iDREAM

Research Journal 2019

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Schools Division Research Committee (SDRC) and
Division’s Research Enthusiasts, Advocates and Mentors (DREAM) Team
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DepEd VISION

We dream of Filipinos
who passionately love their country
and whose values and competencies enable them to realize their full potential
and contribute meaningfully to building the nation.

As a learner-centered public institution, the Department of Education continuously improves itself to better serve stakeholders

DepEd MISSION

To protect and promote the right of every Filipino to quality, equitable, culture-based and complete basic education where:

- Students learn in a child-friendly, gender-sensitive, safe and motivating environment
- Teachers facilitate learning and constantly nurture every learner
- Administrators and staff as stewards of the institution, ensure an enabling and supportive environment for effective learning to happen
- Family, community and other stakeholders are actively engaged and share responsibility for developing life-long learners.

DepEd CORE VALUES

Maka-Diyos, Makatao, Makakalikasan, Makabansa

DepEd MANDATE

The Department of Education was established through the Education Decree of 1863 as the Superior Commission of Primary Instruction under a Chairman. The Education agency underwent many reorganization efforts in the 20th century in order to better define its purpose vis some vis the changing administrations and charters. The present-day Department of Education was eventually mandated through Republic Act 9155, otherwise known as the Governance of Basic Education act of 2001 which establishes the mandate of this agency.

The Department of Education (DepEd) formulates, implements, and coordinates policies, plans, programs and projects in the areas of formal and non-formal basic education. It supervises all elementary and secondary education institutions, including alternative learning systems, both public and private; and provides for the establishment and maintenance of a complete, adequate, and integrated system of basic education relevant to the goals of national development.

Schools Division Office of Imus City Quality Policy

Schools Division Office of Imus City commits to delivering quality services, responsive to the needs of its clientele in accordance with mandated standards, principles of Transparent, Ethical and Accountable Governance, and continuous improvement process towards the holistic development of 'BIDAng' Imuseño.

Schools Division Office of Imus City Quality Objectives

Schools Division Office of Imus City aims to achieve holistic development of 'BIDAng' Imuseño through:

1. Formulated and established evidence and researched-based programs, projects and activities for the continuous improvement of services;
2. Ensured clientele satisfaction through effective and judicious utilization of financial and material resources;
3. Enhanced the Basic Education K to 12 Curriculum through ICT based classroom instructions, intensive monitoring and evaluation, assessment of learning outcomes, alternative delivery mode of instruction, and utilization of equitable and appropriate learning resources;
4. Implemented the merit system in hiring, selection, promotion, benefits and compensation, awards and recognition, and learning and development of personnel in adherence to mandated standards and TEA governance; and
5. Strengthened linkages and partnerships among internal and external stakeholders in conducting programs, projects and activities.

MESSAGES

OFFICE OF THE REGIONAL DIRECTOR

I would like to congratulate the Schools Division of Imus City, through the dynamic leadership of SDS Rosemarie D. Torres, for your publication of the I DREAM Research Journal. We are very pleased with the commitment of the faculty and school personnel in releasing this form of scholarly communication. This manifests our character of resilience that even in this time of pandemic and varied forms of crises, our commitment never ceases to continuously impart knowledge and develop our research culture as a region.

As we move forward to brave the “New Normal”, I engage everyone to safely do researches aligned and designed to further strengthen our Region IV-A PIVOT Learning Continuity Plan. Our LCP aims to make undisrupted learning to be the core strength of our educational programming. For this reason, your data-driven inputs are essential to improve the processes, procedures, and decisions that will ensure that schools can continue to function throughout any form of disaster or crisis.

To develop a research culture, a group needs a shared interest and a means to communicate. The IDREAM Journal is a perfect reflection of both. We forward our fervent appreciation to your commitment and dedication.

WILFREDO E. CABRAL
Regional Director
Region IV- A

OFFICE OF THE ASSISTANT REGIONAL DIRECTOR

We would like to congratulate the members of the Schools Division Research Committee (SDRC) of the Schools Division Office of Imus City for getting the best researches of the Division be published in the I DREAM Research Journal. This journal is important as we now systematically record out observations and reflections of the many phenomena in education relevant to our context. It also reflects the many contributions of our teachers in the improvement of learning and in the development of their craft. This shows the robustness of our research culture as we embark not only on research production but also on research publication and their usability.

Research nowadays is an imperative, as we live in a world where global pandemic, disasters and disruptions are increasingly becoming the norm. Let us not be unfazed by these new norms, instead let us take these as an inspiration and an opportunity to engage in research to improve instructional designs, develop multi-media, teaching modes and learning systems, familiarize oneself- with blended and flipped classrooms and totally innovate ourselves. The current educational policy on research emphasizes the use of action-based researches which are designed to diagnose problems or weaknesses—whether organizational, academic, or instructional—and help teachers and administrators develop practical solutions to address them quickly and efficiently. Given these challenging times, it is highly valued indeed that teachers would greatly participate in many forms of data driven, practical and systematic process of evaluation and improvement that lead o increasingly better results for schools, teachers, and programs.

The conduct of future researches will be different in coming days. But as time has proven and tested, our resilience and perseverance will prevail in any form of crisis, and that we can make undisrupted learning as the core strength of our system. We will need to continue to collaborate and work creatively. Together, we will improvise, adapt and overcome challenges towards a fairly seamless transition to a new normal that allows us to fulfill our mission in the most unusual of times. Again, we forward our sincerest appreciation and compliments to all those who showed commitment in accomplishing this endeavor.

RUTH L. FUENTES
Assistant Regional Director

OFFICE OF THE SCHOOLS DIVISION SUPERINTENDENT

In recent years, the Department of Education has installed key reforms and emphasized the need to raise the quality of basic education and make it at par with the rest of the world.

From this context, the dynamics of a learning leader have steadily evolved.

Present day educators have strived to continuously improve by incorporating data-driven decision-making practices to help them become more effective in defining the needs, setting goals, planning interventions and evaluating progress of the programs, projects and activities being implemented in several levels or areas of governance.

Imus City is no exception. Our Division has established itself as one of the prime movers in advocating research and fostering a culture of evidence-based decision-making through research findings. Engaging in research has taught us how to become more inquisitive, systematic and critical of our practices.

This would not have been a reality if not for I-DREAM or Imus City Division's Research Enthusiasts, Advocates and Mentors.

Let me extend my heartfelt commendation and gratitude to the people who poured in efforts which translated to the success of this third volume of the I DREAM Research Journal.

