learning. It implies that MAPEH teachers in Grade 9 did not exert effort in communicating their respective learners to the extent that learners did not know who their MAPEH teacher is. Little or no follow-up and feedback on performance were made by the Grade 9 MAPEH teachers to the extent that learners skip activities when they find it difficult. According to Estrada (2020), for students, modules are not replacements. The student would not understand it, just like what has been described above, without a knowledgeable person who can clarify complicated concepts written in the module. Second, it is limited to cases. Modules are not perfect themselves. They vary in the school, and their content depends on the teachers who created them. Because of a well-explained module, some students might not have a problem understanding their lessons, but others may not be as fortunate.

What are the feedbacks of respondents on Module quality and Teachers' assistance in MAPEH?

The following themes are the feedbacks of the respondents in all grade levels;

Module Quality

The modules need improvement in print and lay-out. The Physical Appearance of the modules is significant in delivering instructions; problems in prints and layouts might hamper the reader from understanding and comprehend the topics. Respondents in this study found out that some text in the modules that are printed in small sizes makes it unreadable. The black and white color of the figures and illustrations appeared in dark shades, and others are faded, which is undesirable to read and understand. With this, learners yielded that as much as possible, adjust the font of the modules' text in MAPEH by making it more significant to make it reader friendly. Further, in Arts, illustrations and pictures should be printed in color, not in greyscale, so that there is an emphasis on color, which is one of the elements of art. However, the Manila Times (2020) mentioned that the cost of replicating and distributing the printed modules has already drained the subsidies accessible for the needs of schools and teachers, requiring teachers to dig into their wallets to supply their students with the materials. This matter only shows that there is still inconsistency in the modules and the implementation of the modality that hampers DepEd's objective of providing quality education through modular distance learning.

Modules are well presented and comprehensible

Qualified professionals in the field crafted modules, series of quality assurance was also conducted to the modules before the modules were cascade to the schools. With this, learners perceived that the modules are in good condition and that it gives enough and appropriate information for activities. It can be easily understood; thus, sufficient learning is acquired. Instructions and assessments in the modules are straightforward and can be accessed through the use of the internet. Therefore, Arts and Physical Education modules are well appreciated by the majority of the learners. Satisfaction to the modules was yielded by the majority of learners concerning MAPEH modules.

Modules need improvement in assessment activities

Assessment is one of the crucial parts of learning. Activities in the evaluation should be specific to make the lesson easier, highlighted by the learners

that some of the assessment activities in MAPEH are broad and confusing. Further, tasks should be achievable; as Dangle and Sumaong (2020) mentioned, one of the critical problems that arose during the implementation of Modular Distance Learning is a large number of activities in each module. The Department of Education should consider this issue, practical exercises should be minimized, and unnecessary tasks should be taken out to gain mastery as much as possible. Moreover, some module activities are required learners to surf the internet, whereas, in most middle-class homes where at least one person has access to data or an internet connection, this might not pose much of an issue which implies that education and resources are available to them. But for lower-income families, this may not be the case. With this, learners pointed out that the activities should be decreased, explained clearly, and should not always require an internet connection. The learners find difficulty in performance tasks, especially vlog activities. The learners are not used to this activity and find this activity peculiar to the learners, and too many activities are given.

Modules need enhancement in supplemental

Modular learning may not work by any means. Lessons are limited to what's written on the paper. The student would probably have trouble taking in their lessons without another more experienced individual who can illustrate these complex concepts (Estrada, 2020)—further, Searching for an effective future teaching vision impacts the relationship between the school and the individual society that achieves the effective learning technique. The need to study and change the scientific texts adds some important aspects by applying the modules' strategy, enjoying learning and skills development, and teaching the loading into the readers, and providing references and books that enrich the topic and enable the modules to execute the strategy (Alelaimat et al., 2012). Thus, learners want a thorough discussion in the module from the teachers to elaborate on the topic. The provision of contextualized and accessible supplementary materials to supplement modules' topics and activities was highly requested by the learners. Using the modules, students learn at their own pace and are responsible for their learning (Torrefranca, 2017; Columbano, 2019). Therefore it should be easy, and learning materials should be self-explanatory. Learners recommend that as much as possible, answer sheets must be provided for better learning and provide sufficient resources for Music that learners perceived as the most challenging component in MAPEH in this modular distance learning. As per, learners yielded insufficient resources and difficulty in Music.

Learners request for component focus

MAPEH is a four-in-one subject in junior high school that comprises Music, Art, Physical Education, and Health. This subject focuses on developing learners' skills in practical application.

Learners who yielded those modules in MAPEH should be given one (1) component or specialization per week. The number of modules should be decreased as well as the activities are provided. There's a shortage of time due to multiple tasks or projects required in which learners cannot accomplish the tasks in 4 components in MAPEH in the given period. Based on cognitive overload theory, information is processed in the working memory, where small amounts of data are stored quickly. The average person can only hold about four 'chunks of lead in their working memory at one time. Suppose a student's working memory is overloaded. In that case, there is a risk that they will not understand the content being taught and that their learning will be slow and ineffective (NSW Department of Education, 2017).

Modules need content clarification

According to The Manila Times (2020), the educators pointed out two serious educational modules. Several of them are said to be rife with far more extreme errors than mere typographical or editing errors, which resulted in them being unusable; supervisors have allegedly advised several teachers not to use the defective modules. Per, learners mentioned that some lessons are difficult to understand. Thus, they learn less. Instructions in the module should be given clearly, and the selection of vocabulary should be considered. Further, as much as possible more examples and explanations should be given to clarify the topic, instead of more activities that make the learners unmotivated to study. Moreover, there are easy activities that suit the capabilities of the learners, and there are also strenuous activities. Teachers' Assistance

Teachers' Availability of assistance and communication

The implementation of modular distance learning might not be successful without the support of the teacher. With this, learners responded that the teacher's availability for assistance and communication is very open. MAPEH teachers are approachable and responsive even through group chats. Furthermore, learners mentioned that their respective MAPEH teachers give clear instructions and do follow-ups through social media, text, phone calls, and home visitation.

Provides Feedbacks

The teacher gives motivating feedbacks to enhance learners' performance. Learners yielded that their respective MAPEH teachers provide feedback, particularly in the performance task and module-related activities. Thus, modules include sections on motivation and evaluation that serve as a complete guide to the desired capabilities of teachers and students. Teachers will monitor the learners' progress through home visitations (following social distancing protocols) feedback methods and guide those in need of special attention. (FlipScience, 2020). Workplans will also be distributed to the students along with the SLMs. However, unlike SLMs, work plans will be given to the students weekly, as this shows the timetable of lessons and exercises to be done each week (Magsambol, 2020). The critical point of this research study is the assurance of module quality and exemplary implementation.

Appreciation of Teachers' Performance

Learners mentioned that teachers are doing well, approachable, friendly, kind, and show effort and satisfying performance. Further, learners commended and appreciated the efforts made by their respective MAPEH teachers in the implementation of modular distance learning. They are doing such performance despite the difficulties and challenges faced by the teachers. The move from teaching-learning delivery in schools to modular distance learning has made it more difficult for school staff to provide basic quality education. That is why DepEd leaders are always finding ways to solve the problems and training their teachers and heads of school to become more successful for modular distance learning in their field. They have undergone numerous training and seminars as frontlines in the educational system to be more qualified to provide quality education amid the COVID-19 pandemic. It is a standard of the department to train teachers for professional growth and preparation for unforeseen circumstances (Bagoood, 2020). Moreover, the teacher gives consideration and enough time for learners to finish the task at hand.

The teacher lacks assistance and communication

According to Estrada (2020), the modular learning approach is hanging by a thread, and it cannot blame the teachers or the students. The plan seems to be flawed from the beginning. Factors such as the number of students, especially in public schools, who need equal and undivided attention, were not thoroughly considered. Instructors often struggle to reach out to all of their students but fall behind as economic and social factors hinder them. Students are left behind in the dark. For this school year, those who don't

have access to electronic devices and the internet do not even know their classmates. This school year, the only point of communication that students have with their teachers is via the modules. Between students and teachers, social ties do not form. Therefore, in this extraordinary time, communication is very vital. Results of this study found out that there are learners who have lack information about their teachers. Hence, they ask queries from the adviser instead of the concerned subject teacher, particularly in MAPEH.

Further, learners perceived that one of their challenges is the no monitoring and follow-up made by their respective MAPEH teachers. Hence, some learners request open communication through Facebook and an on-time response from their MAPEH teachers. Thus, the student will not understand this without a knowledgeable person who can explain challenging or complicated concepts written in the module. The aid teachers will have a significant factor in achieving the goal of DepEd in providing quality education amid pandemic times.

CONCLUSION AND RECOMMENDATIONS

The module quality and teachers' assistance in MAPEH was not perfect. Several lapses and discrepancies were found along the way in the implementation of modular distance learning. MAPEH is a four-in-one subject in junior high school that comprises Music, Art, Physical Education, and Health. This subject focuses on developing learners' skills in a practical application then rapidly shift to modular distance learning due to health crises. With this, learners expressed their challenges and difficulties encountered in this subject. Satisfaction and feedback of the learners were not brought out to destroy the school's image, as well as the department, nor discourage MAPEH teachers in delivering the instructions to the learners. Hence, the result may serve as a basis for improvement, reflection on teachers' achievement, and plan for future intervention to benefit the learners and the school. Thus, being a learner-centered public institution, the Department of Education continuously improves itself to serve its stakeholders (Department of Education). Soliciting feedback and satisfaction from the learners were great avenues to gathered concrete and reliable bases for innovation and development.

Based on the study results, the following recommendations are proposed: (1.) for the parents: as the home-learning partner as much as possible, they will monitor their children's activity at home (2.) For the teachers, that they will provide intervention activities that will address the problem

in the implementation of the modular learning, provide fewer activities but meaningful to address learning needs, provide feedback, and conduct monitoring and follow-up to students in any modes of communication; (3) School and subject department heads, that they will conduct constant monitoring on the quality implementation of the modular distance learning and provides an avenue for learners to voice out and be heard per, R.A 11032 (Ease of Doing Business and Efficient Government Service Delivery Act of 2018) stated that provide government services are with this mandated to undertake cost compliance analysis regularly, time and motion studies, undergo evaluation and improvement of their transaction systems and procedures and reengineer the same if deemed necessary to reduce bureaucratic red tape and processing time. (4.) For the researchers, they will conduct a more in-depth study on feedbacking about implementing modular distance learning and design interventions regarding the challenges encountered by learners in this new normal education.

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Online Supplemental Class: Implications on Social Well-being and Academic Performance in Science Grade 3 in the First Quarter in during Pandemic

Maily P. Madrigal

ABSTRACT

This study aimed to provide insights on learners' social well-being and academic performance in Science in the program implementation of an online supplemental class in times of pandemic. Further, this study applied the practical action research design primarily to improve the practice of the online supplemental class and address problems encountered before and after the implementation of the online supplemental class. The percentage and frequency distribution were employed in determining scores in performance task, pre-test and post-test and employed a virtual in-depth interview and focus-group discussion to gather data regarding learners' experiences that contributed to their social well-being. The data were gathered from the 10 learners of Grade 3 class enrolled in the Science Online Supplemental class of one of the elementary schools from the Division of El Salvador City. The results showed that learners showed positive overall feedback in the conduct of the online supplemental class that implies great contribution to learners' social well-being that signifies active social participation, positive interaction with co-learners and teacher and experienced enjoyment in a fun-filled class with diverse activities even at home that brought thrill and excitement to learners during the conduct of the online supplemental class, the results of the pre-test and post-test showed progressive results from the overall description of did not meet expectation to outstanding as well as the result in the learners' academic performance in the given performance task.

Keywords: Academic performance in Science, Social well-being, Online Supplemental Class

INTRODUCTION

The World Health Organization (WHO) declared COVID-19 as a global public health emergency of international concern on 30th January 2020 as well as a pandemic on 11th March 2020 (Cucinotta & Vanelli, 2020). The pandemic, COVID-19 has brought the major changes in the way of living of people's lives around the world, from businesses, economy, social gatherings, entertainment, and education has been greatly affected by the disease. The Philippines is not spared with the effects of the said virus. To cope up with the threat of the said virus, various measures were put to place such as restrictions of movements and social gatherings, preventive practices such as social distancing, wearing of masks and handwashing. As part of the restriction to social gatherings, learning at school is also prohibited. In adherence to the RA 105333, with the leadership of the Department's Secretary, Leonor Magtolis Brionnes affirmed its commitment to sustaining the delivery of quality, accessible, relevant, and liberating Philippine basic education services anchored on the Sulong Edukalidad framework resulting through the different learning modalities based on DO 21, S.2019 which is the Distance Learning with four types including Modular Distance Learning, Online Distance Learning, and TV-Based/Radio-based Instruction.

The sudden shift to online learning created a hot debate in the Philippines citing the poor living conditions of the learners. Magsambol (2020) cites an obvious gap between those who can and cannot afford the resources to avail the new education platform. The general condition of children in the public-school system sends a message of inequality with the DepEd's mantra 'no child left behind.' However, learning cannot be cancelled as much as to drive the economy. This led to a tighter measure for education institutions in sustaining its operations despite the impending risk. As the face-to-face classes pose higher risk of spread, the most viable solution is through online teaching and learning. This platform challenges both the teachers and the students as it occurs something new to them. This calls for an 'adopt quickly' response to the new normal in teaching and learning amidst the pandemic (Tanhueco Tumapon, 2020).

In the face of this continuing health threat, the Department of Education (DepEd) formulated the Basic Education Learning Continuity Plan (LCP) to put into motion the marching orders of the Secretary: ensure that learning continues while guaranteeing the health, safety, and well-being of all learners, teachers, and other DepEd employees. The LCP recognizes that DepEd must adopt alternative modes of delivering learning if it is to reach all

learners regardless of who and where they are. Where school-based, Face-to-Face Learning is not possible, the LCP identifies three learning delivery modalities (LDMs) that schools may implement: Distance Learning, Blended Learning, and Homeschooling.

In Region X, according to Functional Literacy, Education and Mass Media Survey (FLEMMS) 2013, Northern Mindanao Out-of-School Children and Youth has the lowest rate in the Philippines (“NorMin out-of-school children and youth: Lowest in Mindanao,” n.d.). Thus, to prevent children from dropping out of school due to COVID-19, the Division of El Salvador City, hereby promoting the continuity of education, strengthened its advocacy on promoting education spread throughout the City by tapping parents to let their children continue learning amidst pandemic through the efforts by each school of the Division using variety of platforms including online dissemination of information and community information drive. The school is one of the medium schools in 14 schools in the Division, exerted its effort given the pressure of time and resources through seeking the help and partnership with stakeholders to promote safe and assured education providing different projects made by each member of the faculty to aide learners and home learning partners in the way of education in the new normal. Thus, the school came up with an online supplemental class which aims to aide learners in learning Self-learning modules in times of pandemic. The program seeks to provide interaction and communication amongst learners-to-teachers and learners-to-learners to ensure the social well-being of learners in this crucial time.

Thus, in this study, the researcher utilized Online Supplemental class in the First Quarter and used the results for pupils who enrolled in the said program launched by the school after 3 weeks upon the opening of classes through modular learning approach.

Research Questions

This research study was conducted to determine the Implications on Social Well-being and Academic Performance in Science Grade in the First Quarter in Times of COVID-19 through the utilization of an Online Supplemental Class.

Specifically, it sought to answer the following questions.

1. How do the students performed in an online supplemental class in terms of? :
 - 1.1 Academic Performance; and
 - 1.2 Performance Task

2. What are the opportunities, challenges and coping mechanisms experienced by the learners when exposed to online supplemental class?

METHODOLOGY

Respondents

The respondents of the study were all the Grade III pupils composed of 3 boys and 7 girls who enrolled in the Science Online Supplemental Class in one of the schools in District 1, Division of El Salvador City, School Year 2020-2021.

Program Title: “Science Online Supplemental Class in Grade 3”

Objective: To conduct online classes to aide learners with their needs in difficult topics in science. The program aims to provide alternative teaching platform and provide support and contribution to learner’s social well-being.

Implementation

Pre-Implementation

The teacher Conducted an Online dissemination of information about the Science Online Supplemental Class in Grade 3 using an online flyer posted in the school’s official Facebook account.

Home learning partners and other stakeholders then enrolled their learners in the class through google classroom by providing their child’s Gmail account. The teacher then administered an online pre-test using Google Forms.

Mid-Implementation

The online classes were done once a week every Tuesday, 9:00-11:00am via Google Meet. The researcher would send invites of google meet link to online class to learners’ email 15 minutes before the time and would send personal texts to parents as a reminder to online class schedule. The researcher would post announcements on the google classroom in the subject taught online relating supplemental videos or performance tasks to be done online.

Post-Implementation

The learners created a performance task entitled “Science Vlog” then uploaded online. The researcher then conducted a post-test then measured learner’s progress in science with the conduct of the online supplemental class.

Research Design

The researcher used the practical action research design. It is intended to address a specific problem within a classroom, school or to other communities. It studies on local practices and focuses on teacher development and student learning. The primary purpose of practical action research is to improve practice in the short term and to inform larger issues. The result of this research is action plan.

Respondents and Sampling Procedures

The respondents of the study were all the Grade III pupils from one of the Elementary Schools in the Division of El Salvador City comprising of 7 females and 3 males, a total of 10 learners who enrolled at the Science Online Supplemental Class. The researcher used the same assessment tool distributed online in a multiple-choice type of assessment in the conduct of pre-test and written work before and after the First Quarter. Then used a 5-point scale rubric in assessing the Online-based Performance Task called Making A Science Vlog with an equivalent percentage in the scores attained by the learners. The researcher then opted to interview learners individually with their experiences and learnings during and after the online supplemental class. Then the researcher conducted a focus-group discussion on learners' learning journey including learning opportunities, experiences, and challenges during the implementation of the online supplemental. Then, the researcher organized and tabulated the data through tables, computed the percentages of the scores in each used tool, and average scores that served as results or evidence of progress in the implementation of Distance Learning with the aid of the program initiated by the researcher and used Pearson correlation coefficient in determining the relationship between the academic performance and satisfaction rate of learners in the conduct of the Science Online Supplemental Class.

Statistical Treatment

The statistical treatment used in the study involved percentage and frequency distribution in determining the grades in performance task using a 5-point scale rubric, online pre-test, and post-test, virtual in-depth interview, and focus-group discussion in determining the satisfaction of learners regarding their experiences in the conduct of the online supplemental class.

RESULTS AND DISCUSSION

This part presents the analyses and interpretation of data gathered out of the instruments used in the study according to specific problem.

1. How do the students performed in an online supplemental class in terms of:
 - 1.1 Academic Performance; and
 - 1.2 Performance Task

TABLE 1
Distribution of Respondents' Academic Performance in Pre-test

Level of Academic Performance	Frequency	Percentage
Outstanding	0	0
Very Satisfactory	0	0
Satisfactory	0	0
Fairly Satisfactory	1	10
Did not meet expectations	9	90
	Mean	2
	SD	3.5213633723318
	Overall Description	Did not meet expectation

Table 1 shows the distribution of the respondents' Science Academic Performance in Pre-test before the start of First Quarter. As shown, the respondents showed low scores on the pre-test with the frequency of 9 (90%) and 1 (10%) with the mean score of 2. The data showed deviation from the mean. The data revealed that the respondents' academic performance is poor/did not meet expectation. What effect does doing a test before instruction have on subsequent test performance after instruction? Previous research has indicated that giving a list of questions before instruction, or before reading a passage, may sometimes enhance learning (e.g. Distad, 1927; Berlyne, 1954, 1966; Samuels, 1969; Welch and Walberg, 1970). Some investigators — both in industrial and educational contexts — have extended this type of finding by demonstrating that not only does a pre-test sometimes increase scores obtained on the same or similar questions asked in the post-test, but that scores on post-test questions not given in the pre-test are also increased (e.g. Washburne, 1929; Holmes, 1931; Kellogg and Payne, 1939; Mc Keachie & Hiler, 1954; Lumsdaine, 1963; Warr, et al. 1970). Pretesting students on lessons that are about to taught can have

the effect of relaxing them by the time a post-test comes around. This is because students feel more comfortable with material that is familiar to them and pretests can provide additional exposure (“What’s the big deal with pretests?,” n.d.).