To the editorial board, kudos to your unwavering dedication to this well-intentioned undertaking. Thank you for sharing your competence and pushing for quality researches which you comprehensively evaluate and review before publication.

To all the authors, be reminded that this journal goes beyond having your final research outputs printed and disseminated. It also proves how passionate and committed you and other Imuseño educators are in finding meaning to what exists and persists in the field from the teaching and learning processes, as well as other research topics or themes.

Together, let us continue what we have started for Bidang Imuseños. Create new possibilities and set and reset milestones in attaining a deeper level of understanding about the complexities of teaching and learning, and learning how to maximize educators' effort to meet learners' needs.

Let us all soar high and go beyond what we have dreamed of!

Mabuhay!

ROSEMARIE D. TORRES
CESO V, Schools Division Superintendent

OFFICE OF THE SCHOOLS DIVISION SUPERINTENDENT

The year 2019 promises many exciting developments for the I DREAM Research Journal of the Schools Division Office of Imus City as researches focused not only on teaching and learning processes but governance theme as well. Congratulations to all of our authors who contributed in the third volume of the research journal.

This 2019 issue of the IDREAM Research Journal brings even more pioneering research content. The ten (10) original studies included in the journal address a variety of significant teaching and learning and governance research topics in the Division level, including the Division personnel's point of views in managing their finances. Disseminating the research results of the studies to teacher-researchers who are continuously striving to improve the quality of research studies is still an important task of *the IDREAM Research Journal as it serves as a research compendium.*

I would like to take this opportunity to express my heartfelt gratitude to the scholars on the editorial board and to those in the editorial office for their collective effort and dedication to the I DREAM Research Journal. We have been extremely impressed by the comprehensive evaluations performed for the Journal both by the internal reviewers through the Schools Division Research Committee (SDRC) and the DREAM Team, which in many cases have substantially improved the quality of the published articles. I support the editorial board's main focus to continue publishing high quality research articles that help teacher-researchers, enthusiasts and advocates of research navigate today's complex basic education environment especially with the new normal educational setting.

I thank all of our submitting author-researchers who have strived in the production of their work and have made I DREAM Research Journal their journal of choice. We look forward to the I DREAM Research Journal continuing to provide to not only the teacher-millennials but also the Master Teachers of the Division an academic expression and a venue for discourse that will shift us forward to the continuous improvement of delivering quality basic education to all Imuseño learners of the Division.

Keep the research passion alive. God bless everyone.

HERMOGENES M. PANGANIBAN
Assistant Schools Division Superintendent
Officer-In-Charge, Schools Division Superintendent

OFFICE OF THE ASSISTANT SCHOOLS DIVISION SUPERINTENDENT

"To get to know, to discover, to publish-this is the destiny of a scientist."–Francois Arago

As I DREAM Research Journal enters another year of publication, there is a lot to look forward to.

Any research work is said to be completed only after the dissemination of findings. Yet, for a long time, dissemination has been limited to sharing of the findings to their colleagues at the local, regional or national conferences.

Research publications has been important part in disseminating the findings after a rigorous process of research production. Publications provide an avenue for researchers to share their discoveries and ideas to a wider audience and learn what others have already found in the specific area and get insights on what more needs to be searched. It is to be internalized that if the research works were not shared, the progress in scientific world would be slow and negligible.

I laud the effort of the editorial board, the contributors and the researchers for their support of the journal and its mission: to improve the teaching learning and governance processes. Launching a new journal is no small feat, and we achieved a good measure of success with a compendium of scholarly work of the Division's teacher-researchers and research advocates and enthusiasts.

This journal will provide insights on evidenced-based researches not only on the teaching learning processes but governance as well. It will be helpful to the teacher-researchers of the Division in terms of various interventions that are appropriate to their situations.

On behalf of all members of the Schools Division Office of Imus City Research Committee, I would like to extend my congratulations on the publication of the journal: I DREAM Research Journal 2019.

GALILIEO L. GO
OIC-Assistant Schools Division Superintendent
Schools Division Research Committee Chair,
January 2019 to May 2020

OFFICE OF THE ASSISTANT SCHOOLS DIVISION SUPERINTENDENT

Borne out of its adherence to the Research Management Guidelines (DepEd Order No.16, s.2017) and in advocating the thrusts under the Basic Education Research Agenda (DepEd Order No. 39, s.2016, the raison d'etre of this journal has come to life to serve as a fertile avenue for researchers of the of Schools Division Office of Imus City to disseminate their worthwhile research findings and output.

I convey my utmost salutations to all the researchers whose research papers were refereed and qualified to be published in this IDREAM Research Journal. On its third volume, the IDREAM Research Journal showcases the research initiatives and projects of educators and researchers in enriching the teaching and learning pedagogies, technological interventions, and educational experiences both of the teachers and learners. This is another milestone for inquisitive minds to share their endeavors and generate scholarly discourse that delve on ideas that will aid and foster the delivery of quality basic education.

In behalf of the Schools Division Research Committee, we are proud to present to our readers and research enthusiasts the ten (10) research titles for this year's issue. May these researches stir discussions to stimulate knowledge transfer, challenge educators on the development of further researches, and utilize the discovered value for societal progress.

Ultimately, this journal intends to reach more minds, influence policy, catalyze reforms and inspire other researchers to venture further towards the horizon of learning and innovation.

After all, *research is the novel inception of the mind, sustained by the rigor conduct of the will, borne from the exigent need to understand and impetus to improve, to innovate*.

IVAN BRIAN L. INDUCTIVO
OIC-Assistant Schools Division Superintendent
Schools Division Research Committee Chair,
June 2020 to present

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Introduction to the 2019 I DREAM Research Journal

Editorial Board

I DREAM Research Journal

Welcome to the 2019 I DREAM Research Journal, the third volume of the official peer-reviewed academic journal of the Schools Division Office of Imus City (SDOIC) published annually. The publication is a compendium of interdisciplinary academic and research works of the various fields of specialization in the SDOIC.

Articles and manuscripts were subjected to scholarly review by the editorial staff and at least three external reviewers who are experts on the specified disciplines. The different types of articles or manuscripts considered are: Original Full Academic and Original Action Research Papers. Research papers with funding from international, national, regional and local institutions were given priority for publication.

Teacher-researchers explored the following themes: 1) Teaching and Learning; 2) Human Resource Development 3) Governance 4) Child Protection; and cross cutting themes which include 1) Gender and Development 2) Disaster Risk Reduction Management and 3) Inclusive Education.