TABLE 2
Distribution of Respondents’ Academic Performance in Post-Test

Level of Academic Performance	Frequency	Percentage
Outstanding	6	60
Very Satisfactory	4	40
Satisfactory	0	0
Fairly Satisfactory	0	0
Did not meet expectations	0	0
	Mean	2
	SD	2.5298221281347
	Overall Description	Outstanding

Table 2 shows the distribution of the respondents’ Science Academic Performance in Post-test after First Quarter. As shown, the respondents showed high scores on the post-test with the frequency of 6 (60%) Outstanding and 4 (40%) Very Satisfactory. The data showed that the Standard Deviation is clustered around the mean. Hence, the data showed that learners’ progress in their Science Academic Performance in Post-test is Outstanding. A much higher post-test score should indicate that a student has learned certain topics in comparing pre-test and post-test scores. If the scores are about the same, or if the post-test score is lower than the pre-test score, in all indications this measures that topics were not learned in the course (Kuehn, 2011).

TABLE 3
Distribution of Respondents’ Academic Performance in Online-based Performance Task

Level of Academic Performance	Frequency	Percentage
Outstanding	10	100
Very Satisfactory	0	0

Satisfactory	0	0
Fairly Satisfactory	0	0
Did not meet expectations	0	0
	Mean	2
	SD	4
	Overall Description	Outstanding

Table 3 shows the distribution of the respondents' Science Academic Performance in Online-based Performance Task in the First Quarter. As shown, the respondents showed high scores in the Online-based Performance Task with the frequency of 10 (100%) Outstanding. The data showed that learners' performance in their Science Online-based Performance Task is Outstanding. According to Back and Hwang (2005), performance assessment has a positive effect on the educational values of teaching and learning activities in schools in South Korea. They reported that performance assessment has positive effects on the improvement of students' intellectual abilities in areas such as achievement, learning attitude, creativity, and inquiring ability. Because they require students to actively demonstrate what they know, performance assessments may be a more valid indicator of students' knowledge and abilities ("Archived: Performance assessment," n.d.).

3. What are the opportunities, challenges and coping mechanisms experienced by the learners when exposed to online supplemental class?

Learners' Learning Opportunities

The following are the learning opportunities provided by the teacher during the Online Supplemental Class:

- Online Experiments
- Online Games
- Science Vlog
- Online Oral Presentations of Learnings
- Online Tests

Learners' Challenges

The following are the learners' common challenges recorded in the anecdotal record encountered during the conduct of the online supplemental class:

- Weak Internet Signal
- Delays in communication
- Difficulty in editing videos

Learners' Experiences (Kwento) During the Conduct Online Class

Learner 1

I am always excited to attend class. I am always on time and chats my teacher ahead whenever there is a class. Once, I cried because I lost my internet connection because of the weak signal in our Barangay so I switched places to find signal, but I was never absent in class. At times, I answer late because of the signal. Luckily, the signal in our Barangay got upgraded. I developed to love Science and it became my favorite subject because of the fun experiments, games, and vlogs we did in our online class. I enjoyed it all a lot.

Learner 2

I like to attend online supplemental class in science. Everything was easy for me. Making Science Vlog is my favorite. Once, I lost my internet connection, I got angry, but I waited and switched places to catch signal and be online again.

Learner 3

I like to attend online class because I miss meeting my classmates. Answering modules alone is getting me bored because my parents are both working. Being with my teacher and classmates once a week makes me feel happy especially, I am new to the class. I get to talk to my new classmates and be friends with them after our online class, we do not log out right after.

Learner 4

I love to attend online supplemental class but whenever my Ate is doing her online class too, I cannot attend the class because we are using only one laptop, so my teacher suggested to use a cellphone. I love online experiments and I love to explain to my classmates about what I learn in our oral presentations.

Learner 5

Before, I have difficulty listening to class because I am always distracted by my classmates but when I joined online class, I was able to listen and focus to my teacher and the instructions she had given us for our experiments and games. I was able to fully participate, and I enjoyed it a lot. Also, I like making vlogs, I feel like a vlogger.

The learners' overall positive feedback in the conduct of the Online Supplemental Class implies great contribution to learners' social well-being that signifies active social participation, positive interaction with co-learners and teacher and experienced enjoyment in a fun-filled class with diverse activities even at home that brought thrill and excitement to learners during the conduct of the online supplemental class. Learner satisfaction is one of the important factors that must be taken into consideration to improve the learning experience. Studies have shown that learner satisfaction impacts learning outcomes such as achievement and motivation (Martirosyan, Saxon, Wanjohi, 2014). The importance of assessing learners' satisfaction becomes even more important when implementing a new system of delivering learning. Some studies have showed that satisfaction is positively related to social presence in online learning (Cobb, 2011; Zhang, 2010).

CONCLUSION AND RECOMMENDATION

Based on the findings, the learners' result from pre-test to post-test differed from did not meet expectation to outstanding. The learners' academic performance based on the Performance Task results is outstanding. The learners have overall positive feedbacks to the conduct of the online supplemental class.

This study brought us to digital learning in times of pandemic and gave new light to alternatives in education despite the absence of physical presence on both teachers and learners. It is recommended that the conduct of the Online Supplemental be embraced/ implemented in schools or the Division especially during pandemic.

Moreover, it is also recommended to conduct further studies in the conduct of the online supplemental class in other subjects for research intensification.

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Types of Parental Involvement: Predictors on the Academic Performance of Grade 7 Students in English

Daniel Ruben B. Penaso*, John Alfred L. Bajuyo, Liberty G. Puertos

ABSTRACT

Upon the suspension of class on March 2020 due to the threat of COVID19, the Department of Education Shifted to new approach on teaching. It is the Distance Learning Approach. In the Distance Learning Approach, Parental Involvement has become the highlight of the educative process, thus parents were regarded as co-educators as they are more involve in their children's education due to students spending more time in their respective homes The purpose of this research is to find out the prevalent Parental Involvement Type experienced by the students from their parents, the academic performance of Grade 7 students in English , and the effect of Parental Involvement towards the academic performance of the students in English, 152 grade 7 students were chosen to partake in this research.

In terms of Parental Involvement, it was found that Communicating is the most prevalent type of parental involvement experienced by the respondents towards their parents. Moreover, base on the data, it was shown that there is an increase in the students' performance base on their grades when parents get involved in their learning. Furthermore, base on the Multiple Regression Analysis, it was shown that the following types of parental involvement can be used as a predictor to the student's academic performance in English, a point increase of communicating will have 0.331 increases on the academic performance, and a point increase of collaborating with the community will have an increase of .158 in the students' academic performance. Whereas a point increase on the decision making there will have 0.275 decrease on academic performance. Therefore, parental Involvement affects the academic performance of the students.

Keywords: Parental Involvement, Communicating, Distance Learning Approach, Academic Performance, Multiple Regre

INTRODUCTION

The global pandemic post many challenges in the educative process and conducting a class has been the foremost concern when the COVID19 virus was detected in the country. Furthermore, when the President ordered an abrupt closure of the school year because of the Pandemic, the education sector began to study on ways on delivering the learning using the Distance Learning Approach. COVID19 has transformed that terrain of education and ushers a new system, the Distance Learning where the teachers and parents will become partners in delivering quality education to the learners. Parents will become co-educators in the educative process of teaching and learning. Concerns regarding the effectivity of the process were questioned. Concerns began to escalate when the case of COVID19 began to rise.

Among the Distance Learning Modalities it was revealed that according to survey conducted by the Department of Education, most Filipino students would prefer the modular approach (Malipot 2020) base on the result of the Learner Enrollment and Survey Forms (LESF), 72 million students is in favor of Modular Learning.

Furthermore ,According to Chin(2020), the Modular Approach is the most convenient to the typical Filipino student. On the other hand she stated that there are some disadvantages regarding the Modular Approach, these are Technical Elements, the Module's reliability, sense of authority, focus and concentration, and Parent's/Guardian's Educational Background (Chin,2020). Further, according to Dado(2020) this raised a concern to some parents, especially this is another "additional" work for them, and suggested that both parents and teachers should undergo some workshop. This is evident in several complaints coming from parents of Grade 7 students of Molugan National High School, their foremost concern is the educational background and their capability to teach and attend to their learner's academic needs.

Parental Involvement has been the highlight in the Distance Learning Approach in Teaching. In the Pandemic Era in which Face-to-face is still likely impossible, parents assuming the role as co-educator is vital in the teaching-learning process. Their view on their specific role can impact their children's performance. In the study conducted by Dangle and Sumaoang (2020) it was found out that parents were committed in their children's education, despite 54% being a working parent, and 46% are non-working they are

still academically involved in their children's education. Furthermore 79% of them did not find difficulties in the submission and retrieval of modules. In congruence, Parental attitudes towards and their involvement in their children's learning at the home influence the children's level and quality of learning, development and attainment at all ages (Edwards and Alfred, 2014)

In terms of Academic Performance, Students perform best in academics if there is a strong parental support involved. (Epstein, 1982) furthermore, Higher levels of parental involvement can directly affect higher student attendance, higher math and reading scores, higher graduation rates, and less retention. (Darling, et. al., 2011). Though some might place financial problem as an issue education, Holloway and Nelson disagrees with this with the result of their studies that Income does not affect the degree of Parental involvement (Holloway and Nelson, 2013).

Objectives:

This research will be conducted in order to find out the following:

- The types of Parental Involvement commonly shown by the parents towards the students.
- The relationship between the types of parental involvement and its effect on the academic performance of the students in English.

Scope and Limitation

This study is only limited to 150 students of Molugan National High School during the School Year 2020-2021.

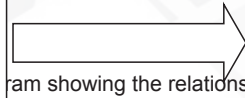
Theoretical Framework:

This study anchors on Joyce Epstein's (1987) six types of parental involvement and its corresponding effects on the students' academic performance.

- The types of Parental Involvement are the following:
 1. Parenting
 2. Communicating
 3. Volunteering
 4. Home Learning
 5. Decision-Making
 6. Collaborating with the Community

Schematic Diagram
INDEPENDENT VARIABLE

- Types of Parental Involvement
1. Parenting
 2. Communicating
 3. Volunteering
 4. Home Learning
 5. Decision-Making
 6. Collaborating with the Community



DEPENDENT VARIABLE

- Academic Performance in English
1. Excellent (96 and above)
 2. Good (91-95)
 3. Fair (86- 90)
 4. Average (80 – 85)
 5. Poor (79 and below)

Statement of the Problem

The study seeks to determine the relationship between parental involvement and the academic performance of the students; furthermore it seeks to answer the following questions:

1. What type of Parental involvement is prevalent among the Grade 7 students in terms of
 - 1.1 Parenting;
 - 1.2 Communicating;
 - 1.3 Volunteering;
 - 1.4 Home – Learning;
 - 1.5 Decision- Making;
 - 1.6 and Collaborating with the Community?
2. What is the level of the Academic Performance of the students in English during the first quarter?
3. Is there a significant relationship between the academic performance of the students in English and the types of parental involvement?
4. Which type of the parental involvement can best predict the academic performance of the students in English?

Null Hypotheses

H01. There is no significant relationship between Academic Performance of Grade 7 students in English and the types of Parental Involvement.

H02. There is no type of the parental involvement that can best predict the academic performance of the students in English

METHODOLOGY

This research uses the Descriptive Research in which it seeks to solve certain problems within a community. Its primary purpose is to improve practice in the short term as well as to inform larger issues (Fraenkel, et.al. 2013). An Action Plan will be derived from the findings of this research.

Data Gathering Procedures

A letter was given to the principal asking a permission to conduct a research and a request to access the form 138 (First Quarter Grade) of the students, a similar letter is also given to the class adviser.

Due to the age of the respondents, parents will be informed that their children will be chosen as respondents of the research and letter of parental consent will be given for them to sign. Once given the approval, the questionnaire will be inserted in module and the students will be given a week to answer the questionnaire, at the end of the week, the questionnaires will be collected, treated and analyzed.

Respondents of the study

A total of 150 Respondents are taken from the total of 250 Grade 7 students. Grade 7 students are chosen as respondents in order to measure the extent of parental involvement, especially in the distribution and retrieval of modules, due to the age restriction implemented by the IATF. In the recent guidelines, individuals living under areas who are placed under MGCQ are allowed to go outside their residence, providing they are 15-65 years old, Hence the standard age of Grade 7 students ranges from 12-14

Research Instrument

A teacher-made questionnaire (validated and tested with the use of cronbach's alpha, and yielded a value of .856) was used in the types and level of parental involvement, and the students' form 137 (with the permission from the principal and adviser) will be used in order to determine their academic performance.

Statistical Analysis Technique

In order to answer the first question, Frequency and percentage were used. In order to answer question number two, the researchers used the average of the sum of the dependent variable and ranked it from highest to lowest, making 1 as the number of the highest rank and 6 as the lowest. Since the research talks about relationship between two variables, the Pearsons R

Correlation Coefficient was used to answer the third question. PValue is used to determine the significance between two variables. Multiple regressions were used to determine the type of parental involvement that best predict the academic performance of the students.

Research Setting

The school selected to be the setting is located along the highway, it is composed of Junior High and Senior High Curriculum and is considered as the largest secondary School in the Division.

RESULTS

This Part involves the presentation, analysis, and interpretation of data gathered by the researchers regarding the effects of parental involvement and its relationship on academic performance of Grade 7 students in English.

Herewith are the results of the study, the findings are indicated below:

Problem 1: What type of Parental involvement is prevalent among the Grade 7 students?

Table 1 shows the types of parental involvement, its average score based on the questionnaire and its rank. When it comes to types of parental involvement, Communicating type got an average of 4.261 and is rank 1, Parenting type got an average of 4.171, and is placed on rank 2, Volunteering type got an average of 4.167 and is placed on rank 3, Home Learning Type has an average of 3.855 and is on rank 4, Collaborating with the community got an average score of 3.68 and is placed on rank 5. Decision Making got an average score of 3.304 and is on rank 6, and. Base on the data presented, Communicating Type of Parental Involvement is the most prevalent type of Parental Involvement experienced by the students towards their parents. Thus confirming the study of Garcia(2018) that communicating with teachers, and volunteering in school are prevalent practice in the Philippines when it comes to parenting, because it reflect cultural beliefs and practices in the Philippines related to traditional parenting.

Table 1. *The types of parental Involvement present in Molugan National High School*

Parental Involvement	Average	Rank
Parenting	4.171	2
Communicating	4.261	1
Volunteering	4.167	3
Home - Learning	3.855	4
Decision-Making	3.304	6
Collaborating with the Community	3.68	5

Problem 2:What is the level of the Academic Performance of the students in English during the first quarter?

Table 2 revealed the scores of the respondents in their academic performance in English. As indicated only 1 student got an Excellent Score with a percentage of 0.657895, a very small fraction to the whole population. On the other hand, the number of respondents who got a grade 91-95, slightly increase with a frequency of 14, which is 9.210526 % of the total population, the students who performed fairly with a grade ranging from 86-90 has a frequency of 27, which is 17.761316% of the total population. 76 students got an Average grade and they comprise 50% or half of the population, and students who performed poorly, got a frequency of 34% which comprise 22.36842 % of the total population. Base on the data, the academic performance in English of Grade 7 students in Molugan National High School are classified as Average. This might be because of the sudden transition between a traditional face-to-face class, to the application of ICT and the different distant learning modalities, this was reinforced by the study of De Villa and Manalo(2020) that shows that majority of Filipino students challenges in the new normal education is due to the limited access and knowledge regarding ICT.

Table 2 *The Academic Performance of Grade 7 Students in English based on the form 138*

Grades	Numerical Value	Frequency	Percentage
Excellent	96 above	1	0.65
Good	91-95	14	9.21
Fair	86-90	27	17.76
Average	80-85	76	50.00
Poor	79 below	34	22.36
Total		152	100.00

Problem 3: Is there a significant relationship between the types of parental involvement and the academic performance of the students in English?

Table 3 Shows the relationship between the types of parental involvement and the academic performance of students in English. Most of the parental involvement types are significant except for the Decision Making, which yielded a Computed Pearson's R value of 0.024 and Pvalue of 0.769519, thus we can conclude that the two variables does not have a significant relationship due to the Pvalue>0.05. Decision-Making Type of Parental Involvement cannot affect the academic performance of the students.

Table 3 *Pearson r Correlation Analysis for the significant relationship between the academic performance of the students in English and the types of parental involvement.*

Variable	N	r	P-value	Interpretation
Parenting	152	0.219	0.007	Significant
Communicating	152	0.313	0.000	Significant
Volunteering	152	0.163	0.045	Significant
Home Learning	152	0.265	0.001	Significant
Decision Making	152	-0.024	0.770	Not Significant
Collaborating with Community	152	0.227	0.005	Significant

P Value = 0.05 level of significance

Problem 4. Which type of the parental involvement can best predict the academic performance of the students in English?

Table 4 presents the multiple regression analysis to determine the type of parental involvement that can significantly predict students' academic performance in English. This was carried out to determine whether the types of parental involvement can significantly predict students' performance in English. The results of R(0.416) showed a moderate relationship which suggest that the model is relatively a good predictor of the outcome. The regression square (0.173) indicated that the model explained 17.3 % of the variance and that the model was a significant predictor of students' performance in English (F= .496, p = .001). While, communicating (P-value 0.008< 0.05) and decision-making (P-value 0.004< 0.05) contributed significantly to the model. The data also implied that communicating is the type of parental involvement that best predict students' performance in English. The regression equation is $Y = 0.227 + 0.331(X1) - 0.275(X2)$ which implied that a point increase of communicating will have 0.331 increase on the academic performance while a point increase on the decision making there will have 0.275 decrease on academic performance.

Table 4. *Multiple Regression Analysis to determine the type of the parental involvement that can best predict the academic performance of the students in English.*

Variables	Unstandardized Coefficients		Standardize	t	Sig.	Interpretation
	B	Std. Error	d Coefficients Beta			
(Constant)	.227	.563		.402	.688	
Parenting	.037	.113	.032	.324	.747	Not Significant
Communicating	.331	.122	.255	2.704	.008	Significant
Volunteering	.010	.129	.007	.078	.938	Not Significant
Home Learning	.170	.113	.159	1.503	.135	Not Significant
Decision Making	-.275	.095	-.256	-2.910	.004	Significant
Collaborating with Community	.158	.085	.163	1.853	.066	Significant

R = 0.416, RSquare(R²) = 0.173, F=5.06 ,P-value = 0.000

DISCUSSION

Based on the data that was collected treated and was interpreted by the researcher it was found out that, Most of the Grade 7 students in Molugan National High School can be classified as an Average Type of Learner. There are 76 identified students who got a grade of 80-85 from the total of 152, they comprise 50% or half of the total population.

The most prevalent type of Parental Involvement is the Communicating type it has an average of 4.261, and was rank 1 among other types of Parental Involvement, thus to say that it is a highly observed characteristic based on the respondents answer to the given questionnaire.

In terms of the types of Parental Involvement and its relationship on the academic performance of the grade 7 students in English, it was found out that based on the data that Parenting Type can affect the Academic Performance of the students, also Communicating Type, Volunteering Type, Home-Learning Type, and Those parents who Collaborate the community can impact their children's academic Performance. On the other hand, Parents who are into Decision-making type, or the one making their decision towards their child's academes, cannot affect their performance.

And in terms of which type of parental involvement can best predict the academic performance of the students, only two types came out as predictors namely communicating, collaborating with the community, and decision-making style and between the three, communicating is the best predictor.

CONCLUSION

Based on the data gathered, it was found out that the following types of Parental Involvement namely Parenting, Communicating, Volunteering, Home-Learning, and collaborating with the Community, can affect the students' Academic Performance in English. Therefore the null hypothesis of the following will be rejected except for Decision-Making, in which it was shown that it has no significant relationship with the students' Academic Performance. Furthermore, communicating style and decision-making style of parental involvement can significantly predict the academic performance of the students. An increase in Communicating type can increase the students' academic performance, on the other hand, an increase on the decision-making can decrease the students' performance.

RECOMMENDATIONS

Teachers: Strengthen the Parent-Teacher Partnership, constant communication to the parents should be practiced.

Parents: Parents should be more involved in their children's education, they should fulfill their parental obligations towards their children such as preparing their children's breakfast and providing their basic needs.

Communication with the teachers should also be practiced, thus strengthening the Parent-Teacher Partnership is a "must" in the new normal classroom setting. Parents should also talk with their children often regarding their studies and should encourage them to communicate their problems encountered in their studies.

Fostering the spirit of volunteerism towards school and community programs should also be encouraged. Parents should be a role-model when it comes to volunteerism to school activities and henceforth not discourage their children to join extra-curricular activities whose intention is for the welfare of the school and its students.

Parental task in their children's education should not only be limited to the distribution and retrieval of modules, but should be an agent of learning. They should be able to give basic information to their students and if they are not capable, they should find ways for their children to learn at home, such as buying their children a gadget so that they can learn, or provide them money so they can have access to the internet, parents should also be an agent for their children to communicate with their children.

Though not very effective in increasing their children's performance in school, but the researcher still encourage the parents in guiding their students in the choices that they are going to make.

Parents should also be an active member in the community programs that can help develop the youth, likewise they should encourage their children to be active in community programs such as attending an anti-drug awareness symposium. Their activeness in community activities can affect their children's academic performance.

Students – students should welcome the involvement of parents in their study and not view it as an intrusion to their privacy. They should be more open and communicate their problems and needs to their parents.

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An Assessment of the Learning and Development Needs of El Salvador City Teachers in Times of the Pandemic: A Basis for a Webinar Series

Karen Rose A. Serrania

ABSTRACT

Learning and Development (L&D) is an essential paradigm to provide teachers with necessary platform for professional growth and development. However, with the onset of the pandemic, training modalities are shifted to the alternative platform. Thus, seeing the crucial role of learning and development activities among the 460 teachers of El Salvador City Division, this study identified the teachers' preferred L&D topics befittingly important in the new educational landscape. The study focused its direction towards this question: What are the essential L&D activities mostly needed by teachers in times of the pandemic in terms of Curriculum-based, Program-based and Technical? Based on the findings of the study, the Assessment process in the new educational landscape was revealed to be the topmost need of the teachers (Curriculum-Based) in response to the shift of the learning modality with 64.8% total responses. Personality Development with a total of 50.1% of the responses and Information and Communications Technology with 58.7% total responses were the utmost training needs of the teachers in Program-Based and Technical areas respectively. Given the responses of the teachers not just in the survey but also in the monitoring of activities conducted, the following recommendations are made: 1. Continuing application of the GCLICK Webinar Series; Strengthening of the monitoring and evaluation in the trainings' effectivity and impact; and Intensifying of the Learning Action Cell (LAC) sessions as reinforcement of the topics presented in the webinar.

INTRODUCTION

In consonance with its mission to provide every Filipino learner with quality, equitable, culture-based and complete basic education, the Department of Education is gearing towards strengthening the professional growth and development of its educators. DepEd believes that the human resource is the most valuable asset as it is the source of operational performance and competitive advantage in an organization; thus, programs, activities and funds are allocated to support this endeavor.

Through DO 32, s. 2011 Re: Policies and Guidelines on Training and Development (T&D) Programs and Activities, DepEd has reviewed and reformulated policy guidelines on designing training and development (T&D) programs and in conducting activities for the capacity and capability building of the DepEd personnel and staff. These policies are implemented in consonance with the existing policies and guidelines prepared by the Civil Service Commission (CSC), National Economic Development Authority (NEDA), Department of Budget and Management (DBM), Commission on Audit (COA), and this Department, among others. The following are the given definition and concept of T&D:

Training and Development (T&D) is the process by which an organization or institution provides professional development activities to enhance individuals with knowledge, skills and attitudes to enable them to perform their functions effectively.

Activities under this are trainings, seminars, workshops, conferences, scholarships and job-embedded learning. Conduct of these activities shall involve a systematic process of competence/needs assessment, planning, designing, resource development and the actual delivery of the programs.

However, as training programs were assessed and evaluated, it has been deemed that trainings alone cannot suffice continuous learning since some of the inputs were not re-echoed to the field; thus, implementation and actual application of the supposed learning takeaways were compromised. With this, the policies stipulated on National Educators Academy of the Philippines (NEAP) transformation were released through DepEd Order 11, s.2019 to strengthen professional and development activities among the teachers.

DepEd El Salvador City with the implementing guidelines from Central Office through its arm in learning and development-NEAP, underscores the importance of these activities to foster strategic and systematic implementation of its L&D activities anchored on the PD priorities of the region. Human Resource and Development funds have been aligned to L&D activities based on the needs of the teachers which will reflect positive and improved teaching and learning performance.

However, the Philippines has recently struck by the Covid-19 pandemic which caused restrictions in various physical activities including face-to-face learning modalities and traditional classroom delivery. Despite such, the Department of Education underscores the use of alternative platforms to continue education and academic undertakings.

Embracing this “new normal” approach in education highlights conformity in several aspects and considerations. With this new challenge, teachers must be capacitated, trained and up-skilled on these modalities; securing quality teaching without compromising the health of both parties. Seeing the crucial role of learning and development activities among the forefront of curriculum instruction, identification of the preferred L&D topics not only in the content and pedagogy, is an utmost consideration to appropriately deliver the needs of the teachers in this times of crisis. Thus, this research is conducted. Table 1.1 shows the career stages of the teachers based on the classifications, specifications and qualifications as reflected in the Philippine Professional Standards for Teacher. El Salvador City Division is one of the newest SDOs in the country with the least number of populace. The table shows that 53.19% of the teachers belong to proficient level, 25.53% belong to highly proficient, 19.14% belong to beginning level (0-3 years in the service) and 6.38% distinguished level. The career stages of the teachers were assessed by the Personnel Development Committee (PDC) based on their performance (IPCRF), competencies, awards and recognition and number of years in the service.

Research Question:

1. What are the essential L&D activities mostly needed by teachers in times of the pandemic?
 - a. Curriculum-based
 - b. Program-based
 - c. Technical

METHODS USED

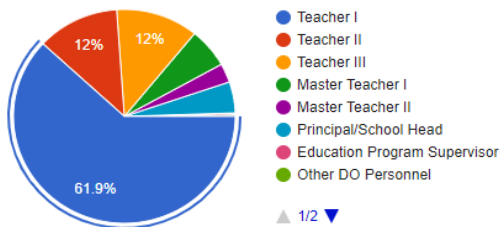
An online survey using the google form was used to gather the responses of 460 public school teachers in the Division of El Salvador City, Region 10 for the SY 2020-2021. Questions stipulated in the survey were pre-validated by the members of the Personnel Development Committee (PDC) in the said SDO (Schools Division Office). The survey link was officially given to the field last June 2020 through a memorandum.

A Descriptive Statistics (frequency and percentage) was used to rank the responses of the teachers based on curriculum-based, program-based and technical.

Focus Group Discussion (FGD) was also conducted to get the in-depth feedback of the teacher-participants.

RESULTS AND DISCUSSION

Percentage of Teachers' Responses based on Plantilla Item



The data shows the number of teachers who responded to the survey based on their plantilla item. Most of the teachers in the SDO are Teacher I in designation comprising of 61.9% out of the total 460 population.

1. What are the essential L&D activities mostly needed by teachers in times of the pandemic? In terms of:

a. Curriculum-Based

Table 2.1. Preferred Trainings on Curriculum

Preferred trainings in the Curriculum	Frequency	Percentage %
Assessment in the New Normal	248	64.8%
Learning Delivery Modality in the New Normal	178	46.5%
Portfolio Preparation	178	46.5%
21 st Century Skills	176	46%
Most Essential Learning Competencies	125	32.6%
Pedagogy	100	26.1 %
Reading and Context Clues	83	21.7 %

Table 2.1 shows the preferred trainings of the teachers in terms of content and pedagogy. As such, the assessment process in the new educational landscape was revealed to be the topmost need of the teachers in response to the shift of the learning modality with 64.8% total responses. El Salvador City Division opted for Modular Approach as its main modality (as a result of a research) aligning this to the resources and preparedness of the SDO.

Further, Portfolio Preparation and Learning Delivery Modality in the New Normal were deemed to be second in place with 46.5% responses. Teachers wanted to be upskilled in these areas for them to adapt to the changes brought about by the pandemic.

21st Century Skills, Most Essential Learning Competencies (MELC), Pedagogy and Reading and Context Clues came in third to sixth places respectively.

Table 2.2 Preferred L&D on Professional Development

Preferred Learning and Development Programs (Professional Development)	Frequency	Percentage %
Personality Development	192	50.1%
Mental Health	161	42%
Psychosocial Support for Teachers & Learners	156	40.7%
Public Speaking and Facilitation Skills	145	37.9%
Values Formation and Restoration among Students	136	35.5%

Table 2.2 shows the preferred learning and development activities of the teachers to target professional growth. Personality Development came in first with a total of 50.1% of the responses. The researcher who is also the training specialist of the SDO conducted a Focus Group Discussion among these teachers per school to find out their reasons of prioritizing this area. According to them, as they embraced this new learning landscape, they also need to strengthen and improve their emotional intelligence which is a key component in personality development. As the teachers adjust to limitations and challenges caused by the pandemic, they need to safeguard not just their health but also the inner aspect.

Mental Health and Psychosocial Support were deemed second and third priorities with total responses of 42% and 40.7% respectively. These can be applicable not just to the teachers but also the learners. According to Javed et.al (2020), people's behavior may greatly affect the pandemic's dynamic by altering the severity, transmission, disease flow, and repercussions. The present situation requires raising awareness in public, which can be helpful to deal with this calamity. With this mental health and psychosocial support were two indispensable topics equally important in the teachers' perspective.

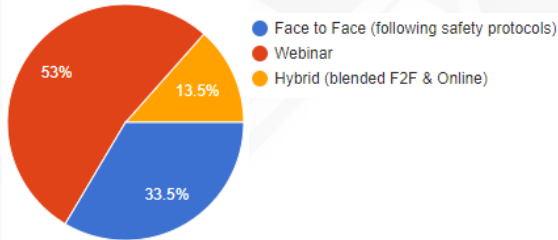
Table 2.3. Preferred Trainings under Technical

Preferred Trainings under Technical	Frequency	Percentage %
Information and Communications Technology (ICT)	225	58.7%
Designing and Writing Innovations	166	43.3%
Student Monitoring	158	41.3%
Research Writing	128	33.4%
RPMS-PPST	96	25.1%

Table 2.3 shows the preferred trainings of teachers under technical. The data revealed that Information and Communications Technology (ICT) is the utmost need of the teachers in this area with 58.7% total responses. According to the respondents, the positive use of ICT and its integration in the curriculum are of importance especially in this new educational landscape to help them assist in resource-management, integrated data system, e-book preparation and the use of the technology in Television and Radio-Based Instruction and the blended modality.

Preferred Training Modality

379 responses



Further, the researcher also asked the respondents of their preferred training modality and 57% chose Webinar, 30.5% opted for limited face to face and 13.5 voted for blended modality. Following the protocols set by the Inter-

Agency Task Force (IATF), the committee including the researcher have decided to craft a training program using the online modality (Webinar).

ACTION PLAN (INTERVENTION)

Based on the result of the survey and the responses of the teacher-participants, the researcher, together with the Personnel Development Committee came-up with G-CLICK: A Webinar Series (GEMS Convergence of Leaders for Innovation, Character building & Keen vision towards education) covering all the topics considered by the participants as learning priorities especially in this time of the pandemic.

Phase I (June-August 2020) and Phase II (Learning Delivery Modality, September-December 2020) have already been conducted and Phase III (January-May 2021) are still taking in-place and has an on-going implementation. Partnerships and external linkages have been tapped to provide the participants with quality and efficient resource person. The following are the topics covered for the program are attached in Annex I.

CONCLUSION AND RECOMMENDATIONS

Human resource is said to be the valuable resource in an organization, that's why they need to be provided with opportunities of growth and development, which in turn radiates positive impact and productivity in the learning and teaching process. As they face uncertainties because of the unexpected shift of the educational landscape due to the pandemic, teachers' needs not just in the content and pedagogy but also in other professional development programs, must also be considered and prioritize.

Given the responses of the teachers not just in the survey but also in the monitoring of activities conducted, the following recommendations are made:

1. Continuing application of the GCLICK Webinar Series;
2. Strengthening of the monitoring and evaluation in the trainings' effectivity and impact;
3. Intensifying of the Learning Action Cell (LAC) sessions as reinforcement of the topics presented in the webinar.

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Basic Education Research Fund 2020

RECIPIENTS FROM EL SALVADOR CITY DIVISION

Students-Made Reflective Learning Vlog (SMaRLeV): The Effectiveness of Video Log Reflection in Enhancing Metacognition among Learners in MAPEH

John Franklin Dresser

ABSTRACT

The study focused on the effectiveness of Student-Made Reflective Learning Vlog (SMaRLeV) as an intervention to enhance learner's metacognition. Participants of the study were Grade 8 learners in one of the public schools in El Salvador City Division, selected using purposive sampling technique. Further, the study utilized quasi-experimental design using two samples to determine the effectiveness of the intervention to the participants. Results showed that the participants' level of awareness in SMaRLeV group increased based on their pretest and posttest result compared to Non-SMaRLeV group. The results also indicated that the metacognitive awareness response increment of the participants who were exposed to SMaRLeV was higher than those who were not exposed in SMaRLeV. The findings further revealed that there was a significant difference in the response of participants to metacognitive awareness, with a higher mean in the SMaRLeV group implying that SMaRLeV is a good intervention for enhancing metacognition.

Keywords: Reflective Learning, Video Log, Metacognition, MAPEH

INTRODUCTION

Instructive analysts have given significance to the term metacognition for few decades considering that metacognition is crucial for integral learning since it empowers people to oversee their cognitive ability and to decide shortcomings than can be rectified by building new intellectual ability. Nearly any individual who can demonstrate an ability is able of metacognition – that is considering how they demonstrate that ability (Sancoban, 2015). Agreeing to Flavell (1979), metacognition is the person's mindfulness of how he comprehends and what he does. It is also characterized as deduction about reasoning.

Metacognitive mindfulness has a significant part as indicator on students' scholastic achievement. As indicated by Saricoban (2015), recent research suggests that metacognitively mindful learners perform way better than unaware learners, allowing people to plan, organize and monitor their learning in a way that improves execution. Knowledge around cognition compares to what students know about themselves. Strategies and contingent information can be thought of as building blocks of conceptual knowledge. Cognitive regulation coincides with learning how learners plan, execute strategies, screen, correct mistakes, and assess their learning.

With the fast-paced world, Philippines continuously adopt an aggressive approach in coping with the changing needs of the time. It made reforms in its education to ensure that its Filipino learners are globally competitive. From access to education, Philippines shifted its focus to the quality of its basic education. Thru the flagship program, known as Sulong Edukalidad, of the Department of Education (DepEd), the Philippines hopes to produce holistically developed citizens.

One of the changes this fast-paced world has offered is Technological advancement. Technology offers a lot of opportunities to make learning easier for both the teachers and learners. Since thru technology, running an activity becomes more convenient, one of the basic competencies currently required in an employee is ICT Literacy. This means DepEd is expecting its employees to know how to use technology to make one's work easier. For the case of the teachers, they are expected to develop learning media in school using the existing technology.

Education must adapt to technology especially that majority of the current learners belong to Generation Z. Gen Z learners were born with technology,

hence, consider technology not just as a tool but a part of life. Majority of Gen Z's daily activity is spent with gadgets such as smartphone, TV, desktop, laptop and tablet. Since Gen Zs are accustomed to fast technology, they prefer to be part of the learning process than merely sitting like bystanders listening at lectures (Kalkhurst, 2018).

Furthermore, global pandemic struck the world and have a great impact not just on global economy but also the world's education system. It forces the world to run and implement education in a new normal way. Philippine is not spared from the COVID-19 pandemic. The Philippine Education System adapted the so called 'new normal.' Department of Education (DepEd) greatest challenge is to strike a balance between its mandate and securing the health and safety of its learners and teachers. Despite the COVID-19 pandemic, DepEd is still responsible in making sure that learners have access to basic education. Although various initiatives and solutions are made to adapt to the 'new normal,' one-size-fits-all fix is not applicable for this extraordinary time. With this, Department of Education (DepEd) implemented the Basic Education Learning Continuity Plan (BE-LCP) that utilizes different learning modalities to cater learners' capabilities and needs to ensure that no child left behind in this pandemic time in terms of education. Distance learning is the main modality of DepEd in delivering lessons to the learners.

According to the Department of Education (2020), innovation performs a considerable part in aiding educators develop, communicate, implement and evaluate assessment tasks. Using the available technology, students can reflect through video, writing, or drawing. Through writing, drawing, and video learners could reflect quickly in real time providing an authentic look at their thoughts. Insight and complex learning are encouraged in reflection (Kallick & Costa, 2008). Technology could support student learning thru reflection. For instance, in a study by Byne, (2015), instant video revisiting proved to be effective allowing learners to review their videos of themselves working and reflect with their teacher.

A video-based intellectual learning task could enhance both the breadth and profundity on learner's reflection and deliver more significant notes after video reflection (Li & Ping, 2018). In consonance with Dewey (1993), reflective students can control their learning and know the hole between what they understand and what they ought to do. Van Velzen (2016) accepts that learners who are not involve in reflective thinking may not be able to make strides the status quo because they cannot critically assess a

particular situation. By looking back and analyzing their behavior, students can distinguish the areas that need further improvement and the areas of success. (Van der Schaaf et al., 2013).

According to the study of Naber and Wyatt (2014) found out that recording reflective thinking positively affects the overall metacognitive and other thinking skills of the students. It gave positive impact to the learning performances of learners (McCrinkle & Christensen, 1995; Mauroux, et al., 2015; Nückles, et al., 2009) stated in the study of Shaw. et al., (2018).

Moreover, the researcher observed in the past few years in school where the study was conducted that learners are fan with lower order thinking skills. Learners preferred to do things and answer questions that do not require critical thinking. Most often, learners tend to skip the activities or just remain silence in the situations that require them to use higher order thinking skills. This dilemma is still observable even in this new normal education set-up.

A further aim of the video log reflection is to put process thoughts and ideas on what have learned in the lesson into a video. The aim of study is to investigate the effectiveness of students-made reflective learning vlog (SMARLeV) in enhancing learners' metacognition in MAPEH.