The I DREAM Research Journal now on its third year of publication served as a method of scholarly communication and aims to gather together and extend the profoundly interdisciplinary and growing field of the abovementioned themes and cross cutting themes, for which there is no existing journal in circulation in the Division.

In the spirit of honing and building a culture of research in the Division, the editors of I DREAM Research Journal aim to do more than provide a home for creative and critical basic education researches scholarship. We want to provide researches that are reflexively constituted through its continuous educational improvement and reforms.

HINDI OBLIGASYON KUNDI DEDIKASYON…DAHIL SA IMUS, IMPORTANTE KA..IKAW ANG BIDA!

Dr. Hermogenes M. Panganiban, SDS, Mr. Galileo L. Go, ASDS and Mr. Gregorio A. Co Jr. SGOD Chief review researches for the I DREAM Research Journal Research Publication 2019

Schools Division Research Committee (SDRC) evaluates completed researches conducted by teacher-researchers in the teaching and learning and governance themes

“Alone we can do so little; together we can do so much.” – Helen Keller quote inspires each member of the SDRC

SCHOOLS DIVISION OFFICE OF IMUS CITY (SDOIC)
ASSOCIATION OF BASIC EDUCATION RESEARCHERS (ABER) OFFICERS

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Dr. Rosemarie D. Torres
Adviser

2019 I DREAM Research Journal

The 2019 I DREAM Research Journal captures our vision of encounters between theory, teaching and learning and governance.

THE USE OF 4A MODEL INSTRUCTIONAL STRATEGY TO IMPROVE THE READING SKILLS OF GRADE 7 STUDENTS by Michelle A. Baltazar, Marites R. Peñaredonda, Joseph R. Carreon, Vanessa P. De Leon, and Roselyn F. Santos of General Emilio Aguinaldo National High School aimed to determine the needs and wants of the students and to improve the implementation of teaching and reading program for struggling readers of G7 students.

IMPLEMENTATION AND FIDELITY OF INTERVENTIONS FOR STUDENTS-AT-RISK OF DROPPING OUT IN PUBLIC SECONDARY SCHOOLS by Joseph R. Carreon of General Emilio Aguinaldo National High School endeavored to assess the level of implementation of interventions for students-at-risk of dropping out in public secondary junior high school during the school year 2017-2018

EFFECTIVENESS OF SUPPLEMENTARY MATERIAL IN STATISTICS AND PROBABILITY FOR SENIOR HIGH SCHOOL IN THE DIVISION OF IMUS CITY, CAVITE by Mark Julius Balagtas of Gov. Juanito Reyes Senior High School wants to determine the acceptability of the enrichment activity material in teaching and learning statistics and probability for grade 11 students in relation with the following factors, objectives, content, language and style, presentation, usefulness, evaluation, illustration, and activity

***"I DID NOT EXPECT TO STUDY RESEARCH":* THE CHALLENGES OF STUDENT-RESEARCHERS IN THE SENIOR HIGH SCHOOL by Nolan Severino R. Jusayan** of Gov. Juanito Reyes Remulla Senior High School is anchored on the fundamental process of teaching and learning research under the steps in the broader context of pedagogy by grima-farrell (2017), presents a basic research design (merriam, 2009) that offers insights into the challenges that the students faced and the ways they dealt with the conduct of research in the senior high school. This study is determined to call for measures that would eventually provide clearer path and common knowledge on research, which will benefit the student-researchers.

IMPLEMENTATION OF TECHNOLOGY INTEGRATION IN IMUS NATIONAL HIGH SCHOOL by Michael Vincent R. Galestre of Imus National High School is concerned with description, recording, analysis and interpretation of the extent of adequacy in the information and communications technology (ict) implementation. It provided a valid and reliable assessment on the implementation of technology integration as perceived by teachers in imus national high school-main during the school year 2018-2019. Also, it identified the adequacy of ICT facilities and the ict skills and knowledge of the teachers.

THE EFFECT OF AUDIO-VISUAL MATERIALS IN TEACHING LETTER SOUNDS TO GRADE II STRUGGLING READERS OF MALAGASANG II ELEMENTARY SCHOOL by CRISTINA M. BEN, ROBELIA O. GAYO and MA. CHONA C. DOROSAN of Malagasang II Elementary School embarked on identifying struggling readers in Grade 2 using Phil-IRI reading materials. Results revealed that many pupils struggle to read. A total of 192 pupils out of 748 were classified as struggling readers in which the letter sounds are not fully developed.

INSTRUCTIONAL COMPETENCIES OF GRADE SIX TEACHERS: BASIS FOR PROPOSED INSTRUCTIONAL SUPPORT by Gemma V. Sierra, Rosemarie M. Orcullo And Jesus V. Bergado, School Heads Of Anabu I, Malagasang III and Tinabunan Elementary Schools was conducted to determine the instructional competencies of grade six teachers in relation to their performance rating on Individual Performance Commitment And Review Form (IPCRF).

POINTS OF VIEW OF SDO IMUS CITY LEVEL 1 NON-TEACHING PERSONNEL ON FINANCIAL LITERACY: BASIS FOR PROGRAM FLOWS (FINANCIAL LITERACY OPPORTUNITIES FOR WORKERS OF SDO IMUS CITY) by Riza C. Garcia, Christian Mespher A. Hernandez And Jenielyn Sadang of SDO Imus City School Governance and Operations Division sought to explain people's preference in relation to consumption and saving, and find if there is a gap between the perception of financial literacy and how it is being practiced.

GENDER INEQUITY IN TECHNICAL VOCATIONAL LIVELIHOOD (TVL) TRACK OF SENIOR HIGH SCHOOL BASIC EDUCATION: BASIS FOR GENDER DEVELOPMENT PROGRAM by Rolando B. Talon Jr. of SDO Imus City Curriculum Implementation Division was conducted to look into the gender inequity in technical vocational livelihood (tvl) track of senior high school basic education. The study served as guide for sustainable development program strategies for expansion and improved quality, equity and efficiency of the delivery of senior high school basic education. The study aimed to determine the teachers profile and the extent of gender inequity in senior high school tvl track in the areas of curriculum**,** learning materials, physical facilities and programs and projects

PERCEIVED IMPACT OF DEVELOPMENTALLY APPROPRIATE PRACTICES (DAP) IN TEACHING NUMERACY IN GRADE III by Jocelyn T. Aquino, Arlene T. Exiomo and Michael Vincent R. Galestre of Bukandala Elementary School, Toclong Elementary School and Imus National High School respectively assessed the impact of developmentally appropriate practices (DAP) in teaching numeracy in Grade III in Bukandala Elementary School in the Division of Imus City.