Innovation, Intervention and Strategy

The study proposed an intervention that enhanced and developed the critical thinking, creativity, communication, information literacy, media literacy, technology literacy, Leadership, initiative, productivity and social skills which are consider as the 21st century skills (Stauffer, 2020). These skills are essentials to produce globally competitive learners.

The intervention focused on the reflection of the learners, on how students think and process own learnings, share and collaborate to other in order to make reflections into action using video log and this could be basis for teachers on assessing of students' learning. Further, improving students' cognitive mindfulness, especially the ability to reflect their own reasoning and to utilize practical problem-solving skill to solve learning troubles (Joseph, 2010).

This intervention anchored on the reflective learning of John Dewey (1933), a theory that cites it as an intentional and complex process that recognizes the role of social context and experience. Dewey highlighted that reflection in a learning context is not just a passive recall of an event. Reflection is

a deliberate and active process. It is about thinking to learn. In Dewey's words it is an "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and further conclusions to which it leads" (Dewey 1933 pg. 118).

Furthermore, this is also anchored on Schon's work. The work of Schon (1983) which distinguished 'reflection-on-action' from 'reflection-in-action'. The former merely reveals the kinds of tacit knowledge one have thru the way how tasks are carried out and how problems are approached. The latter on the other hand, is often conscious and/or documented.

The intervention of the study applies both Dewey's theory on learning thru reflection and Schon's concept of 'reflection in action. It encourages processing of thoughts and ideas thru reflection on the lesson/s delivered by the teacher through the use of modular leaning approach. Learners think and process their own learning from the information given by the modules and formulate concrete ideas to derive to a conclusion. As this study wants to highlight the concept from abstract to concrete, the reflected thoughts and ideas of learners would then be transformed into action thru documentation by learners in a form of video log (vlog).

Video blogging (vlogging) was proven to be a useful learning activity. The study of Rvees T et al. (2017) presented notable advantages and challenges on vlogging as a learning activity and for facilitation of performance-based courses. The study concluded that potential benefits for student learning and engagement may be maximized thru introduction of technology as part of a broader instructional strategy.

In this study, the intervention reflective learning vlog was done individually and in groups, it depends on the learners. This is with reference to the concept of Vygotsky that interpersonal connections and interactions with the social environment could lead to psychological development. Further, in joint learning activities, self-regulation and self-reflection are both evident.

A prior study of Zimmerman (2002) documented the link between the various manifestations of self-regulation and academic achievement among secondary school students. Accordingly, this study involved learners from the secondary level only. This is with consideration also of neo-Vygotskians emphasis of learners' need to regulate their own emotional responses, motivational state and the contexts in which their learning occurs, in addition to regulation of their own cognitive processes. Some of the behaviors which exhibited emotional and social self-regulation among these students were

delay of gratification, perseverance in tasks and display of appropriate manners.

There are arguments that reflection, although established and nurtured in the classroom, should not be assessed in the educational setting. One of which is the claim of Ixer (2016) which discouraged assessment of reflection as it may distort the construct. Assessment thru reflection proved to have limitations. Instead of assessing all the mental processes which constitute reflection, there is a risk of assessing the learners' memory and writing or oral skills only (Wilson, 2013). Further, there is a possibility that the learners' authentic experiences were not captured in reflections (Ryan & Ryan, 2013).

Nonetheless, there are studies which proved assessment of reflections to be desirable. One of the good reasons noted from assessment of reflections was how it motivated learners to learning (Watkins, Dalhin & Ekholm, 2005). Other noted benefits of assessment include student learning becoming more evident and determination of students' strengths and weaknesses. Through assessment, students are diagnosed which would lead to identification of students who struggle with reflection.

In this research, students will record their learning reflection out from the points from Self-Learning Modules (SLM) in MAPEH or quickly from there on, through vlogging. In this process, students would depend on the data from internal genuine reflective process instead on the learner's memory on a subject. Thus, the key focuses in which the vlog contains are the learners' learning such as what they learn after perusing and considering the SLM, shared related past encounters and current occasions in connection to the themes, real-life application of the subject as well as the abilities learned from the subject.

Action Research Questions

This study will investigate the effectiveness of Student-Made Reflective Learning Vlog (SMaRLeV) in enhancing the metacognition among learners in MAPEH.

Specifically, it sought to answer the following questions:

1. What is the level of Metacognitive Awareness of the two groups of participants before and after the intervention?
2. Do the two groups of participants' differ significantly in their Metacognitive Awareness Inventory pretest and posttest result?
3. Do the two group of participants differ significantly in pretest and posttest result increment?

METHODS

Participants

The participants of the study were the 8th Grade learners in a public secondary school of El Salvador City Division, located at the western part of Province of Misamis Oriental. The participants were selected using purposive sampling techniques. The selection was based on the following criteria: (1) must confirm the participation in the study; (2) submit parental consent; and (3) have access to smart phone. The participants were divided into two groups (SMaRLeV Group and Non-SMaRLeV Group), fishbowl was used for the group assignments. The SMaRLeV group consists of learner-participants who were tasked to make a reflective learning video log, based on what they learned out from the topics in the modules in MAPEH and the Non-SMaRLeV group (control group) consists of learner-participants who underwent the usual conduct of modular distance learning.

Instrument

This action research study used the “Metacognitive Awareness Inventory” (MAI) adapted from Schraw and Dennison (1994) consists of 52 items, 17 of which are for knowledge about cognition. In this part, the section for procedural knowledge includes 4 items (Items: 3, 14, 27, and 33). Declarative knowledge items are 5, 10, 12, 16, 17, 20, 32, and 46 (Total: 8 items). Lastly, the conditional knowledge section consists of 5 items (Items: 15, 18, 26, 29, and 35). The second part of the MAI consists of 5 sections. Planning has 7 items (Items: 4, 6, 8, 22, 23, 42, and 45). Information management strategies have 10 items (Items: 9, 13, 30, 31, 37, 39, 41, 43, 47, and 48). Debugging strategies include items 25, 40, 44, 51, and 52 (Total: 5 items). The items for comprehension monitoring are 1, 2, 11, 21, 28, 34, and 49 (Total: 7 items). Lastly, the items 7, 18, 24, 36, 38, and 49 refer to evaluation strategies. Schraw and Dennison found an alpha coefficient of .91 on each factor of the MAI and .95 for the entire MAI, which indicates unwavering quality. However, the revised MAI of Terlecki and McMahan (2018) that use a five-point Likert-type rating scale, ranging from “I never do this” to “I do this always” was applied. Five points also allow a middle rating with two extremes on either side (always/never). It is important to note that the original content of the survey questions has not been altered. Meanwhile, Visayan translations were added right after the original content of the survey questionnaire.

Data Gathering Methods

Prior to the conduct of the study, permission to conduct the experiment was obtained from the schools division superintendent (Appendix B) and school

head (Appendix C). Further, the researcher secured inform and parental consent (Appendix A) from the participants relative to the conduct of the study.

The intervention took place for eight (8) weeks at home of the respective participants. The researcher conducted a pretest on the participants' metacognitive awareness with the used of Metacognitive Awareness Inventory (MAI) through face-to-face with limited number of learners at a time in the open space following the health protocols such as wearing of facemask, one point five (1.5) to two (2) meters social distancing and hand sanitizing using alcohol before and after the session, then recorded the score result of the participants. The experimental groups record learnings after studying the lessons in MAPEH using the self-learning modules (SLMs) with the used of multimedia and present video log on their reflections every week, while control group underwent the usual conduct of modular distance learning. Researcher recorded and evaluated the students-made video log for improvement and progression. Chat room in facebook messenger and facebook group page were utilized as an avenue for consultation and submission of vlog output for SMaRLeV group (experimental). After the duration of the conduct of the intervention, the researcher asked the two (2) groups of the participants to answer the MAI through face-to-face following the safety health protocols as mentioned in the pretest phase. Finally, the results of pretest and posttest were analyzed using the SPSS software (IBM SPSS Statistics 21) to compare the significant difference of the pretest and posttest results of the scores of the participants, after the intervention conducted.

Data Analysis Plan

The study used descriptive statistics (mean, and standard deviation) to determine the participants' pre-test and post-test score in Metacognitive Awareness Inventory. Inferential statistics (T-test for paired samples) was used to determine any significant difference in the pre-test and post-test ratings of participants. Furthermore, T test for dependent samples was used to find out the significant difference between the two (2) groups in their pretest-posttest result increment.

RESULTS AND DISCUSSION

The following summarizes the results of this study:

What is the level of Metacognitive Awareness of the two groups of participants before and after the intervention?

Table 1 presents the pretest and posttest mean and standard deviation of SMaRLeV group on knowledge about cognition. The data in the pretest shows that the response of participants who were exposed in the SMaRLeV intervention program is within the range considered as 2.5 to 3.4 (inconsistently) across all criterion items in knowledge about cognition, which implies that majority of the participants who were exposed in the SMaRLeV intervention are inconsistently aware on their declarative knowledge ($x=2.71$; $SD=0.17$); procedural knowledge ($x=2.55$; $SD=0.35$) and conditional knowledge ($x=2.71$; $SD=0.08$). It indicates that before the intervention took place, participants in the SMaRLeV group were not systematically aware of factual information that they know to speak or write and can be both, as well as the factors affecting their performance. In addition, the data shows that the participants' knowledge of an information and whether to use the process and skills or not to perform the procedural steps is also inconsistent.

Table 1. Mean Distributions of the SMaRLeV (Experimental Group) Participants' Response Results on Knowledge about Cognition before and after the Interventions (n=30)

Knowledge about Cognition		Pretest			Posttest		
Item	Description	Mean	SD	Description	Mean	SD	Description
Declarative Knowledge							
5	I understand my intellectual strengths and weaknesses.	2.40	1.0	Inconsistently	3.77	1.1	Frequently
10	I know what kind of information is most important to learn.	2.70	1.1	Inconsistently	3.47	1.1	Frequently
12	I am good at organizing information.	2.93	1.1	Infrequently	3.60	1.0	Inconsistently
16	I know what the teacher expects me to learn.	2.60	1.1	Inconsistently	3.50	1.2	Frequently
17	I am good at remembering information.	2.90	1.5	Inconsistently	4.27	1.0	Inconsistently
20	I have control over how well I learn.	2.70	1.0	Inconsistently	3.63	1.2	Frequently
32	I am a good judge of how well I understand something.	2.77	1.1	Inconsistently	3.60	0.9	Always
46	I learn more when I am interested in the topic.	2.67	1.3	Inconsistently	3.8	1.2	Always
	Mean	2.71	0.1	Inconsistently	3.70	0.2	Frequently
	SD	0.17	0.1	Inconsistently	0.35	0.1	Frequently
Procedural Knowledge							
3	I try to use strategies that have work in the past.	2.93	1.1	Inconsistently	3.93	1.1	Frequently
14	I have a specific purpose for each strategy I use.	2.77	1.2	Infrequently	3.60	1.0	Inconsistently
27	I am aware of what strategies I use when I study.	2.07	1.0	Inconsistently	3.17	1.0	Frequently
33	I find myself using helpful learning strategies automatically.	2.63	1.0	Inconsistently	3.87	1.2	Frequently
	Mean	2.55	0.35	Inconsistently	3.70	0.2	Frequently
	SD	0.35	0.35	Inconsistently	0.35	0.35	Frequently

47	I try to break studying down into smaller steps.	2.33	1.2	4	Inconsistently	3.37	1.3	5	Frequently
	Mean	2.55	0.3	5	Inconsistentl y	3.59	0.3	3	Frequently
	Conditional Knowledge								
15	I learn best when I know something about the topic.	2.70	1.2	4	Inconsistently	4.10	1.1	6	Always
18	I use different learning strategies depending on the situation.	2.60	1.2	5	Inconsistently	3.33	1.2	4	Frequently
26	I can motivate myself to learn when I need to.	2.80	1.1	6	Inconsistently	3.90	0.9	9	Frequently
29	I use my intellectual strengths to compensate for my weaknesses.	2.77	1.3	3	Inconsistently	3.77	1.3	0	Frequently
35	I know when each strategy I use will be most effective.	2.67	1.0	3	Inconsistently	3.50	1.0	7	Frequently
	Mean	2.71	0.0	8	Inconsistentl y	3.72	0.3	1	Frequently

Legend: 1-1.4 Never; 1.5-2.4 infrequently; 2.5- 3.4 inconsistently; 3.5- 4.4 frequently; 4.5-5 Always

Meanwhile, the participants' response mean on all criterion items in knowledge about cognition such as declarative knowledge ($\bar{x}=3.70$; $SD=0.25$), procedural knowledge ($\bar{x}=3.59$; $SD=0.33$) and conditional knowledge ($\bar{x}=3.72$; $SD=0.31$) were within the "frequently" range (3.5 to 4.4) during posttest. Majority of the participants' response during posttest for the SMARLeV group were in "frequently" description, an indicator that the participants in SMARLeV group increased in their metacognitive awareness based on the pretest and posttest mean across all criterion items in knowledge about cognition. This posttest result denotes increase in the participants' awareness on the knowledge on the factual information that they know either be spoken or composed or can be both, as well as the factors that affects their performance. Moreover, it appears on the data that the level of awareness among participants' knowledge on information on how to perform the procedural steps that make up an assignment and information when to utilize ability, strategy or procedure were increased after the conduct of the intervention. It supports the claim of the study of Naber and Wyatt (2014) that recording reflective thinking positively affects the overall metacognitive and other thinking skills of the students.

Table 2 shows the result of mean and standard deviation on regulation of cognition. Consequently, this indicates that participants who were exposed to SMARLeV prior to the intervention had an inconsistent level of awareness of planning criteria ($\bar{x}=2.67$; $SD=0.14$) according to accreditation regulation criteria, which means that in planning conditions: participants achieved the goal. Inconsistently selected the actions required to perform, set the right sequence, assigned each task to the appropriate cognitive resources, and

created an action plan. Furthermore, participants' response were described as "inconsistent" in terms of their comprehension monitoring ($x=2.81$; $SD=0.35$), which meant that participants had to observe and assess their learning or use of strategies prior to intervention. . However, the pretest mean result of Information Management Strategies ($x=2.60$; $SD=0.26$), Debugging Strategies ($x=2.73$; $SD=0.36$) and Evaluation ($x=2.64$; $SD=0.11$) "inconsistent" description, which Indicates that prior to the intervention, participants of the SMaRLeV group were inconsistently aware on the skills and strategy sequences used to process information more effectively (e.g., organizing, elaborating, summarizing, selective focusing), strategies that they used to correct comprehension and performance errors and analyzing of performance and strategy effectiveness after a learning episode.

Meanwhile, the participants' response mean on all criterion items in regulation of cognition such as planning ($x=3.82$; $SD=0.27$), comprehension monitoring ($x=3.77$; $SD=0.24$), information management strategies($x=3.60$; $SD=0.36$), debugging strategies($x=4.15$; $SD=0.34$) and evaluation ($x=3.68$; $SD=0.14$) were within the "frequently" range (3.5 to 4.4) during posttest. Majority of the participants' response during posttest for the SMaRLeV group were in "frequently" description, an indicator that the participants in SMaRLeV group increased in their metacognitive awareness based on the pretest and posttest mean across all criterion items in regulation of cognition. The result of the posttest suggests increase in the participants' awareness of planning, goal setting and allocating resources prior to learning; Evaluation of one's learning or strategy use; the skills and strategies used to process information more effectively (eg, organizing, designing, summarizing, selective attention), strategies used to correct comprehension and performance errors, and reviewing the performance and strategy effectiveness after the intervention. With this result, it affirms that technology could support student learning thru reflection. For instance, in a study by Byne, (2015), instant video revisiting proved to be effective allowing learners to review their videos of themselves working and reflect that could enhance their regulation of cognition.

Table 3 presents the pretest and posttest mean and standard deviation of Non-SMaRLeV group on knowledge about cognition. The data in the pretest shows that the response of participants who were not exposed in the SMaRLeV intervention program is within the range considered as 2.5 to 3.4 (inconsistently) across all criterion items in knowledge about cognition, which implies that majority of the participants who were not exposed in the SMaRLeV intervention were inconsistently aware on their declarative knowledge($x=3.20$; $SD=0.17$); procedural knowledge ($x=3.00$; $SD=0.21$)

and conditional knowledge ($x=3.28$; $SD=0.28$). This indicates that prior to the intervention, non-SMaRLeV group participants were inconsistently aware of the knowledge of factual information, which they know either be oral or written, and may be both, and the factors affecting their performance. In addition, the data also demonstrate that non-SMaRLeV group participants' knowledge on information on how to use the process, skills, or strategy to perform tasks and assignments, were inconsistent as well.

Meanwhile, the participants' response mean on all criterion items in knowledge about cognition such as declarative knowledge($x=3.22$; $SD=0.25$), procedural knowledge ($x=2.95$; $SD=0.22$) and conditional knowledge ($x=3.26$ $SD=0.26$) were still within the "inconsistently" range (2.5 to 3.4) during posttest. Majority of the participants' response during posttest for the Non-SMaRLeV group were in "inconsistently" description, an indicator that the participants posttest result in Non-SMaRLeV group remained as is from their metacognitive awareness pretest result mean across all criterion items in knowledge about cognition. The result of the pretest and posttest denotes that the participants in the Non-SMaRLeV group awareness on the knowledge on the factual information that they know how to speak or write, or both, as well as the factors that influence their performance (Pre $x= 3.20$; Post $x=3.22$) had a slight increase of 0.02, but is still classified as an "inconsistent" description, both in pretest and posttest mean result. However, the data also shows that the level of awareness among participants' knowledge on information on how to perform the procedural steps that make up a task (Pre $x= 3.00$; Post $x=2.95$) and knowledge when to use procedure, skill, or strategy or when not to (Pre $x= 3.28$; Post $x=3.26$), decreased after the conduct of the intervention.

Table 4 shows the result of mean and standard deviation on regulation of cognition of Non-SMaRLeV group. It indicates in the result that participants who were not exposed in the SMaRLeV intervention prior to the conduct of the intervention were inconsistent level in terms on awareness on planning ($x=3.31$; $SD=0.14$) criterion of regulation of cognition, this implies that during planning, participants inconsistently chose the actions needed to achieve their goal, established the correct order, assigned each task to the proper cognitive resources, and created an action plan. In addition, participants' response to their comprehension monitoring ($x=3.21$; $SD=0.37$) were described as "inconsistent". It means that the participants' monitoring and assessing the degree to evaluate one's learning or use of strategy were inconsistent before the conduct of intervention. However, the pretest mean result of Information Management Strategies ($x=3.11$; $SD=0.30$), Debugging

Strategies ($x=3.31$; $SD=0.34$) and Evaluation ($x=3.04$; $SD=0.21$) all fell to the “inconsistent” description which implies that prior to the conduct of the intervention, participants in Non-SMaRLeV group, were inconsistently aware of the skills and strategy sequences used to process information more efficiently (e.g., organizing, elaborating, summarizing, selective focusing) strategies used to correct comprehension and performance errors and analyzing of performance and strategy effectiveness after a learning episode.

Meanwhile, the participants’ response mean on all criterion items in regulation of cognition such as planning ($x=3.42$; $SD=0.16$), comprehension monitoring ($x=3.24$; $SD=0.27$), information management strategies ($x=3.09$; $SD=0.19$), debugging strategies ($x=3.41$; $SD=0.45$) and evaluation ($x=3.08$; $SD=0.26$) were still fell within the “inconsistently” range (2.5 to 3.4) during posttest. Majority of the participants’ response during posttest for the Non-SMaRLeV group were remain in “inconsistently” description, an indicator that the participants in Non-SMaRLeV group remain as is, in their metacognitive awareness based on the pretest and posttest mean across all criterion items in regulation of cognition. However, data shows that there is an increased in numerical value in the mean of pretest and posttest result, but still the description (inconsistently) is remain the same from pretest to posttest. Do the two groups of participants’ differ significantly in their Metacognitive Awareness Inventory pretest and posttest result?

Table 5 presents the results of the difference in the participant’s response on metacognitive awareness inventory before and after the conduct of the intervention.

Data show that the participants who were exposed to SMaRLeV had significantly improved in their response based on the overall mean in the pretest ($x=2.71$; $SD=.64$) and posttest ($x=3.82$; $SD=.52$) result, where the response fell in “inconsistently” description in pretest and increased during posttest to “frequently” description. Thus the null hypothesis can be rejected ($p=.000$; $t=-8.380$).

Table 5. Result of the Test of Difference of Two Groups’ Responses in the Metacognitive Awareness Inventory Before and After the Intervention.

Group		\bar{x}	SD	t	P-value	Decision	Interpretation
SMaRLeV	Pre	2.71	.64	-8.380	.000**	Sig	Inconsistently Frequently
	Post	3.82	.52				
Control	Pre	3.19	.60	-.938.356	Not Sig	Frequently	Frequently
	Post	3.21	.59				

**significant at 0.05 level

There are sufficient data that shows that the interventions have contributed to the enhancement of the metacognitive awareness of the participants through SMaRLeV as intervention performed for eight weeks. It can be gleaned from the table that participants in Non-SMaRLeV group response on posttest result showed a higher mean than the pretest but, the increase is not significant ($p=.356$; $t=-.938$). However, the SMaRLeV group responses on posttest results showed a higher mean ($x=3.82$) than the pretest ($x=2.71$). It implies that participants in SMaRLeV group becomes more aware on their knowledge about cognition and regulation of cognition after the conduct of the intervention. The result of the study attested that video-based reflective learning project could enhance both the breadth and depth on student's reflection and produce significant intelligent notes after video reflection (Li & Ping, 2018). Further, it supports the belief of Van Velzen (2016) that learners who are not involve in reflective thinking may not be able to make strides the status quo because they cannot critically assess a particular situation. By looking back and analyzing their behavior, learners can distinguish the areas that need further improvement and the areas of success. (Van der Schaaf et al., 2011).

Do the two group of participants differ significantly in pretest and posttest result increment?

Table 6 presents the results of difference on response increments of the two (2) groups' responses on the metacognitive awareness inventory before and after the intervention. Findings reveal that the increments significantly differ with the group exposed to the SMaRLeV intervention program showing a higher metacognitive awareness response than those are not exposed to the SMaRLeV intervention program.

Table 6. Result of the Test of Difference in the Participants' Response Increments in the Two Groups

Group	\bar{x}	SD	t	MD	p-value	Decision
SMaRLeV	1.17	0.73	8.006	1.09	.000	Sig
Control	0.03	0.15				

**significant at 0.05 level

Thus, the null hypothesis can be rejected ($p=.000$; $t=8.006$). The SMaRLeV intervention program is effective, since it was observed by the researcher that the students who were exposed in the SMaRLeV exhibited higher order thinking skills such as reflecting skills, organizing ideas, analyzing connections between experiences and ideas as well as putting ideas into action. It supports the idea of both Dewey's theory on learning thru reflection

and Schon's concept of 'reflection in action. It encourages processing of thoughts and ideas thru reflection on the lesson/s delivered by the teacher through the use of modular leaning approach. Learners think and process their own learning from the information given by the modules and formulate concrete ideas to derive to a conclusion. As this study wants to highlight the concept from abstract to concrete, the reflected thoughts and ideas of learners would then be transformed into action thru documentation by learners in a form of video log (vlog). With this, it attests that video blogging (vlogging) was proven to be a useful learning activity in enhancing metacognition among learners.

CONCLUSION

The Student-Made Reflective Learning Vlog is an effective intervention for enhancing metacognition among learners. However, a great number of students were found out who do not have smart phones and access to an internet connection which are considered as challenges and limitations of SMaRLeV. Thus, one-size-fits-all is not applicable in this extraordinary situation. According to the Department of Education (2020), learners' activities can be done or assessed through either low, medium and high technology-based. With this, SMaRLeV is still a possible and a potential activity for learners who are able to use the medium and high technology. The intervention is not just about teaching with the use of technology in this digital era, it is more than that, as it intended to develop and produce self-regulated and independent learners with higher order thinking skills. In addition, SMaRLeV is aligned with the flagship program of the Department of Education, the Sulong Edukalidad program through the application of KITE, which improves/innovates the way of teaching, making it more relevant towards the development of 21st century skills among learners.

Recommendations

Based on the results of the study, the following recommendations are proposed: (1.) for the parents: that they will monitor the activity of their children in using technology such as smartphones and other devices, (2.) For the teachers, that they will provide activities to learners which enhance metacognition with an integration of technology such as Vlogging, in this new normal education set-up; (3.) For the researchers, that they will conduct a more in-depth study on metacognition using SMaRLeV in another context or another intervention that improves metacognition among learners.

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The Influence of Differentiated Instruction using Product Approach Module in English, Filipino, and Mathematics in improving Grade 7 Students' Learning

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ABSTRACT

Differentiated instruction (DI) is a curriculum framework that focuses on the individual student. Students achieve because teachers develop lessons to the student's readiness levels, interests, and learning styles. The purpose of this action research was to measure the effectiveness of the innovation being introduced through differentiated instruction using a product approach. Due to COVID-19 Pandemic, face-to-face learning instruction is prohibited; thus, print modular learning delivery modality is implemented with differentiated instruction using a product approach in tailoring the performance tasks considering the learning needs and styles of the learners. This study obtained information from 41 grade 7 learners of Sambulawan National High School in the Division of El Salvador for the school year 2020 - 2021. Purposive sampling was used in this study.

It was found out that differentiated instruction using product approach Modules in English, Filipino, and Mathematics can improve learning by increasing their score performances. Although, Mathematics and English seemed to have lesser mean differences as compared to Filipino but all of these subjects indicated significant differences.

It is suggested that teachers and administrators are encouraged to implement and embrace differentiated instruction using a product approach in the preparation of the Weekly Home Learning Plan and Individual Learning Monitoring Plan.

Keywords: Differentiated Instruction, Product Approach, Grade 7 Students' Learning

INTRODUCTION

The Department of Education issued DepEd Order 12 s. 2020 entitled the National Adoption of the Basic Education Learning Continuity Plan in Times of Public Health Emergency for the school year 2020 – 2021. This is in response to the strong stand of DepEd Secretary Leonor Magtolis Briones that education must continue. With this implementation, different learning delivery modalities have been introduced; thus, public school teachers were compelled to participate in the upskilling and reskilling flagship KITE program of the Department.

Differentiated instruction is a philosophy of teaching students in the ways they learn best. As schools experience the diversification of their student population, teachers must differentiate instruction so that they can meet the needs of students with a wide range of skills and needs (Means, Chen, DeBarger, & Padilla, 2011). The goal of differentiated instruction is to maximize student growth and success for each learner.

The need for effective differentiation of instruction has become increasingly prevalent in schools (Tomlinson, 2014). Diversity among students has hit an all-time high (Maxwell, 2014). Diversity is the extent to which students' lives differ from one another in one or more aspects. This can include students with disabilities, both diagnosed and undiagnosed (Tomlinson & Imbeau, 2013), age, sex, ability, family background, socioeconomic status, or ethnic, cultural, or religious background. Increased diversity brings many educational challenges because students are coming from a wider range of backgrounds, at-home languages, and experiences than their teachers (Maxwell, 2014).

It is in this regard that different learning delivery modalities have been introduced to provide learning opportunities for the learners without face-to-face and physical interaction. Through differentiated instruction using the product approach, the learners will be given opportunities on how to demonstrate their learning. The researchers seek to know if differentiated instruction using the product approach will have a positive influence on the learning performance of the learners.

Conceptual and Theoretical Framework

The framework used in this study is anchored from Tomlinson (2014) on her 2nd Edition *The Differentiated Classroom: Responding to the Needs of All Learners*. Differentiation allows teachers to give the learners the support

they need instead of lumping them together in one big group. Smaller groups make it easier to ascertain who has mastered the lesson goals and has acquired the talents to maneuver on. Larger class sizes make it more difficult to zero in on individual learner needs.

Differentiated instruction is an activity-driven approach to education that guides learners through a subject or course using a variety of projects, tasks, or problem-solving activities to choose from. This educational approach has been the norm in K-12 classrooms for generations. As early as one-room schoolhouse days, American educators were finding ways to shepherd diverse assortments of learners through the curriculum.

While integrating scaffolding strategies is centered around the class as a whole, providing structures to clarify learning objectives, differentiated instruction provides individual learners with specific steps towards taking control of their learning experience. This framework requires the teachers to assess how the lessons affect learners before, during, and after class. Tomlinson (2014) describes four ways to differentiate the learning experience: (a) create a differentiated learning environment, (b) prepare thoughtful lessons backed by data, (c) tailor assignments based on learner's goals, and (d) adjust your lesson content based on learner's needs.

This study focused on tailoring assignments based on the learner's goal. Using differentiation strategies to shake up the end product that learners turn in for assignments can also help the teachers reach different learners. Some learners are visual while others may be auditory. Teachers can offer learners different avenues to present their understanding of the lesson based on how they learn the materials. For example, some visual learners might want to make a billboard to point out their understanding of Newton's first law of motion (inertia), while readers may like better to write a paper or auditory learners might want to offer public speaking.

This theory is applied in presenting the schematic diagram of this study. A pre-test was administered first then the learners were given Self-Learning Modules for them to answer the activities. As part of the mandatory assessment provided by the Department of Education, there shall be four (4) Written Works and four (4) Performance Tasks. The teachers tailored the Performance Tasks in English, Filipino and Mathematics. After the implementation of the full quarter, a post-test was then administered to measure if there was a significant difference in the scores obtained by the learners.

Statement of the Problem

This study aimed to determine the performance of the grade 7 learners of Sambulawan National High School in the Division of El Salvador City using the Differentiated Instruction. Specifically, the study sought to answer the following questions:

1. How do the respondents perform before and after the implementation of the intervention in the learning areas:
 - 1.1 Filipino;
 - 1.2 English; and
 - 1.3 Mathematics?
2. Is there a significant difference between the pretest and posttest scores obtained by the respondents before and after the intervention?

METHODS

Research Design

This study used action research as its research design which can produce practical solutions to solve immediate problems and will help improve the educational practices, especially inside the classroom since this study is about incorporating differentiated instruction in the classroom particularly the product approach. This study is a quantitative approach because the researchers made use of pre-test and posttest wherein the scores that the students obtained from these tests were the basis for the results of this study.

Respondents

The respondents of the study are the 41 grade 7 learners of Sambulawan National High School in the Division of El Salvador City for the school year 2020 – 2021. A purposive sampling procedure was employed since the school offers only one section for every grade level.

Research Instruments

The study utilized a researcher-made questionnaire for the pre-test and post-test which underwent validation and item analysis under the supervision of our Mathematics teacher. The multiple-choice type of instrument in English, Filipino, and Mathematics is composed of 50 items. The constructed

instrument was then tested out to 10 learners who were non-respondents of this study. The try-out was done to find out if changes in the questionnaire are necessary.

Statistical Treatment

Data of this study were processed using descriptive and inferential statistics. Specifically, frequency and percentage were used to determine the respondents' performance before and after the intervention. T-test was used in getting the significant difference between the pretest and posttest scores obtained by the respondents before and after the intervention.

RESULTS AND DISCUSSION

Problem 1. How do the respondents perform before and after the implementation of the intervention in the learning areas:

- 1.1 Filipino;
- 1.2 English; and
- 1.3 Mathematics?

Table 1. Distribution of Pre-test and Posttest Scores of the Respondents in Filipino

Range	Interpretation	FILIPINO			
		Pretest		Posttest	
		N	%	N	%
39-50	Excellent	17	41.46	37	90.24
27-38	Good	24	58.54	4	9.76
13-26	Fair	0	0.00	0	0.00
1-12	Poor	0	0.00	0	0.00
	Total	41	100.00	41	100.00
	Overall Mean	36.27		41.54	
	Description	Good		Excellent	

Table 1 shows the respondents' performance before and after the implementation of the intervention in the Filipino. For the pretest, the table reveals that 24 (58.64%) of the respondents have Good scores and none of the respondents scored below Fair and Poor. The overall mean (36.27) is defined as Good in its description of performance.

In particular, for the posttest, data revealed that 37 (90.24) of the respondents have Excellent scores and still none of the respondents scored below Fair and Poor. The overall mean (41.54) is defined as Excellent in its description of performance.

The increase of mean in the pretest and posttest is a manifestation that the strategy employed by the teacher is effective in developing the performance of the respondents. The finding implies that the content of the lesson and the way it was transferred to the learners have helped in the learning process of the learners.

This is supported by the study of Aranda and Zamora (2016) and Muthomi and Mbugua (2014) verifying that differentiated instruction displayed a significant difference in the test scores of grade 10 students. Differentiated instruction is encouraging for supporting the academic needs of diverse students in the classroom and it is an effective method of teaching Filipino subjects for it gives students many opportunities to excel in all their performances.

Table 2. Distribution of Pre-test and Posttest Scores of the Respondents in English

Range	Interpretation	ENGLISH			
		Pretest		Posttest	
		N	%	N	%
39-50	Excellent	8	19.51	20	48.78
27-38	Good	20	48.78	19	46.34
13-26	Fair	13	31.71	2	4.88
1-12	Poor	0	0.00	0	0.00
Total		41	100.00	41	100.00
Overall Mean		30.90		38.46	
Description		Good		Good	

Table 2 shows the respondents' performance before and after the implementation of the intervention in English. For the pretest, the table reveals that 20 (48.78%) of the respondents have **Good** scores and none of the respondents scored below **Poor**. The overall mean (30.90) is defined as **Good** in its description of performance.

In particular, for the posttest, data revealed that 20 (48.78) of the respondents have **Excellent** scores and still none of the respondents scored below **Poor**. The overall mean (38.46) is defined as **Good** in its description of performance. This did not fare enough with Filipino because the students are well-versed

in its utilization compared to English language. As a transition period from elementary to secondary, when students are tasked to do translation, they translate literally and don't read the entire text. So when they translate, it comes out wrong as they do it word for word.

The unaffected description of the pretest and posttest is a manifestation that the strategy employed by the teacher is effective in developing the performance of the respondents; however, it does not present a significant increase. The finding implies that the content of the lesson and the way it was transferred to the learners may have helped in the learning process of the learners but could be subjected to the enhancement of the process.

The present investigation concurred with Alvarez (2015) and Jefferson et al (2016) as suggested that the lessons to be included in teaching reading to students must be highly contextualized to nature and background knowledge of the learners. Teachers should find ways to look for local reading materials that can be considered as counterparts of foreign text in teaching reading to students.

Table 3. Distribution of Pre-test and Posttest Scores of the Respondents in Mathematics

Range	Interpretation	MATHEMATICS			
		Pretest		Posttest	
		N	%	N	%
39-50	Excellent	0	0.00	2	4.88
27-38	Good	7	17.07	28	68.29
13-26	Fair	34	82.93	11	26.83
1-12	Poor	0	0.00	0	0.00
Total		41	100.00	41	100.00
Overall Mean		22.17		28.76	
Description		Fair		Good	

Table 3 shows the respondents' performance before and after the implementation of the intervention in Mathematics. For the pretest, the table reveals that 34 (82.93%) of the respondents have **Good** scores and none of the respondents scored **Excellent** and **Poor**. The overall mean (22.17) denotes Fair in its description of performance.

In particular, for the posttest, data revealed that 28 (68.29%) of the respondents have **Good** scores and still none of the respondents scored below **Poor** but there is already an entry for the **Excellent**. The overall mean (28.76) is defined as Excellent in its description of performance.

The increase of mean in the pretest and posttest is a manifestation that the strategy employed by the teacher is effective in developing the performance of the respondents. The finding implies that the content of the lesson and the way it was transferred to the learners have helped in the learning process of the learners. Mathematics seems difficult because it takes time and energy. In this print modular learning delivery modality, many learners don't experience sufficient time to "get" Mathematics lessons and they fall behind as the next module moves on.

This teaching strategy is affirmed by the study of Konstantinou-Katzi, Tsolaki, Meletiου-Mavrotheris, and Koutselini (2013); Magayon and Tan (2020), whereby a teacher would move around to help students as needed, and ensure that all students work at their own pace, in effect the students can develop a plan and be confident to finish their task.

Problem 2. Is there a significant difference between the pretest and posttest scores obtained by the respondents before and after the intervention?

Table 4. Result of the Test on the Difference between the Respondents' Pre-test and Posttest Scores Before and After the Intervention

Subjects	Mean		T-Value	p-Value	Remarks
	Pre-test	Posttest			
Filipino	36.27	41.57	12.03	<0.001	Significant
English	30.90	38.46	5.76	<0.001	Significant
Mathematics	22.17	28.76	7.04	<0.001	Significant

Table 4 shows the comparison of the pretest and posttest scores of the respondents in Filipino, English, and Mathematics. Data revealed a significant difference in the pretest and posttest scores in Filipino, English, and Mathematics as indicated by the p-value less than 0.001. This means that there is a significant increase in the test scores of students in the posttest as compared to their pretest scores in Filipino, English, and Mathematics. This implies that Differentiated Instruction using the product approach is an effective intervention applied in improving their test scores in Filipino, English, and Mathematics. Moreover, both in pre-test and post-test, Filipino subject had the highest mean while Mathematics subject had the lowest mean. The desired mastery level is achieved in English and Filipino but not for Mathematics having the resulting mean of (28.76).

The results of the study are in line with Hassan (2016) that differentiated instruction helped students' achievement despite the difference in a school subject. Moreover, the findings of this study also were in line with

Magableh and Abdullah (2019) in that differentiated instruction did not only help students' achievement but reduced classroom diversity. Finally, the results are in line with Mavido and Kakana (2019) in that both studies proved that when differentiating the content, process, and product, students' achievement is statistically improved.

Finding

1. The scores from the pretest increased based on the result of the posttest.

Conclusion

Based on the finding of the study, the following conclusions are drawn:

1. The pre-test scores did not achieve the desired mastery level of 75%.
2. The post-test scores in Filipino and English subjects achieved the desired mastery level of more than 75%; however, the Mathematics subject remained below the desired mastery level.
3. Differentiated instruction using the product approach is an effective intervention applied in improving the test scores in Filipino, English, and Mathematics.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are hereby forwarded:

1. Teachers are suggested to continue tailor the different learning needs and styles of the learners in crafting and formulating further innovations and interventions to deliver the basic quality education.
2. School administrators are proposed to strengthen their Instructional Supervision highlighting the use of differentiated instruction and craft professional learning community through LAC session for this endeavor.
3. Future researchers are encouraged to conduct further researches related to Differentiated Instruction especially that this study is limited to a one sample only; hence, this needs to be tested to another group of students using two samples.

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Work from Home (WFH) as an Alternative Work Arrangement (AWA) for Government Employees in Region 10

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ABSTRACT

This research aimed to identify the demographic profile of employees and examine how it affects the employees' perception of Work From Home (WFH) arrangement as an Alternative Work Arrangement (AWA). The study concentrated on the respondents' perceived advantages and disadvantages of the WFH arrangement. Survey questionnaires (link to Google Form/Survey) were disseminated online to all employees, and two hundred thirteen (213) have responded. This study is a descriptive correlational type of research. It utilized the quantitative method of research. The results imply that, in general, more employees see the advantages of the WFH arrangement instead of its disadvantages. Spearman Rho Correlation test results showed that there is a significant relationship on education and perception on disadvantages of WFH Arrangement. Significant relationship is also noted on the employees' number of persons supervised and perception on the advantages of WFH arrangement. Further, Kruskal-Wallis test results shows that there is a significant difference on the employees' perception on the advantages of WFH arrangement between groups of different station of assignment, level of position and average number of people to contact while working.