We are pleased to be able to impart the ten (10) original researches in the 2019 I DREAM Research Journal and look forward to exploring future collaboration and mutual exchange of ideas. The journal is intended as a meeting place in which continuous improvement advocates and educational reform beings and doings of teaching and learning, human resource, governance and child protection studies and practice meet and, by doing so, are on- goingly transformed. We hope you will join us in making these transformations into material realities and assist in sustaining the standards required by ISO 9001: 2015, that is, to deliver quality education to Imuseño learners and provide quality services to all our clienteles.

Schools Division Research Committee (SDRC) and
Division's Research Enthusiasts, Advocates and Mentors (DREAM) Team
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THE USE OF 4A MODEL INSTRUCTIONAL STRATEGY TO IMPROVE THE READING SKILLS OF GRADE 7 STUDENTS

by:

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Abstract

This study aims to determine the needs and wants of the students and to improve the implementation of teaching and reading program for struggling readers of G7 students. Using the concurrent mixed-method design, the students were given a post-assessment reading inventory after determining their instructional and independent levels using the standardized Mac Ginitie Reading Test. Focus group discussion was conducted to transcribed the needs and wants of the students. Using the 4A Model instructional strategies in reading: activity, analysis, abstraction, and application, the findings yielded an increase of 13.98% in the instructional and independent levels in the reading tests of grade 7 students. It was disclosed that reading teachers found a pleasant disposition in teaching very important to make struggling readers open-up and ask questions without hesitation. Moreover, listening to the voice of the struggling readers helps to improve the reading process; introducing clear and attainable goals for every reading lesson; making the reading process purposeful and more meaningful. The provision of appropriate instructional reading materials to the level of the students and applying guided instructional learning strategies foster engaging learning experience. It is recommended that current teaching and reading process must continuously implemented focusing on students' need and enhance reading teachers' instructional strategies, time management and improve instructional materials in the classroom.

Keywords: *Reading Program, Struggling Reader, Instructional Reader, Independent Reader, Continuous Improvement*

Context and Rationale

The Philippine schools have been implementing several educational innovations with an overarching goal of maximizing the development of every child according to his diversity, interest, abilities, and needs. Reading is a subtle and complex process that involves sensation, perception, comprehension, application and integration and the utmost fundamental key for understanding text and learning all the subject areas and associated with enlightenment and enjoyment. The concepts articulated by total quality management and continuous improvement founder have been suggested as a basis for achieving excellence in schools. It is based on the assumption that educators want to do their best in institutionalizing a reading program by constantly improving the reading system of the school. It requires teamwork, training, extensive assessment, analysis, and

action dealing the opportunity to conceptualize a systematic change for school reading intervention program (Tamano et al., 2016).

The school wanted to attain the 75% National Standard for students to be either instructional or independent reader. This is in response to DepEd Memo No. 143 s. 2012 stating that reading is the foundation of all academic learning and if the pupils fail to master the basic skills, they can never hope to get through the other disciplines successfully and thereby, deprive them of becoming literate and productive individuals. Congruently, a study on Reading Habits among Students and its Effect on Academic Performance stated that both reading and academic achievements are interrelated and dependent on each other. Individual differences coupled with several factors such as the ineffective and untrained teacher, the lack of instructional materials, poor classroom environment, and lack of coordination with the home and community agencies have resulted in various types of reading disabilities (Tosco, 2010). Teacher's engagement in teaching methods that integrate vocabulary-oriented and reading comprehension activities improved the reading skills of the students (Tamano et al., 2016).

According to (Guthrie and Davis, 2010) many struggling readers in middle school are disengaged from reading. In addition to low achievement, these students can have low motivation for reading and reading instruction is often disconnected from content, making reading tedious. Textbooks are formidable, and students are expected to respond to text with formal criticism or outlining rather than personal reactions. Middle schools often show an increased teacher control and a curtailment of student freedom, as compared to elementary school. Finally, students are too often removed from the social support of teachers and are expected to compete rather than cooperate with each other in reading. To provide support for engaged reading, middle school teachers can use six classroom practices: they can (1) construct rich knowledge goals as the basis of reading instruction, (2) use real-world interactions to connect reading to student experiences, (3) afford students an abundance of interesting books and materials, (4) provide some choice among material to read, (5) give direct instruction for important reading strategies, and (6) encourage collaboration in many aspects of learning. Using these practices creates a context for engagement in literacy learning.

The management of reading intervention pursuit results through quality management process and continuous improvement of services and process quality towards a culture of change in the organization. This conceptual basis modified by the researchers in connection with customer focus which derived from Basic Education Sector Transformation (BEST) program. Continuous Improvement Methodology is quality management approach that is to continually assess, analyze, and act on the performance improvement of key processes focusing on both customer needs and the desired performance. This concept involves 10 stages towards attaining the process of change systematically organized for the fulfilment of the educational program (BEST-AusAid, 2016).

The total participation link with reading is enjoying while acquiring skills that encompasses the process involvement and process management which the project

focuses on instructional delivery associated with a commitment on the established and implemented a policy for the management of a reading program. According to (Lee Goss, 2008) in his study about Reading Intervention, the purpose of this study designed to implement a response to intervention techniques in reading. Teachers need to ensure that students are given a healthy, balanced diet of literacy activities. However, it is not the remit of the learning support/resource teacher to deliver all elements. Nevertheless, shared reading, the teaching of subject specific comprehension skills and vocabulary building should all be happening in the mainstream classroom or subject lesson. The task of the learning support teacher is to identify the area of greatest deficit or need on a reading process on phonic knowledge, word reading and reading fluency (Nugent, 2012).

Based on the Standardized Mac Ginitie Reading Test result given to the G7 students in English for S.Y. 2016-2017, of the 2138 total number of G7 students in General Emilio Aguinaldo National High School, 1537 (71.89%) are struggling readers. It revealed that students have poor result in vocabulary and difficulty in comprehension. The probable causes are due to limited reading materials were provided and used; longer time was used in setting instructional materials, but shorter time was allotted for discussion, and no established rules to follow during class hour.

The setting of the study consists of 8,643 students; has the fundamental goal to enhance and strengthen the future well-being of students towards the vision and mission of Department of Education. The main objective of the study is to establish a teaching reading process for struggling readers in G7 students and to improve the teaching reading process, and to decrease the number of struggling readers to 25%. When introducing any new reading strategy or concept, or a new type of text or text genre, it is best to plan a series of lessons that take students through the Gradual Release of Responsibility framework so that students can come to take ownership of the learning and begin to apply it as a part of their regular process. The study is limited only to grade 7 struggling readers in English subject from 10 sections. It includes the voice of the students regarding their needs and wants to enhance their reading skills. Moreover, the research study is also limited within the findings of the study using the 4A model in teaching and reading intervention for struggling readers and the ground basis for action plan. Particularly, it sought to answer the following questions:

Research Questions

1. What are the needs and wants of the students in the implementation of teaching and reading program?
2. What are the processes of the 4A model in teaching and reading intervention for struggling readers in G7 students?
3. What is the level of performance of the students in reading comprehension and vocabulary before and after the teaching and reading process intervention?
4. Based on the findings, what recommendations for action are to be adhered in school improvement plan for teaching and conduct of reading program in school?

Methodology

The study sought to determine the Reading program process in response to student's difficulty in understanding and reading texts among grade 7 students in General Emilio Aguinaldo National High School using mixed method of research design. The sampling method used in the study was simple random that includes 10 sections from grade 7 students. The students were initially selected regardless to the heterogeneity of the class section and the previous grades of the students. Hence, the mean average grades of the pre assessment prior to Mc Ginitie Test have no significant difference. The study used two sets of instrument: researcher made questionnaire for qualitative data which includes testimonials from teachers, students and parents and the adopted Mc Ginitie Test for quantitative data aligned to content and performance standards of the English 7 as specified in K to 12 curriculum which consists of 50 items formative type of test that is parallel to each other.

Heterogeneous sections were utilized in this study. Students were randomly selected as subject based on the collected data drawn from the focused group discussion. The study used a pre-assessment and post assessment instrument using the Mc Ginitie Reading Test. These students were exposed to the teaching and reading process. All students were engaged in a teaching and reading process. Following the 4A model in teaching English comprehension and vocabulary wherein the class start with post-test than the reading process that involves the following dimensions: activity, analysis, abstraction, and application. After the routine classroom instructional delivery, students will undergo post-test. Percentage count statistic was used to determine the needs and wants of the students and to measure the level of frustration, instructional and independent levels of the students. The results of the assessments will further conclude the significant difference between the pre-assessment and post-assessment of the Mc Giniti Test which served as the basis for an action plan.

Students were engaged on Reading Program mechanisms using Mc Ginitie Reading Tool and ABRC kit as supplementary instructional materials. The process owners handled the students involved in the study given with necessary instructional reading program and assessment. Reading process and assessments were programmed according to pilot implementation which were implemented to roll out the reading program to 10 sections prior to the implementation of action plan. After the exposure of the students to the procedural reading process that aimed to adequately attain the comprehension and vocabulary skills in the post-assessment parallel to the questions given to pre-assessment. The analysis and interpretation of data determined the significant improvement of the results and the bases for formulations of accurate statements for conclusions and recommendations.

Results and Discussion

This chapter presents the findings of the study in illustrative tables, analysis, and interpretation based on the treatment of the data. This also presents the answer to the specific research questions previously stated in the study. In this research, comprehensive analysis and interpretation of the data are shown below:

Research Question 1. Students' needs and wants in response to teaching and reading program implementation

Table 1

Struggling readers' needs and wants in the implementation of teaching and reading program

Students Needs	Response
1. Reading of English Book / Story Book	105
2. Reading using Dictionary	91
3. Study English very well	88
4. Listen and understand the teachers' discussion	55
5. Practice speaking and reading English repeatedly	42
6. Ask teacher to teach	31
7. Ask parents, siblings or friends to teach	12
8. Watch movie and shows in English	3
Students Wants	
1. Read books with pictures	99
2. Research on internet about the meanings of words in English	1 4
3. Teacher must explain and translate words with depth meaning	10
4. Ask for tutor to English Teacher	9
5. Government must provide Wi-Fi/internet to access materials	1
6. Provide Books	1
TOTAL	381

Table 1 shows the needs and wants of struggling readers in the implementation of teaching and Reading Program. The data was collected from 381 grade 7 students' response during the preliminary survey regarding students' needs and wants in the implementation of teaching and reading program in school. Based on the Focus Group Discussion (FGD), the common response of students' needs and wants were transcribed verbatim as indicated on table 1. These students were exposed in reading program for a period of 4 months or an average 16 weeks teaching delivered by the reading teachers. Based on the analysis of the gathered data, the investigation coded three categories based on students' response of their prior needs and wants. These categories underscore Instructional Strategies, Time Management and Instructional Materials.

It is very important to listen to the voice of the students which is a good avenue to help improve the teaching and reading process in response to the needs of struggling readers. It can be said that the aptitude of the students to recognize words and to understand corresponding meaning is essential in the development of students reading

comprehension skills. According to Feriña, (2010) the goal of reading instruction is to support students in becoming independent readers who can make meaning from text and analyze what they've read using evidence.

Research Question 2. Teaching and Reading Process Intervention Implemented in School for Struggling Readers

Activity

Begin a lesson with a short review of previous lesson; by setting the parameter of the lesson; with a short statement of goals or objectives and give clear and detailed instructions and explanations.

Daily Routine (prayer/greetings) for 3 minutes; Set house rules to follow for 2 minutes; Introduce the reading skill to be developed for one (1) minute; Present the vocabulary words for two (2) minutes. Motivate students by providing the purpose for each particular lesson for two (2) minutes. Remove checking of attendance and review of the previous lesson for the rest of the period.

Analysis

Teacher models how to read a text while students listen for 3 minutes and Teacher demonstrates how to answer the activity while students observe for 3 minutes. Teacher asked motive question 1, Getting feedback from students, Teacher asked motive question 2, Getting feedback from students, Teacher asked questions about Music listened and getting feedback from students.

Abstraction

The teacher invites and guides the student in reading along with her for seven (7) minutes while students read along, and read aloud. The teacher listens to the process and corrects mistakes while students read and answer the activity questions for eight (8) minutes, Teacher guides the students in answering the questions. Removed Setting of Instructional Materials, Daily Routine (prayer, attendance), Review Audio-Visual Presentation, Processing of video viewed, Background of the story and Author's Background, Vocabulary Activity Checking of Answers, Viewing of the Story and other important details of the story viewed.