Keywords: work from home, alternative work arrangement, employees' perception, government office, Region 10

INTRODUCTION

Due to the pandemic brought by COVID-19, President Rodrigo Roa Duterte, thru Proclamation No. 922, s. 2020 declared the country under the state of public health emergency. To ensure non-disruption of government work productivity amidst current threats to health, Civil Service Commission (CSC) has issued various communications which suggested government offices to adopt various Alternative Work Arrangements (AWAs) such as compressed work week, work from home and skeletal force (CSC Announcement 12, s. 2020). Four-day workweek, shifting or combination of both are suggested as alternative work arrangement options thru CSC Memorandum Circular 7, s. 2020. Work from home is strongly encouraged during Enhanced Community Quarantine while Skeletal Force is applicable for agencies required to provide services 24/7 (CSC Announcement 13, s. 2020).

With reference to these guidelines, just like other government offices, the Department of Education (DepEd), the Schools Division Office of El Salvador City for instance, has adopted various alternative work arrangements. Initially, compressed work week or four-day work week was implemented. Upon declaration of general community quarantine within the area, it followed the work arrangement set by its Regional Office, the 2-day rotational work from home arrangement. It is a combination of shifting and work from home arrangement. Employees considered as vulnerable such as senior citizen, pregnant women and those who commute every day are considered for work from home arrangement for the whole duration of quarantine. Majority of the week are spent by employees working from home.

Work from home is already possible with the help of technology. As per study of Cutlip (2019), an estimate of 30% of the workforce are more likely to work virtually by 2020 with consideration of globalization and recent technological advancements. With technology, physical presence in the workplace may be replicated already thereby reducing the need for transportation to the actual workplace (Johnson, 2014). In the case of DepEd, it uses various platforms for work such as Google Mail & Drive, Workplace via Facebook and Microsoft Teams.

To demonstrate organizational sensitivity, companies usually include in their written policies the Flexible Work Arrangement (FWAs) made available to its employees (Timms et al., 2015). Across the world, work from home has already been practiced by some organizations. In USA, flexible schedule and place of work are often offered by employers as flexible work options

over reduced/paused work (Sweet et al., 2014). In China, although telework is not yet considered as a legitimate work form, teleworkers pursue it as a better option for greater autonomy, achievement, efficiency, flexibility and professional development (Long et al., 2013).

Flexibility in work arrangements such as work location have positive outcomes such as higher job satisfaction, WLB support and sense of workplace inclusion among employees (Morganson et al., 2010). Government interventions (e.g. regulations and incentives) were recommended to increase participation rate of employers in AWAs considering that organizations could yield savings in total operating energy and commuting energy upon implementation of AWAs (Hasan, 2001).

As early as 1991, there has already been a study of AWAs in the public sector in Canada by Duxbury and Haines Jr. Recently, Marzi (2018) reviewed various studies on FWAs some of which cited/confirmed the positive outcomes brought by FWAs, while some found the adverse effects of FWAs on the separation/management of work, life and family demands. Although there have been several studies conducted relative to AWAs/FWAs, most of the studies are conducted in a foreign setting. Hence, the conduct of this study. The researcher would like to conduct a study in the Philippines local context.

To reap the benefits of AWAs such as increased employees' productivity and work-home balance, Sukal (2009), McGrath (2012), and Higgings, Duxbury and Julien (2014) suggested that policies relative to AWAs must be established and promoted. This is to ensure standard method of implementation and monitoring of AWAs within the organization. Effective implementation of FWAs would require establishment of national-level policies which would prescribe and regulate the terms for such purpose with consideration of the cultural contexts (Golden et al., 2018). However, since the government has implemented AWAs driven by the need arising due to being in a state of public health emergency, policies on AWAs are general. It has not prescribed detailed guidelines as to method of implementation and monitoring. Since the end of COVID-19 may not be a possibility in the near future, the government must look into the AWAs, specifically the Work from Home (WFH) arrangement as being a permanent work arrangement for government employees. Its advantages and disadvantages must be considered, hence the conduct of this study.

Research Questions

This study examined the applicability of Work from Home Arrangement as an Alternative Work Arrangement in the government offices, with focus in the Department of Education. Specifically, it sought to answer the following questions:

1. How do employees perceive Work from Home arrangement in terms of:
 - a. Advantages (Pros)
 - b. Disadvantages (Cons)
2. Is there a significant relationship in the employee's perception of Work from Home arrangement with the employee's demographic characteristics and job classification?
 - i. Demographic Characteristics
 - a. Age
 - b. Gender
 - c. Educational Attainment
 - d. Number of household members
 - e. Location/Residence
 - ii. Job Classification
 - a. Station of Assignment
 - b. Level of Position
 - c. Number of people supervised
 - d. Number of people to contact while working
3. Is there a significant difference in the employee's perception of Work from Home arrangement based on their demographic characteristics and job classification?

Scope and Limitation

The study focused mainly on the respondent's perception on working from home as an alternative work arrangement including its advantages and disadvantages. It no longer examined the perception of employees on other alternative work arrangements such as the compressed work week and shifting work arrangements.

The factors to be considered which may affect the respondents' preference included their demographic characteristics and job classification only. Demographic characteristics considered in this study were limited to the respondents' age, gender, educational attainment, number of household members and location/residence. As to job classification, only the station of

assignment, level of position, number of people supervised and number of people to contact while working were considered.

The study is conducted in the Division of El Salvador City. It is one of the Divisions in Region 10-Northern Mindanao. With its scope, what may be the case in the said Division or Region may not be similar with other Divisions or Regions.

METHODOLOGY

Sampling

The participants of the study were the employees from the Division of El Salvador City, Region X. The Division selected experienced General Community Quarantine (GCQ) and Modified General Community Quarantine (MGCQ) during the COVID-19 pandemic. Aside from the Schools Division Office, respondents included employees from the Division's fifteen (15) elementary schools and eight (8) secondary schools, a total of twenty-three (23) schools. The participants were selected using purposeful random sampling technique. Purposeful random sampling included only those who meet the criteria/conditions of a group studied and provide an unbiased way of selecting respondents (Ames et al., 2019). The respondents must have experience of working from home for them to be able to share their perceptions as to the advantages and disadvantages of the WFH arrangement. As per Brophy et al. (2018), perception requires the use of our senses to a phenomenon. Hence, one should have experienced the phenomenon before one can have a perception of something. Further, for convenience purposes, in consideration that the readily available data as to list of employees with their respective email address are only those of the permanent employees, the list of employees inputted in the Online Randomizer, accessible via randomizer.org, are only those who are included in the plantilla, holding permanent positions.

Data Collection

The study adapted the questionnaire by Ipsen, Kirchner and Hansen (2020) from their study Experiences of Working from Home in times of COVID-19. Based on Cronbach's alpha, the factors included in the questionnaire for the advantages (with Cronbach's alpha of 0.74) and disadvantages (with Cronbach's alpha of 0.83) of WFH arrangement are considered reliable. Some of the questions were modified to suit the needs of the researcher. The researcher created an online form questionnaire (Appendix A) via Google

Forms and conducted the survey via online to avoid physical contact during COVID-19 pandemic. Since the target respondents were the permanent employees of the Department, the questions used in the survey were in English language and terms/words used are easy to understand. Link to the online form was then generated and disseminated to the respondents via email. The responses from the Google Form were generated into a Google Sheet where the researcher extracted the data such as the respondents' demographic profile and perceived advantages and disadvantages of WFH arrangement.

Data Analysis

The study used descriptive statistics (frequency, percentage, mean, and standard deviation) in determining the respondents' perception of work from home as an alternative work arrangement according to their demographic characteristics and job classification. It applied Normality test to the data sets to identify the appropriate statistical treatment in determining the significant relationship of demographic factors and perception of WFH arrangement as well as the significant difference between thereof. If normality test resulted to p value > 0.05 , the data did not significantly differ from normal distribution (Normal) while if p value < 0.05 , the data significantly differed from normal distribution (Not normal). Since the normality tests yielded p -values of less than 0.05, the null hypothesis is rejected. Hence, the data significantly differ from the normal distribution. Considering that the variables used in the study is either nominal (e.g., gender), ordinal (e.g., satisfaction level) and interval (e.g., age), this study applied Spearman Rho correlation in identifying the significant relationship between variable. To identify the significant difference between variables, the researcher used Kruskal-Wallis test since the data were found to significantly differ from the normal distribution.

Ethical Issues

Prior to the conduct of the study, permission and approval were obtained from the Schools Division Superintendent and the Regional Director. The researcher sought the approval of the researcher/s who owned the questionnaire which was adapted and used in this study. The approval was secured via email attached as Appendix B. The online survey form has introductory statement as the purpose of data collection with assurance that personal data collected shall be kept confidential. Further, the selected respondents were not coerced to participate in the study as answering the online survey was voluntary subject to the discretion of the respondent.

RESULTS AND DISCUSSION

In this section, the researcher showed the output of the data analysis based on the enumerated research questions.

1. How do employees perceive Work from Home arrangement in terms of:
 - a. Advantages (Pros)
 - b. Disadvantages (Cons)

Table 1. Respondents' Perceived Advantages of Work From Home (WFH) Arrangement

Indicator	Mean \bar{x}	Standard Deviation σ	Description
Benefits from Home-based workplace			
I can be close to my family and friends	4.122	1.048	Agree
I like the atmosphere in my home better than at work	3.516	1.216	Agree
I save the normal transportation time to my workplace	4.296	1.056	Strongly Agree
I get a chance to break my old habits and change routines	3.986	1.026	Agree
It is easier to get in contact with people than normal	3.488	1.261	Agree
Average	3.882	1.121	Agree
Control over working day			
I can take a break when I like to	4.014	1.172	Agree
I can eat and drink my own food	4.075	1.105	Agree
I have no-one looking over me	3.319	1.304	Neutral
Average	3.803	1.193	Agree
Precautionary measure against COVID-19			
I contribute to lowering the risk of spreading Covid-19	4.601	0.914	Strongly Agree
I do not expose myself to the risk of getting a disease	4.545	0.913	Strongly Agree
Average	4.573	0.914	Strongly Agree
Work with more efficiency			
I get time to focus on my work without interruptions from other people	4.019	1.128	Agree
I get a possibility to do some other work that I would normally not have time to	4.070	1.042	Agree
I do not have to spend time on long meetings	3.709	1.174	Agree
Average	3.933	1.114	Agree

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree
3.41 – 4.20	Agree
2.61 – 3.40	Neutral
1.81 – 2.60	Disagree
1.00 – 1.80	Strongly Disagree

From Table 1, it can be inferred that the indicator which respondents Strongly Agree to be an advantage of WFH arrangement is it is a good precautionary measure against COVID-19 virus ($\bar{x}=4.573$). While employees Agree that benefits from home-based workplace ($\bar{x}=3.882$), working with more efficiency ($\bar{x}=3.933$) and control over working day ($\bar{x}=3.803$) are the advantages of WFH arrangement. This affirms the study of Ipsen et al., (2021) which identified work–life balance, improved work efficiency and greater work control as the main advantages of WFH arrangement.

The benefits from home-based workplace where most respondents strongly agreed is saving time from the normal transportation to workplace ($\bar{x}=4.296$). This supports the findings of Stiles and Smart (2020) that with WFH arrangement, duration spent for daily travel is decreased. This is also reinforced by the exploratory study of Purwanto et al. (2020) which cited time and cost saved from transportation to and from work as some of the advantages of WFH arrangement. Although WFH arrangement proved to help employees save time and cost from daily travel to work, in the survey conducted by Rubin et al. (2020), results showed that respondents missed some aspects of commuting such as the activity itself, spending time alone and the feeling of being independent.

It can be observed that having control over the working day has the lowest mean ($\bar{x}=3.319$). This implies that although they are working from home, employees perceived that someone is still looking over them. Hence, supervision is constantly felt by employees. This is affirmed by the study of Abdullah et al. (2020) where respondents agree that the effectiveness of supervisors' supervision was not affected by the WFH arrangement. Communication technology options are already available for managers which can help them conduct daily check ins on employees who are working remotely (Larson, Vroman & Makarius, 2020). Technology is helpful in connecting with peers and supervisors and in looking for opportunities for professional development (Shewan, 2017). As for the Department of Education, different platforms are available such as SMS & Phone Call, Google Suites, Office 365, Facebook Groups and etc. Results of the survey relative to the platforms used while working from home are illustrated in Figure 1.

It can be inferred from the results, as shown in Figure 1, that the platform commonly used by the respondents are DepEd Email (85.92%), Facebook Groups (82.16%), Communication apps (88.26% and Phone call & SMS (90.61%). This could explain why the respondents often feel that someone

is still looking over them despite working from home. As can be seen in Figure 1, almost half of the respondents often used the conference systems (49.77%) and more than half often used the communication apps (88.26%). Video conferencing can help in updating team members while communication apps and phone calls are best in checking out how employees are doing (Zimmerman, 2020). Web platforms are usually used to obtain information aside from connecting with other people (Drahošová & Balco, 2017). Although technology seems to be helpful while working from home, it is prone to fail if technical support or resources and reliability are inadequate (Morrison-Smith & Ruiz, 2020). Hence, it is essential that support and resources are provided to employees who will be under WFH arrangement.

When respondents were asked of additional advantages while working from home, the following are the common responses gathered:

“flexibility and comfort”

“stronger internet connection at home than at workplace”

“less time for preparation to work”

“can oversee kids/children while working from home”

“can connect and communicate with students and parents while working from home, without distractions”

These remarks are aligned with the findings of Goździewska-Nowicka, Modrzyńska and Modrzyński (2020) that employees no longer fear the remote work arrangement introduced during the pandemic. Further, with the current workforce where majority belong to Gen Y, flexible work arrangements is rising as a key theme in the work place (Ahmad, 2016). This is affirmed by a study of Klopotek (2017), young workers' work comfort and satisfaction were improved with the flexibility offered at work such as flexible working hours. With consideration of the findings of Blumberga and Pylinskaya (2019) that there are more advantages than disadvantages about remote work for both the employee and employer, the government must look into how these flexible work arrangements may be implemented effectively.

Although WFH arrangement has various advantages, it also has its disadvantages. Ipsen (2021) cited home office constraints, work uncertainties and inadequate tools as the main disadvantages of WFH. In the study of Blumberga and Pylinskaya (2019), greater self-management required from employees due to the reduced interaction with colleagues and the manager/ employer is considered as one of the disadvantages of working remotely.

Respondents' Perceived Disadvantages of Work from Home arrangement

Statement	Mean \bar{x}	Standard Deviation σ	Description
Isolation			
I do not get to see my colleagues or other people as much as I would have liked to	3.202	1.214	Neutral
I miss the food or other benefits that we have at my workplace	2.249	1.128	Disagree
I get disturbed by other people in my home	2.315	1.120	Disagree
I miss getting out of my home	2.390	1.142	Disagree
I do not get enough exercise when I am not at my workplace	2.296	1.134	Disagree
The physical conditions in my home do not afford a good working environment (adjustable table and chair, enough light, quietness, good monitor, etc.)	2.202	1.108	Disagree
It requires more effort from me that I cannot use my normal routines	2.404	1.114	Disagree
I feel tied to my computer to a greater extent than at my workplace	2.545	1.147	Disagree
Average	2.450	1.138	Disagree
Loss of important work tools			
I need physical equipment to do my work which I do not have access to at home	3.070	1.270	Neutral
I need data or documents to do my work which I do not have access to at home	3.033	1.264	Neutral
I am concerned that there are work tasks I want to do but cannot do from home	2.855	1.249	Neutral
Average	2.986	1.261	Neutral
Loss of the value of work			
I find it difficult to keep focused on work when I am alone	2.216	1.125	Disagree
I don't know what kind of work I should do	2.014	1.026	Disagree
It is a financial problem for my work that I cannot be at the workplace	1.991	0.895	Disagree
The work I do from home is not as interesting as the work I do at my workplace	2.249	1.072	Disagree
I am afraid that there will not be enough work that I can do from home	2.376	1.145	Disagree
Average	2.169	1.053	Disagree

Legend:

Scale	Verbal Description
4.21 – 5.00	Strongly Agree
3.41– 4.20	Agree
2.61 – 3.40	Neutral
1.81 – 2.60	Disagree
1.00 – 1.80	Strongly Disagree

As illustrated in Table 2, respondents disagree that isolation ($\bar{x}=2.450$) and the loss of value of work ($\bar{x}=2.169$) are disadvantages while working from home, except for the indicators classified as loss of important work tools ($\bar{x}=2.986$) and one indicator under isolation where the employee does not get to see his/her colleagues or other people as much as he/she would like to ($\bar{x}=3.202$).

Limitation of normal interaction with colleagues and employee isolation are some of the identified drawbacks in e-working (Lupu, 2017). According to Beño (2021), one of the factors that is mainly affected in e-working is isolation, stress and depression. Lower motivation from feeling lonely may lead to an employee working less hard while under WFH arrangement (Bloom et al., 2015). To avoid undesirable things to happen, sustained communication is encouraged (Purwanto et al., 2020). Fortunately, the Civil Service Commission (CSC) and DepEd established policies and programs for the mental health and psychosocial support of its employees. What it needs is the proper and sustainable implementation of such programs.

Aside from the feeling of loneliness, one of the challenges to be addressed with the WFH arrangement is the provision of tools needed by employees. Internet, equipment such as laptop or computer and all applications required to perform the job are some of the things to be provided to support the employees complete the work assigned to them even while they are working from home (Purwanto et al., 2020).

As illustrated in Figure 2, majority of the respondents use their cellphone/tablet (85.85%), laptop/PC (90.61%), printer w/ printing supplies (77.00%) and internet connection (89.20%) while they are working from home. With these data, the employer/organization must look into providing these tools as support to employees in the performance and completion of their tasks. As of present, public schools were allowed to lend its IT equipment to teachers to enable them to perform the tasks at hand even while working from home (Department of Education, 2020).

Aside from the tools, the government must also look into the availability and access to internet connection. In a study by Hatayama, Viollaz and Winkler (2020), the importance of investing in broadband infrastructure by governments especially in the developing countries is emphasized. The unstable or poor internet connection has been a prevalent response as disadvantage while working from home when respondents were asked of additional disadvantages while working from home. Other common responses gathered are as follows:

“unstable or poor internet connection”

“can’t focus with the distractions at home”

“limited resources at home”

“some of the tasks can be performed only on-site or at the workplace”

“tends to work beyond the work hours and feels more stressful”

These responses conform to a study by Bergefurt et al. (2021) which concluded that workspace distractions cause the higher stress level of employees. Figure 3 below may explain why one of the common identified disadvantages is distraction at home. As illustrated, more than half of the respondents (54%) have at least 4 household members while working from home. Interrupting children can distract employees while working from home, making it difficult for the employee to concentrate while working (Toniolo-Barrios & Pitt, 2020). To address these distractions, employees need to create a workspace at home that is quiet and peaceful while employers need to consider the distractions and concerns of the employees in setting performance expectations of the employees (Kinman et al., 2020). Chung et al., (2020) suggested that organizations provide better support to employees with flexible work arrangements to ensure the wellbeing of employees and avoid overworking, stress and burnout among employees.