Application

Teacher distributes the reading text for tow (2) minutes. Students read the text for 3 minutes. Students answer the questions at the end of the story for 6 minutes. The teacher provides help, support, and encouragement. Removed Teacher asked a question on a real-life situation and getting feedback from students.

The 4A model is a learner-centered teaching and reading strategies accompanied with the delineation of duties and responsibilities of reading teachers in the reproduction and enlargement of answer key and, construction of structured lesson plan. The 4A model instructional strategy fosters students' potential to engage and able to maximize their time in the activities. It also provides an avenue for the students to collaborate with their classmates and ignite confidence and motivation among grade 7 struggling readers. The

enriched teaching-reading practices increase the engagement in a child-friendly Reading Program which improves learners' reading skills and performance outcomes. The development of a learning-centered Reading Program Model captured the quality of attributes of the Reading Programs among performing public schools (Espedido, 2015). According to Logatoc (2017) when fluency increases, comprehension increases. Therefore, vocabulary and comprehension are fundamental skills to develop instructional and independent readers in consonance to the 4A model in teaching-reading process.

Research Question 3. Index of Mastery of students in reading comprehension and vocabulary before and after the teaching and reading process intervention

Table 2

Frustration Level, Instructional and Independent Levels of Grade 7 Students in Reading

Section	Level	Pre-Test	Post-Test	Increase/Decrease
Cosmos	Frustration	96.15	78.18	17.97%
	Instructional and Independent	3.85	21.82	
Santan	Frustration	96.49	73.33	23.16%
	Instructional and Independent	3.51	26.67	
Veronica	Frustration	81.67	73.91	7.76%
	Instructional and Independent	18.33	26.09	
Waling-waling	Frustration	96.61	81.63	14.98%
	Instructional and Independent	3.39	18.37	
Lily	Frustration	96.15	83.02	13.13%
	Instructional and Independent	3.85	16.98	
Camia	Frustration	98.11	95.74	2.37%
	Instructional and Independent	1.89	4.26	
Zinnia	Frustration	96.30	89.80	6.5%
	Instructional and Independent	3.70	10.20	
Azalea	Frustration	95.08	59.65	35.43%
	Instructional and Independent	4.92	40.35	
Daffodil	Frustration	96.77	86.84	9.93%
	Instructional and Independent	3.23	13.16	
Everlasting	Frustration	94.55	86.05	8.5%
	Instructional and Independent	5.45	13.95	
	Overall Performance Percentage			13.97%

Table 2 presents the frustration level, instructional and independent level of Grade 7 students in reading. Based on the percentage obtained between the pretest and posttest of the 10 sections, it can be noticed that the overall performance percentage of the students in reading was improving with a decrease of 13.97% in frustration levels and increase of 13.97% in instructional and independent levels, though, the performance of the 10 sections were in varying percentage This implies that the reading program foster a positive impact on students' comprehension and vocabulary. Although, the increase of percentage is very minimal, it can be surmised that the exposure of the students in the program should be reading teacher must assure that struggling readers are exposed consistently in the program process. However, introducing clear and attainable goals for every reading lesson make reading purposeful and meaningful. Besides, providing appropriate reading materials to the level of the students and applying guided learning assure progress in learning. On the other hand, being tactful and understanding, firm but not critical in guided teaching warrant a learning atmosphere and most of all. In implies that while introducing clear and attainable goals for every reading lesson make reading process purposeful and more meaningful experience. Hence the reading strategy improved better the performance of the learners. Many instructional project pertaining to reading program claim that their strategies and approaches with or without the aid of technology deemed to be effective interventions in enhancing students' reading abilities in word recognition skills, vocabulary skills, and comprehension skills which helped improve the students' academic performance in English.

According to Regalario, (2017) the availability of reading and viewing materials affects the performance in academic writing. Villones, (2017) stressed that the uniqueness in contents and simplicity of the computer aided instructions and E-reading materials are proven effective instructional tool to meet individual needs as preferences of non-readers and to enhance teaching-reading process. Reading behavior and level of comprehension are not significant, the fact that reading enhanced the way student think as well as developed inclination towards pleasure to reading (Luna and Pimentel, 2017).

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. Reading text, story books with pictures illustrations, and use of dictionary are the primary needs and wants of the students.
2. The 4A Model: Activity, Analysis, Application, and Abstraction is effective strategy that maximize collaboration, confidence, and motivation.
3. Listening to the voice of the struggling readers helps improve the teaching and reading process in the classroom.
4. The provision of appropriate instruction reading materials to the level of the learners and applying guided instructional learning strategies allow an engaging learning experience and ensure the progress of struggling readers.

Recommendations

Teachers, by nature, should maximize the impact of a reading program in the classroom and designing innovative pedagogical approach, mainstreaming the 21st-century skills, engaging environment, and empowered quality teaching practices aligned with the goals of the curriculum maximizing student educational outcomes.

Based on the preceding findings and conclusions, the following recommendations are meant to enhance the present study:

1. Teachers should show enthusiasm and ensure quality of delivery in utilizing the 4A model and provide any available reading materials needed to facilitate reading class.
2. The period of the study in using the ABRC kit instructional materials must be incorporated throughout the school year to complement the content and performance standards set for grade 7 English competencies.
3. Provide ample time to expose students on Reading Program, establish time.
4. Management in planning teaching and reading intervention for struggling readers.
5. Set classroom ground rules in Reading Program that motivate students to respond to the intervention.
6. Students must develop intrinsic motivation to be proactive in the Reading Program instructions given by the reading teachers.
7. Provide consistent timely monitoring on teaching and Reading Program and check the students learning progress.

Table 5.

Action Plan

Area of Concern	Objectives	Actions to be Taken	Expected Output	Responsible Person for the Action	Time line	Resources
Reading Materials	* Evaluation of the number of Instructional Reading Materials * Reproduction of reading materials and answer keys	Evidence-based interven-tion provision of establish-ed and improved reading process	* Checklist/ Inventory of reading texts * Complete copy of reading materials	Head Teacher and Reading Teachers	December 13, 2016 January 12, 201	School Fund,

Prepara-tion of SIMs	Enlargement of answer keys * Preparation of reading class schedule * Construction of structured lesson plan	Structured lesson plan explicitly allocates time frame for particular discussion and facilitate reading class	* Two copies of enlarged answer keys * Reading class schedule * Structured lesson plan	Head Teacher Reading Teachers	December 16, 2016 January, 2017	School Fund,
House Rules, Duties and Respon-sibilities	* Duties and Responsibili-ties * Orientation of reading teachers * Delineation of duties and responsibilities * Monitoring	Identify specific class-room problems to address and suggest preven-tive strategies and address student needs	* Copy of reading process * Copy of duties and responsibilities * Routinely Standards	CI Team Head Teacher	December 12, 2016	School Fund,
Manage Progress and Monitor-ing	Consistently provide and maintain timely feedback and monitoring on students learning progress	Consistently monitor teachers manage-ment in Reading Program Instruction	100% of the teachers should be able to manage efficiently and effectively their teaching and Reading Program Instructions * Monitoring Checklist	EPS, Principal, Head Teacher, Master Teacher, Teachers, Parents, Students	Whole Year Round	School Fund Dept. Fund Personal

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IMPLEMENTATION AND FIDELITY OF INTERVENTIONS FOR STUDENTS-AT-RISK OF DROPPING OUT IN PUBLIC SECONDARY SCHOOLS

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Abstract

Dropout rate is the most important priority area in school improvement plan. Hence, education for all ensures access to quality education toward no student left behind. The research endeavored to assess the level of implementation of interventions for students-at-risk of dropping out in public secondary junior high school during the school year 2017-2018. Descriptive research design in which the primary gathering instrument was researcher-made questionnaire validated by experts, documentary analysis and unstructured interview were employed in the study. It involved school heads, department heads, guidance personnel, teachers, and students-at-risk. Frequency count, percentage, and mean statistics were used to analyze and interpret the data. Findings revealed that: (1) students' demographic profile are somehow determinants that influence students-at-risk; (2) the respondents perceived the guidance and counselling, peer counselling, home visitation service, and after-school as highly implemented and are essential components in the management of prevention, intervention, and support strategies; and (3) inclusive interventions promote social fairness and equal opportunity, and engage students-at-risk in proactive and constructive activities geared towards building strengths and character. The commitment, capacity building and instructional delivery of school personnel reflect a high fidelity which comes from their resiliency in such culture. A profound fidelity is essential to strengthen family engagement, explicit provision of training, adequate essential resources, and an empowered multi-disciplinary team and community support to implement the different intervention and support programs for students-at-risk.

Keywords: Students-at-Risk, Secondary Level Interventions, Level of Implementation, Fidelity

Introduction

Education has always been strongly viewed as a pillar of national development and a primary avenue for social and economic mobility (Education for All and Millennium Development Goals, 2015). The 1987 Constitution, likewise, guarantees that the state shall protect and promote the right of all citizens to quality education at all levels and shall take appropriate steps to make education accessible to all. The right of every Filipino to quality basic education is further emphasized in Republic Act 9155 or the Governance of Basic Education Act of 2001.

Philippine education has been dogged with issues of high dropout rates, high number of repeaters, low passing grades, lack of particular language skills, failure to adequately respond and address the needs of students with special needs, overcrowded classrooms, and poor teacher performance (EFA, 2015). Learners-at-risk display certain easily identifiable characteristics, some of which are demographic and some of which are related to their performance in school (Burrus, 2012). Study shows the following causes of the occurrence of students-at-risk in school: (a) low socioeconomic; and (b) students' unstable situations regarding personal, health, physical, social, and psychological circumstances. Most often, students considered at-risk show persistent patterns of underachievement that leads to their failure to finish high school. They are identified as students who are with learning difficulties, unable to make adequate progress, struggling from typical instruction, low performing, and prone to failure. These problems, in turn, result in a considerable number of illiterate Filipinos and out of school youths and graduates who are not prepared to work.

The extent to which an intervention program is delivered in adherence to its design features has been labelled as treatment fidelity and has been identified as a critical element of intervention programs (Zirkel & Thomas, 2010). Lack of implementation fidelity of intervention remains a challenge in program implementation that might result in a practice that is less effective, less efficient, or producing less predictable responses and can weaken outcomes (Hagermoser and Kratochwill, 2011). Some signs that intervention fidelity is interfering with the effectiveness of the intervention include the following: (a) lack of data regarding implementation, (b) lack of progress monitoring data of outcomes, (c) lack of data indicating the intervention is rarely implemented with integrity, (d) lack of training has not been provided regarding correct implementation, and (e) lack of continuous intervention program implemented properly (Kovaleski et al., 2013). There is also lack of efficacy and of systematic approach on the part of principals' and teachers' understanding about effective teaching strategy for students with difficult behaviour (Kelly, 2010). Therefore, it is imperative to assess the degree of fidelity to interventions to which intervention is empirically supported, and understand beneficial adaptation that highlights the potential strategies that could be used to address learners-at-risk prone to dropout. Fidelity is the extent to which the delivery of an intervention adheres to the program model originally developed (Kaye, 2011).

As a response to these demands to provide access and quality education, the DepEd implemented the Dropout Reduction Program (DORP) through DepEd Order No. 74, s. 2010. This program deems to decrease dropout rates and increase participation rate and improve learning outcomes using formal, non-formal, and informal methods in many schools across the regions with the overarching goal to contribute to the achievement of better-quality performance indicators in basic education. The provision of DepEd Order No. 18 articulates that the intervention and support program mechanism aimed at reducing delinquency among students, including learners and out-of-school-youth is implemented within the general education classroom. It provides a process by which students may be identified to receive special education and related services according to students' needs. In all stages of the process, the school head is informed of the cases and actions taken involving the students-at-risk which include reporting and

gathering of information, profiling and initial risk assessment, development of intervention plan, and implementation.

The Schools Division Office of Imus City has five secondary junior high schools with a total population of 22,054 students, school year 207-2018. Despite adherence to the intervention policy and protocols embedded in schools to reduce the dropout rate and improve participation rate, still the current status of learners-at-risk constitutes 6.04 percent of the total population in secondary junior high school level (Division Records Unit). To eradicate the causes being at-risk and prevent students from dropping out and the need to address student-at-risk, schools have implemented the different components of the levels of intervention in various mechanisms such as: youth development program, values formation program, health and nutrition program, guidance and counselling, peer counselling, home visitation, after-school program, alternative learning system, home study program, and accreditation and equivalency program. The program provides coping mechanisms for learners during hostilities, aims to facilitate access of every student to quality basic education, and equips the student with the basic literacy that is essential for their growth and development in all walks of life. Moreover, schools need to adopt multifaceted intervention programs, sustain the consistency and culture of responsiveness. It is in this context that the researcher conducted the study, to describe the level of implementation and the extent of fidelity of secondary level interventions which is considered critical factor that contributes to the successful implementation of a program. Thus, this study is geared towards the reinvigoration and building of evidence-based best practices that will serve as a guide to school in the management of intervention and support program for at-risk students towards continuous improvement of quality education inclusive for all.