With the COVID-19 pandemic, organizations tend to move to flexible work arrangements. Although, positive aspects of e-working are greater than the negative ones it brings (Beño, 2021), organizations must recognize and address the disadvantages/challenges in implementing changes in the work arrangements. As Beño (2021) concluded in his study, WFH arrangement may not be applicable for all sectors, individuals or professions. Occupations with greater labour/physical component is less amenable to move online compared to occupation which require greater knowledge content (Stocker & Whalley, 2021).

2. Is there a significant relationship in the employee’s perception of Work from Home arrangement with the employee’s demographic characteristics and job classification?
 - i. Demographic Characteristics
 - a. Age
 - b. Gender
 - c. Educational Attainment
 - d. Number of household members
 - e. Location/Residence
 - ii. Job Classification
 - a. Station of Assignment
 - b. Level of Position

- c. Number of people supervised
- d. Number of people to contact while working

Null Hypothesis: There is no significant relationship between employees' demographic characteristics and job classification with the employees' perception on the advantages and disadvantages of WFH arrangement

Alternate Hypothesis: There is a significant relationship between the employees' demographic characteristics and job classification with the employees' perception on the advantages and disadvantages of WFH arrangement

As to perceived disadvantages while WFH, education ($r = -0.71$) has high negative correlation, age ($r = 0.60$) and number of household members ($r = 0.70$) have moderate positive correlation, gender ($r = -0.50$) has moderate negative correlation while location ($r = 0.07$) has negligible correlation. Since the p-value of these indicators are greater than 0.05, except for education, it can be inferred that the identified demographic characteristics have no significant relationship to the respondents' perception on the disadvantages of WFH arrangement. However, since the p-value for education is 0.05, the null hypothesis is rejected. Hence there is a significant relationship between education and perceived disadvantages of WFH arrangement. This implies that higher educational attainment yields to less negative perception on the disadvantages of WFH Arrangement.

As shown in Table 4, employees' station of assignment has a very high positive correlation ($r = 1.00$) with the employees' perceived advantages of WFH arrangement while it has a very high negative correlation ($r = -1.00$) with their perception on the disadvantages of WFH arrangement. This implies that there is a significant relationship between an employees' station and perception on WFH arrangement.

As to position, its correlation ($r = -1.00$) with the employees' perceived advantages of WFH arrangement is considered as very high negative correlation while its correlation ($r = 1.00$) with employees' perceived disadvantages of WFH arrangement is very high positive correlation. This implies that there is a significant relationship between the employees' position and perception on WFH arrangement.

Spearman rho correlation ($r = -0.90$) between the number of persons supervised and perceived supervisory function indicates a high negative correlation. With p value of 0.04 which is less than 0.05, the null hypothesis is rejected. Thus, there is a significant relationship between the number of persons supervised to the perception on the advantages of WFH

arrangement. This implies that employees with greater number of people to supervise perceive less on the advantages of the WFH arrangement. On the other hand, its correlation ($r = -0.10$) with the perception on the disadvantages of WFH arrangement indicates a negligible correlation.

As to the number of persons to contact in a day, its correlation with the perception on the advantages of working from home is highly positive ($r = 0.80$) while its correlation with perceived disadvantages of working from home is negligible ($r = 0.30$). As shown in table 5, the p-value is greater than 0.05, hence the null hypothesis is not rejected. This implies that there is no significant relationship between the number of persons an employee needs to contact while working from home and the employee's perception on WFH arrangement's advantages and disadvantages.

3. Is there a significant difference in the employee's perception of Work from Home arrangement based on their demographic characteristics and job classification?

Null Hypothesis: There is no significant difference in the employees' perception on the advantages and disadvantages of WFH arrangement with reference to their demographic characteristics and job classification.

Alternate Hypothesis: There is a significant difference in the employees' perception on the advantages and disadvantages of WFH arrangement with reference to their demographic characteristics and job classification.

Table 5
Kruskal-Wallis Test Statistics on Employees' Perception on the Advantages and Disadvantages of Work Form Home Arrangement based on Demographic Characteristics

		Age	Gender	Educational Attainment	Number of Household Members	Location/ Residence
Advantages of WFH Arrangement	Chi-Square	2.020	0.880	6.390	1.560	15.380
	Df	4	2	7	4	18
	Asymp. Sig.	0.732	0.645	0.495	0.816	0.636
Disadvantages of WFH Arrangement	Chi-Square	4.550	4.480	8.220	1.380	27.83
	df	4	2	7	4	18
	Asymp. Sig.	0.337	0.107	0.313	0.848	0.065

As illustrated in Table 5, with reference to the p-values which are $>$ than 0.05, hence the null hypothesis is not rejected. Therefore, there is no significant difference in the employees' perception on the advantages and disadvantages of WFH arrangement, with reference to their demographic characteristics.

Table 7 shows a different picture compared to Table 5. As to perceived advantages of WFH arrangement, all factors relative to job classification yielded a p-values of less than 0.05 except for the factor of the number of people supervised by an employee. Hence, null hypothesis is rejected except for the item on the number of people supervised. Therefore, there is a significant difference in the employees' responses on the perceived advantages of WFH arrangement with reference to their station of assignment, level of position and average number of people to contact while working.

Table 6. Kruskal-Wallis Test Statistics on Employees' Perception on the Advantages and Disadvantages of Work Form Home Arrangement based on Job Classification.

Table 6.
Kruskal-Wallis Test Statistics on Employees' Perception on the Advantages and Disadvantages of Work Form Home Arrangement based on Job Classification

		Station of Assignment	Level of Position	Number of People Supervised	Number of People to Contact
Advantages of WFH Arrangement	Chi-Square	16.62	4.880	4.020	12.96
	Df	1	1	4	4
	Asymp. Sig.	0.000	0.027	0.404	0.011
Disadvantages of WFH Arrangement	Chi-Square	3.690	0.06	1.710	1.510
	df	1	1	4	4
	Asymp. Sig.	0.055	0.803	0.788	0.824

As can be inferred in the results of the Kruskal-Wallis Test, the p-value for all indicators with reference to the perceived disadvantages of WFH arrangement is greater than 0.05. The null hypothesis is therefore not rejected. Hence, there is no significant difference in the employees' perception on the disadvantages of WFH arrangement relative to station, position, number of people supervised and number of people to contact in a day.

VII. ADVOCACY PLANS

The results and findings of the action research shall be presented to the Schools Division Offices where the respondents of the study are stationed. Results of the study shall be submitted to the Department's Central Office shared with the Civil Service Commission (CSC) to serve as reference in establishing standard policies or guidelines on alternative work arrangements such as work from home arrangement in the government. If possible, it shall be presented also to research conferences.

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DIGITAL MEDIA as TOOL for SOCIAL EMOTIONAL LEARNING OPPORTUNITIES (Project Digi-SEL)

Helen Estrada Maasin

ABSTRACT

This action research highlighted an intervention program addressing the least mastered skills in Edukasyon sa Pagpapakatao (EsP) through the production of digital media covering “concern for others”. The videos followed the concepts of social emotional learning (SEL) opportunities such as self-awareness, self-management, social awareness, relationship skills and responsible decision-making. Ten (10) digital social emotional learning (digiSEL) videos were used for the intervention which were especially designed following the pre-identified least mastered learning competencies in EsP as a result of the national survey of EsP least mastered skills for SY 2018-2019 conducted by the Bureau of Learning and Delivery of the Department of Education. The study dealt on the following research questions: 1) What are the least mastered learning competencies in Edukasyon sa Pagpapakatao across all grade levels that include the value concern for others?; 2) What are the different digital media instructional materials that address the identified least mastered learning competencies?; 3) What are the different digital media instructional materials on concern for others in terms of the following socio-emotional learning components: 3.1) self-awareness; 3.2) self-management; 3.3) social awareness; 3.4) relationship skills; 3.5) responsible decision-making?; 4) What is the level of socio-emotional learning opportunities per component that were integrated in the videos according to the teacher-respondents?; 5) What is the status of information, media and technology or the use of digital media among the schools of El Salvador City?; and, 6) What is the impact of the digiSEL videos on concern for others to the following: 6.1) teachers; 6.) students? The results and findings of the study include the following: Among the SEL categories, self-awareness (86.62%) was the favorite theme of the video producers. This is then followed by responsible-decision-making (80.77%). The lowest category is self-management (65.38%). Further, the use of digital media in El Salvador City is about 80-99 percent as confirmed by the 46 percent teachers included in the study. Among the digital instructional materials, teachers preferred radio-based instruction (81%). Their less preferences were on self-made video (23%) and self-made audios (27%). This means that most of them preferred readily made and validated radio-

based instruction materials. The intervention through digiSEL videos provided impact among teachers and learners of El Salvador City. Most teachers evaluated the videos as excellent (57.7%). They have seen the importance of the videos in integrating “concern for others”. All teachers (100%) also believed that there is a problem on “concern for others” among the learners. Majority of them (85.70%) considered that digiSEL videos are effective intervention for the integration of the value “concern for others”. For the one hundred forty one (141) learners who participated in the study, 62 percent perceived that there is a problem on concern for others nowadays while 38 percent did not see that the problem exist. Majority of these learners (97.9%) considered that digiSEL videos contribute to the improvement of their concern for others. Learners who have seen the impact of digiSEL videos to their cultivation of concern for others believed that viewing the videos served as information drive (47.5%), opportunities to showcase other values relating to concern for others (21.3%), wake up call for everybody on the importance of concern for others (21.3%) and as a means to improve the society (9.92%).

INTRODUCTION

Edukasyon sa Pagpapakatao (EsP) is one of the subjects offered in the K to 12 curriculum. The subject offering starts from Grade 1 up to Grade 10 level. In the conceptual framework of EsP, the main goal of teaching the subject is to help learners decide and act responsibly for the common good. Topics offered range from knowing one's self, to concern for others, social responsibility in the community and relationship with a supreme being or God. These topics are concretely translated into learning competencies. To quantify whether learners achieve learning in EsP, these learning competencies are dealt with through assessment tool.

In the recent national result of the least mastered skills in EsP, it can be gleaned that learning competencies pertaining to concern for others were not achieved by learners in School Year 2018-2019. This means that concepts and application about concern for others has not been given priority.

Data revealed that learning competencies about concern for others were present across all grade levels. However, learning competencies about concern for others were least mastered.

Second in rank in terms of least mastered skills deals with concepts and application on information, media and technology. This means that learners are not exposed to lessons on information, media and technology.

This study will focus more on addressing the gap on the least mastered skills in EsP learning competencies which is on "concern for others". With this gap, the researcher came up with an intervention to address the problem. The intervention thought is an instructional material through short video production showing concern for others which were made accessible to the teachers as well as to the learners through online as well as offline viewing. When this study was first conceptualized, the intervention was designed for a face-to-face interaction. However, due to the health protocols set by the inter-agency task force (IATF) and the Department of Health (DOH) as well as the mandate of the Department of Education through its Basic Education Learning Continuity Plan (BE-LCP), face to face was no longer allowed. Thus viewing of the videos on concern for others was made through social media specifically through facebook and youtube.

Based on researches and studies, the nearest concept to address the gap on concern for others can be gleaned from the concept about social emotional learning. This concept can be coupled with digital media as a tool for it to be interesting and acceptable among learners in the present generation.

Social and emotional learning (SEL) is a process of integrating thinking, feeling and behaving in order to become aware of the self and of others, make responsible decisions and manage one's own behavior and those of others. Activities to be used for intervention will be in a form of a digital media which will be especially designed to achieve this process.

Edukasyon sa Pagpapakatao (EsP) is one of the subjects in the K to 12 curriculum. The development of the lessons in EsP is guided by the learning competencies required by the Department of Education. The approach in teaching the subject is experiential and assessment must be near to the lived experiences of the learners. The integration of social emotional learning activities through digital media in the teaching learning process of EsP ensures real hands-on experience that leads to the practice of values of our learners.

The result of this study aims to gauge whether social emotional learning activities through digital media are effective measures as intervention in the teaching learning process in EsP especially in the inculcation of the value concern for others.

INNOVATION, INTERVENTION AND STRATEGY

Based on the result of the least mastered skills in Edukasyon sa Pagpapakatao (EsP) revealing that there is a need to focus on the learning competencies on concern for others as well as on application of information, media and technology, the intervention being thought of is the production of instructional materials showcasing concern for others through digital media. The videos on concern for others are anchored on the components of socio-emotional learning which cover self-awareness, self-management, social awareness, relationship skills and responsible decision-making. These socio-emotional learning components set the boundary on how the digital media through videos on concern for others must be developed. Based on researches and related studies mentioned above, socio-emotional learning materials are good interventions to address issues on lack of concern for others.

Research Questions

This study aimed to integrate social and emotional learning (SEL) activities in the curriculum, particularly in Education sa Pagpapakatao specifically on learning competencies addressing the value of concern for others. Furthermore, this study looked into the effects of these SEL activities using digital media as a tool in its delivery.

The following questions that were considered in this study:

1. What are the least mastered learning competencies in Edukasyon sa Pagpapakatao across all grade levels that include the value concern for others?
2. What are the different digital media instructional materials that address the identified least mastered learning competencies?
3. What are the different digital media instructional materials on concern for others in terms of the following socio-emotional learning components:
 - 3.1 self-awareness;
 - 3.2 self-management
 - 3.3 social awareness
 - 3.4 relationship skills
 - 3.5 responsible decision-making?
4. What is the level of socio-emotional learning opportunities per component that were integrated in the videos according to the teacher-respondents?
5. What is the status of information, media and technology or the use of digital media among the schools of El Salvador City?
6. What is the impact of the digiSEL videos on concern for others to the following:
 - 6.1. teachers;
 - 6.2 students?

Scope and Limitation

The study was limited to the schools of the Division of El Salvador City. Twenty eight (28) teacher-advisers and one hundred forty one (141) learners were identified as respondents in the study. The integration of digi-SEL activities was done by the class advisers and teachers of Edukasyon sa Pagpapakatao especially on the learning competencies about concern for others.

Due to the health protocols of the inter-agency task force (IATF) and the

Department of Health (DOH), the orientation of Project DigiSEL was done virtually. Ten (10) teacher-experts were identified by the researcher based on the recommendations of their schools heads to develop videos on concern for others. The least mastered learning competencies about concern for others were pre-identified prior to the development of the said videos.

The videos were uploaded in the facebook account accessed by the teachers and the learners.

Methodology

A. Sampling

This study used purposive sampling. A sample of teachers both in the elementary and secondary levels of El Salvador City were considered in the study. The assistance of the video producers were tapped in identifying teachers who were requested to view the videos they had produced. Twenty eight (28) teacher-respondents and one hundred forty one (141) learner-respondents were included in the study.

B. Data Collection

Data on least mastered skills about concern for others were taken from the national result of least mastered skills in EsP for SY 2018-2019. This is to generate learning competencies that were identified as least mastered skills. The development of digiSEL instructional video materials were based on these competencies.

C. Ethical Issues

Consent of teachers and learners who were participants of the data collection were considered and assured that their responses were treated with utmost confidentiality.

D. Data Analysis

Due to the pandemic and with the mandate of the Basic Education Learning Continuity Plan (BE-LCP) which does not allow face-to-face interaction among respondents, analysis of data were generated from the respondents through google form designed by the researcher. This is to gauge whether there is the impact of digiSEL instructional video materials on the teaching-learning process.

I. Results/Findings

The following are the results and findings gathered in the conduct of the action research. Results and findings were presented according to the research questions.

Research Question 1:

What are the least mastered learning competencies in Edukasyon sa Pagpapakatao across all grade levels that include the value concern for others?

Among the grade levels included in the identification of least mastered learning competencies in EsP, it is in Grade 1 level that four (4) of these competencies are least mastered. One can gleaned that these competencies range from recycling of materials that can still be used, love and concern for family members, respect on the belief of others, and love and unity in the family. These competencies cover concern for others. The importance of doing recycling leads to turning waste materials that can still be used into something usable. This also impacts concern for others in such a way that cleanliness and orderliness of the environment is taken into consideration, thus other people will also benefit from it.

Furthermore, love and concern for family members, respect for the beliefs of others as well as love and unity in the family are direct manifestations of concern for others.

For Grade 2 level, the least mastered learning competencies were focused more on identifying as well as showing concern for members of the school and the community. Competency on taking part on the care for the environment was also identified as least mastered.

For Grade 3 level, two (2) least mastered learning competencies covered being prepared for any emergency or disaster. It also included following rules and regulations in the family. The first competency on preparedness for any disaster is a manifestation of concern for others. If one warns someone and gives someone concrete ways to avoid disaster such as fire, earthquake or flood, one shows concern for others. On the other hand, following the standard rules set in the family, it would make each family member be responsible in the role each has to play.

For Grade 4 level, there are also two (2) least mastered learning competencies. Both competencies also touched on concern for others. First is on showing respect to others by maintaining a peaceful, clean and orderly environment. Second is on sharing one's experiences and situations that show understanding the needs of others.

Among all grade levels identified with least mastered competencies, only one (1) is focused on concern for others for Grade 5 level, and that is showing true love for others.

Other grade levels have also its least mastered competencies. However, for the focus of the research study, it only included least mastered skills that manifest concern for others.

Research Question 2:

What are the different digital media instructional materials that address the identified least mastered learning competencies?

Table 2 showed the different digital media instructional materials that address the identified least mastered learning competencies. These materials are all focused on concern for others.

Table 2. Digital Media Instructional Video Materials that Matched the Least Mastered Learning Competencies

Grade Level	Learning Competencies	Digital Media Instructional Video Materials
1	Nakagagamit ng mga bagay na patapon ngunit maaari pang pakinabangan	Segregasyon ng Basura (Video Producer: Ryan Junayon)
1	Nakatutukoy ng mga kilos at 105awain na nagpapakita ng pagmamahal at pagmamalasakit sa mga kasapi ng pamilya	Pamilya Solana (Video Producer: Kimberly Baspin) Love @ 13 (Video Producer: Phoebe Pacut)
1	Nakapagpapakita ng paggalang sa paniniwala ng kapuwa	Pagkakaisa sa Pagkakaiba (Video Producer: Liberty Taneo)
1	Nakapagpapahayag na tungo sa pagkakaisa ang pagsasama-sama ng pamilya	Pamilya Solana (Video Producer: Kimberly Baspin)
2	Nakatutukoy ng mga kilos at gawaing nagpapakita ng pagmamalasakit sa mga kasapi ng paaralan at pamayanan	Kusa at Disiplina (Video Producer: John Alfred Bajuyo)
2	Nakapagpapakita ng pagmamalasakit sa kasapi ng paaralan at pamayanan sa ibat ibang paraan	Kusa at Disiplina (Video Producer: John Alfred Bajuyo)
2	Nakikibahagi sa anumang programa ng paaralan at pamayanan na makatutulong sa pagpapanatili ng kalinisan at kaayusan sa pamayanan at bansa	Kusa at Disiplina (Video Producer: John Alfred Bajuyo)
3	Nakapagpapanatili ng ligtas na pamayanan sa pamamagitan ng pagiging handa sa sakuna o kalamidad	Sunog/Lindol/Bagyo (Video Producer: James Saludares)

3	Nakasusunod sa mga pamantayan/tuntunin ng mag-anak	Tagubilin ni Nanay: Mga Kaugaliang Pilipino (Video Producer: Mailyn Madrigal)
4	Nakapagpapakita ng paggalang sa iba sa pamamagitan ng pagpapanatili ng tahimik, malinis at kaaya-ayang kapaligiran bilang paraan ng pakikipagkapuwa-tao	Segregasyon ng Basura (Video Producer: Ryan Junayon) Kusa at Disiplina (Video Producer: John Alfred Bajuyo) Kalinisan at Kaayusan (Video Producer: Alan Martinez)
4	Nakapagbabahagi ng sariling karanasan o makabuluhang pangyayaring nagpapakita ng pang-unawa sa kalagayan/pangangailangan ng kapuwa	Pagmamalasakit sa may Sakit (Video Producer: Amor Junayon)
5	Nakapagpapakita nang tunay na pagmamahal sa kapuwa	Pagmamalasakit sa may Sakit (Video Producer: Amor Junayon) Sorpresa kay Lola (Video Producer: Rheaneza Loon)

Research Question 3:

What are the different digital media instructional materials on concern for others in terms of the following socio-emotional learning components:

- 3.1 self-awareness;
- 3.2 self-management
- 3.3 social awareness
- 3.4 relationship skills
- 3.5 responsible decision-making?

Table 3 displayed the ten (10) digital videos on concern for others that showcased the different socio-emotional components:

Research Question 4:

What is the level of socio-emotional learning opportunities per component that were integrated in the videos according to the teacher-respondents?

There were twenty eight (28) teachers who responded and viewed the DigiSEL videos. They were asked on the socio-emotional learning opportunities they have seen and observed in the videos produced. The following is the result of their responses:

Figure 1 displayed that among the socio-emotional learning competencies, self-awareness and relationship skills were seen by the teacher-respondents to be concretely and consistently integrated in the DigiSEL videos. Self-

awareness has around 85 percent and so with relationship skills. This means that most videos portray feelings and actions that bring about self-awareness and relationship skills among the viewers. The videos entitled Sunog, Lindol, Bagyo portrayed the importance of being prepared from the coming of any calamities. Thus,

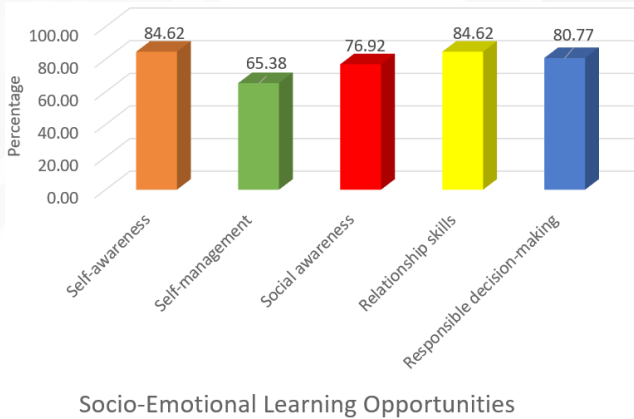


Figure 1
Percentage of Socio-emotional Learning Opportunities Portrayed in the DigiSEL Videos

someone has to be self-aware of the dangers if one is not prepared on what to do in case disaster come anytime. Self-awareness entails recognizing one’s emotions, thoughts, strengths and weaknesses in a given situation.

Another video that portrayed self-awareness is the video entitled Pamilya Solana. This video showed the importance of the roles played by each member of the family to live in harmony and understanding with each other. If all members of the family are aware of their roles and responsibilities, then a happy family is achieved.

Relationship skills as a socio-emotional learning opportunity is also seen as a dominant component portrayed in the videos. Among the ten (10) videos produced, six (6) of those videos displayed feelings and actions on relationship skills. The videos entitled Pagmamalasakit sa May Sakit, Tagubilin ni Nanay, Pamilya Solana, Love at 13 and Sorpresa kay Lola all showed relationship skills needed in the family. In the video Pagmamalasakit sa May Sakit, the natural tendency among us Filipinos to take care of our sick loved ones is portrayed. In the video, family members took turn in

taking care of the grandmother who was sick. Love and affection were shown in the video. In the video *Tagubilin ni Nanay*, viewers were reminded about respect for the elderly through *pagmamano* and through the use of the words *po at opo*. These concretely showed that relationship skills are enhanced through our gestures (*pagmamano*) and our respectful words (use of *po at opo*). In the video *Pamilya Solana*, each family member showed how to maintain good family relationship by taking turns in the household chores as well as participating in the activities at home such as praying, cleaning and the like. Indeed, a lot of relationship skills can be drawn from the actions happening inside the home of a family. In the video *Love @ 13*, it showed an overflowing emotion of selflessness portrayed by the characters. When asked about what gift is important to them, the gift for themselves or the gift for their parents, all of them chose the gift for their parents. This had made most of the parents cried as they were given a chance to listen to the words of their children why it is more important to give the gift to their parents instead of taking the chance to get a gift for themselves. The video simply displayed the importance of selfless love and generosity that children nowadays are challenged to give to their parents. The video *Sorpresa kay Lola* also portrayed our Filipino value of giving significance to a birthday celebration. It is a tradition among us Filipinos to celebrate joyful occasions such as birthdays and anniversaries. These occasions are also seen as opportunities to express our love and affection to our loved ones.

On the other hand, the socio-emotional learning component that must be worked out based on the result of the survey is on self-management. It can be gleaned in the table above that self-management has only a percentage of around 65 percent. Self-management includes managing one's stress, controlling one's impulses. Motivating one's self and setting goals. Only two (2) videos were seen by the respondents that portrayed self-management, namely: *Sunog, Lindol, Bagyo* and *Kusa at Disiplina*. These two videos challenge our viewers the danger if one has no self-management. In the videos *Sunog, Lindol, Bagyo*, it was portrayed that if one is out of control of his impulse and cannot manage the stress brought about by the calamities, it will put one's life in danger. In the video entitled *Kusa at Disiplina*, the viewers were reminded about the importance of motivation and discipline in achieving one's goal and as well as in caring for the environment.

Research Question 5:

What is the status of information, media and technology or the use of digital media among the schools of El Salvador City?

Based on the perceptions and views of teacher-respondents, the following is the status of information, media and technology among the schools of El Salvador City:

Figure 2 showed that integration of information, media and technology among the different schools in El Salvador City division is high. 80-99% integration is confirmed by 46.20 percent of the teacher-respondents. Around 39 percent of respondents confirmed that in their respective schools all teachers or 100 percent of the teachers have integrated information, media and technology in the teaching-learning process.

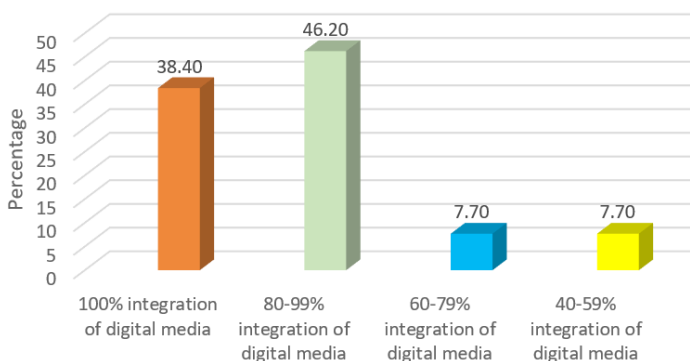


Figure 2
Status of Information, Media and Technology Integration among Schools in El Salvador City

This means that a higher level of integration of information, media and technology is acted upon by the teachers of El Salvador City Division. Learners who were able to access the videos can both access it via online and offline platforms.

On the other hand, 7.7 percent of the teacher-respondents believed that only 60-79 percent integration of digital instruction is made by the teachers in their assigned schools. Also, 7.7 percent of these respondents confirmed that only 40-59 percent integration is employed in their respected schools.

Small turn out of integration can be due to unavailability of internet accessibility for online learning and unavailability of electronic gadget for offline learning.

In terms of the different digital instructional materials used in the teaching-learning process, teacher-respondents confirmed the following turn-out:

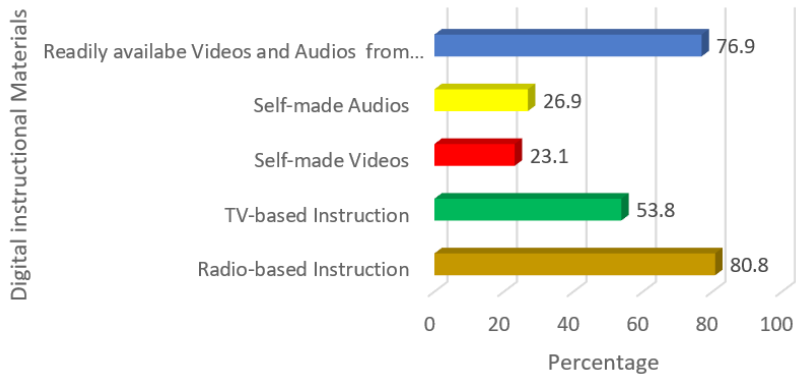


Figure 3
Different Digital Instructional Materials Used
in the Integration of the Teaching-Learning Process

Figure 3 showed that among the different digital instructional materials used by the teachers in the teaching-learning process, a bigger percentage come from materials on radio-based instruction (RBI) with around 81 percent. This showed that teachers in El Salvador City made use of RBI as they facilitate learning. This is also due to the availability of a radio station in El Salvador City local government unit known as Savior Radio. The said radio station broadcasts everyday RBI from 8:00AM to 5:00PM. The station is in partnership with the Department of Education El Salvador City Division. RBI audio files are also made available via universal serial bus (USB) for learners who have available electronic gadget and equipment where the audio files can be accessible.

It can be gleaned in the above figure as well that next digital media used by the teachers are videos readily made available from youtube, facebook and other social media accounts with a percentage of around 77. It means that these digital media from the commercial platforms are also used by the teachers in the teaching-learning process especially by those teachers that blended printed modular distance learning with online distance learning. It can also be used for offline platform since these digital media materials can also be easily downloaded.

Question 6:

What is the impact of the digiSEL videos on concern for others to the following:

- 6.1. teachers;
- 6.2 students?

Figure 4 showed the overall evaluation of the teacher-respondents about the digiSEL videos they were able to view.



Figure 4. Overall Evaluation of DigiSEL videos viewed by the Teacher-Respondents

Based on the feedback of the seventy eight (78) teacher-respondents who participated in the survey and had viewed the different videos, around 58 percent rated that the DigiSEL videos are excellent while around 39 percent perceived the videos as very good. Only 4 percent perceived these videos as good.

The overall evaluation suggests that the video producers were successful in touching the thoughts and the emotions of the viewers. The objective of producing the digiSEL was also achieved.

Furthermore, teacher-respondents confirmed that there exist a problem on the value on concern for others. Figure 5 showed that 100 percent of these teachers believed that “concern for others” is indeed a problem.

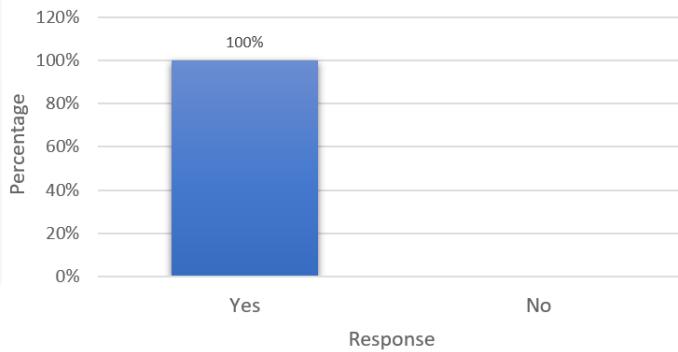


Figure 5. Perception of Teacher-Respondents that Concern for Others is Seen as a Problem Nowadays

However, not all teacher-respondents believe that the produced DigiSEL videos when viewed by the learners can improve their value on concern for others. It is reflected in Figure 6 that only around 86 percent of these teachers believed that these DigiSEL videos can contribute to the improvement of learners' value on concern for others while the remaining 14 percent do not see the contribution of the produced digiSEL videos to the improvement of learners' concern for other.

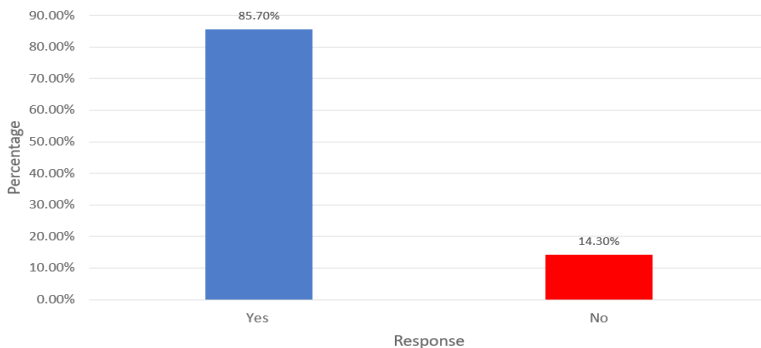


Figure 6. Response of Teachers whether DigiSEL videos can contribute to the Improvement on Concern for Others among Learners

For teachers who perceived that DigiSEL videos can improve the value on concern for others among learners, they believed that said videos can awaken the minds of the learners especially in taking care of others. These

videos are also perceived to appeal to the feelings and emotions of the viewers. Thus, it serves as a reminder on the importance of taking care of people we love.

In addition, the videos also improve not only concern for others but discipline as well. Said videos are also able to make viewers realize how important it is to care for others.

Learners also participated in gauging the impact of DigiSEL videos to them. There were one hundred forty one (141) learners across all grade levels that were considered in the study.

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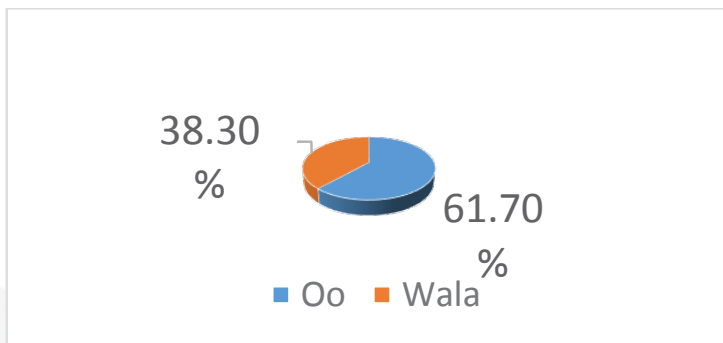


Figure 7. Perception of the Learners Whether or Not there is a Problem on Concern for Others Nowadays

It can be gleaned on Figure 7 that majority of the learner-respondents perceived that there is a problem on valuing concern for others nowadays. Around 62 percent of them believed that there is difficulty among the youth nowadays to show concern for others. However, around 38 percent of them do not see concern for others as a problem. They believed that there are still youth nowadays who manifest concern for others.

In terms of the DigiSEL videos they viewed required by their teachers as part of the integration in their Edukasyon sa Pagpapakatao class, around 98 percent of the learners agreed that these videos are of great help in the improvement of their value on concern for others. However, 21 percent of them do not see the videos as a help in the development of the value concern for others.

Figure 8 showed the graphical presentation on the perception of the learners about the DigiSEL videos whether it can improve their concern for others or not.

Learners who were able to see the impact of the DigiSEL videos in terms of improving their concern for others were further asked how these videos can help the viewers improve their concern for others. Figure 9 showed the means on how the DigiSEL videos lead to valuing concern for others.

Different answers of the learner-respondents in terms of how DigiSEL videos can impact the value concern for others. These answers were then categorized by the researcher according to the following: videos served as wake up call on the importance of concern for others, videos served as means for the improvement of the society, videos served as opportunities to show other values relating to concern for others, and videos served as information drive to values concern for others.

Among the four categories, the category on : videos served as information drive to values concern for others garnered the highest percentage of 48. Answers to this category include the awareness for the viewers on what to do (aron ma-aware sa unsay angay buhaton). Learners also believe that the videos served as means to educate them (aron maedukar) as well as for other viewers to also know (aron makabalo ang tanan) about concern for others. They also had seen the videos as a way of preventing untoward incidence (aron malikayan ang dili mayo nga panghitabo). They were also able to identify that the videos showed the truth (nagpapakita ng katotohanan) and an awareness about the truth (aron makamata sa

kamatuoran). The videos also helped them think about the right action to do (marefresh ang hunahuna sa angay buhaton) and gave them lessons (makakuha ug pagtulun-an). It also awakened them on the right action to show towards others who are in need (makaamgo kita ug mapukaw sa angay nga buhaton).

However, the category on videos served as means for the improvement of the society garnered the lowest percentage of around 10. This means that only few learner-respondents were able to see the impact of the videos to the society in general. These learners were able to perceive that the DigiSEL videos can also contribute growth on concern for others (makapalambo sa pagpakabana sa uban). They also believed that the serious reflection and absorption of the videos can help the economy (makatabang sa ekonomiya) and can also impact the future (alang sa kaugmaon).

In terms of why there is a need to show concern for others, learner-respondents vary in their answers. Their answers were categorized by the researcher into three, namely: for self-interest, for the good of the community and as a responsibility. Figure 10 showed the distribution of percentage per category.

Among the three categories, most learners see the need to show concern for others as a responsibility with around 41 percent. They viewed concern for others as an obligation (obligasyon nato ang motabang). This responsibility comes in different forms such as: allowing others to feel that they belong (aron ma-feel sa uban nga they belong); helping others in their problems (aron makatabang kita sa suliranin sa uban); serving as a guide to others (arong mahatagan sila ug giya); and, letting others feel their importance (aron mapabati sa ubang ang ilang ka importante).

Learners also see concern for others as opportunity for those who are recipients of the said value for them to be made aware that there are people that can help them (aron makatabang ug ma-aware nato ang atong isigkatawo). Some perceived it as a learning opportunity to show concern for other (aron kita makakat-on sa pagmalasakit sa uban) while some viewed it as a reminder for others that there are people who are willing to help them (aron makabalo sila nga naa diay tao nga andam mutabang).

On the other hand, the category on self-interest got the lowest percentage of 19. Learners who answered in this category believed that there is a need to show concern for others so that one can be reciprocated with the

same in the future (aron kita mabaslan sa pagtabang kung kita na pud magkinahanglan; aron tabangan pud ta kung magkalisud ta; aron maluwas kita). Learners also considered showing concern for others for one's good (para sa atong kaayuhan). Some considered it to gain social approval (aron makaingon ang uban nga matinabangon ta ug aron pud ta madayeg sa uban). Furthermore, others see it as important in one's lives (importante sa atong kinabuhi) and as a way of avoiding sickness (aron dili magsakit o para makaiwas sa sakit). It is also considered important as a way of avoiding problems (aron dili ka magkaproblema).

VIII. Reflection

The action research conducted is an eye-opener on seeing the difficulties of the learners in the teaching-learning process of Edukasyon sa Pagpapakatao (EsP) translated through the least mastered learning competencies. Upon seeing such difficulties, it is a great challenge for teachers to design intervention that will appeal to the learners of the 21st century.

EsP is not be taken as an academic subject. Its teaching approach is experiential thus strategies and contents must appeal to the experiences of the learners.

It is sad to note that among the learning competencies in EsP, concern for others has been identified as the least mastered skills. This means that the learners were not able to understand more deeply the value of extending help and concern for others. It is indeed ironable that these learning competencies involving concern for others are not achieved by our learners in EsP considering that one of the subject's main theme is on pakikipagkapwa (fellowship).

Thus, the intervention through the production of DigiSEL videos is very timely and appropriate since integration of digital media on instructional materials is multi-sensory, meaning, it appears to the senses, thoughts and motivation of the learners.

With this intervention, it also posts a great challenge to look into how assessment must be designed to ensure that objective and proper way of gauging the improvement of the least mastered learning competencies will be achieved. Afterall, EsP is more concern not much on the cognitive process domain but more on the affective level. With objective and proper assessment in EsP, the problem on least mastered skills on concern for

others can be addressed. The most important thing is not on how the learners correctly answer the assessment test through paper and pencil but more so on how they will be able to apply what they have learned from the subject and thus improve their concern for others.

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