Conceptual Basis of the Study

The study is anchored on DepEd Order No. 18, series 2015, also known as Department of Education Guidelines and Procedures on the Management of Children-At-Risk (CAR) and Children in Conflict with Law (CICL) which is associated with the degree to which the intended guidelines and procedures of the management of intervention are implemented is the extent of implementation fidelity achieved for a particular intervention. Fidelity of implementation is predetermined to ensure that intervention and support program practices are integrated and sustain the framework and benefit to increase program credibility, consistency, positive student outcomes, and intensified staffs' and stakeholders' support. Hence, the more clearly the core components of an intervention program are defined, the more readily the practice can be implemented successfully (Center for Innovation and Improvement, 2011).

The intervention program runs in a continuum and is not linear, providing services to struggling learners at increasing levels of intensity. The levels are not hierarchical but interlinked to address circumstances of students-at-risk. The program has three major level of interventions found to be effective to address at-risk learners in school. Thus, the

provision of the three levels of intervention substantiates within the fidelity of intervention implementation of the different prevention, intervention, and support strategies in schools.

Statement of the Problem

Currently, there are different prevention, intervention, and support program practices implemented in the public schools that respond to the needs of at-risk students to foster meaningful academic and behavioral outcomes. Owing to this needs, the study aimed to determine the level of implementation and extent of fidelity of secondary level interventions for students-at-risk of dropping out in secondary junior high school in the Schools Division office of Imus City.

Specifically, the study sought to answer the following questions.

1. What is the demographic profile of the students-at-risk in terms of:
    a. Sex,
    b. Age,
    c. Grade Level,
    d. Siblings' Position,
    e. Parents' Educational Attainment,
    f. Parents' Civil Status,
    g. Parents' Occupation, and
    h. Parents' Monthly Income?
2. What are the perception of the respondents on the level of implementation of secondary level interventions among the different group of respondents:
    a. School Head and Department Heads,
    b. Guidance Personnel,
    c. Teachers, and
    d. Students?
3. What are the perception of the school personnel on the extent of fidelity of secondary level interventions in terms of:
    a. Commitment,
    b. Capacity Building, and
    c. Instructional Delivery?

Methodology

Research Design

A descriptive method of research was used in the study which involves the description, interpretation, synthesis, and analysis of the data gathered. Descriptive research may be defined as a purposive process of gathering, analyzing, classifying and tabulating data about prevailing conditions, practices, beliefs, processes, trends and then making an adequate and accurate interpretation about the data with the aid of statistical methods (Calderon and Gonzales, 2012).

Population and Sampling

The study was conducted in the Schools Division Office of Imus City, wherein samples of the study were drawn from five junior public secondary schools. The respondents of the study were composed of school heads, department heads, guidance personnel, teachers, and students respectively. The number of participants were determined using the proportional stratified random sampling procedure based from the total population of the five secondary schools who were involved in the intervention program. The total respondents from teachers and students was computed using Slovin's formula with .05 margin of error, while the total samples from school heads, department heads and guidance personnel were computed at 100% sample size and total enumeration of students-at-risk referred by the guidance office.

A total population of 357 respondents were involved in the study from five junior public secondary schools with a sample size of 186 teachers and 143 students from different department and grade levels. It also involved 16 school heads and department heads and 12 guidance personnel. The students' respondents were based on the guidance record and advisers report on students-at-risk across grade level per school.

Research Instrument

The study used two sets of descriptive type researcher-made questionnaires and applied documentary analysis. Cohen et al. (2011) described survey questionnaire as a systematic collection of data to scan an extensive field of concerns, behavior of population, and programs in order to describe any comprehensive status. There were sets of a questionnaire that was used. A researcher-made type of questionnaire was utilized in the study. One set for school heads and department heads, guidance personnel and teacher-respondents, and set two was intended for the student-respondents that were validated and translated in a native or Tagalog language. The questions that were used in the two sets of questionnaire depended on the data needed that was collected from the four groups of respondents in order to draw the data appropriately for each particular group of respondents in accordance to the problem statements.

The documentary analysis was applied in the study in order to interpret the pertinent documents that was reviewed in the conduct of the study. Among the documents that were analyzed were taken from the information obtained in the action plan, work plan, narrative reports and activity or program completion reports with regards to the implementation of the secondary level interventions and support program practices for students-at-risk found in the school records. Unstructured interview was also conducted in the study in order to gain additional needed information to support the documents and findings of the study.

Validation of an Instrument

The validation of instrument and data gathering procedure of the manuscript is part of a graduate school thesis.

The instrument went evaluative validation from educational experts who were determined by the College of Education Graduate Studies Professor of De La Salle University-Dasmariñas. The research questionnaire protocol was reviewed by the institutional ethics review committee for informed consent and was approved for the implementation of the study.

Data Gathering Procedure

The researcher secured a permit from the university research office to formally start the data gathering to five secondary schools in the Schools Division Office of Imus, City. A letter was presented to the office of the Schools Division Superintendent of the Schools Division Office of Imus City for approval and permission to conduct research study data gathering in the five secondary schools. The researcher was endorsed to the guidance office to organize the administration of the survey questionnaire. An orientation regarding the conduct of the study was given to the guidance personnel, an informal or unstructured interview regarding the conduct of the different intervention program practices. The researcher requested the necessary documents such as anecdotal records, work plan, action plan, and the narrative report obtained from the guidance office pertaining to the different activities in the conduct of intervention and support programs. With the help of the guidance personnel, the survey questionnaire was turned over to the guidance personnel and was distributed to the advisers of the target students-at-risk identified in the study. Together with the adviser and students, they were asked to answer the questionnaire in their free time and at their most convenient time in order to answer the survey until all the details completed. The duration of answering the research instrument took one week for the school personnel and two weeks to one month waiting time to retrieve all the survey questionnaire for the students. The pertinent documents were analyzed thoroughly to answer the research questions. The study secured a prior and informed consent from the parents of the student-respondents to participate in the study, confidentiality of the documents, and anonymity of the respondents as well as the validity of the questionnaire were considered.

Statistical Treatment of Data

Frequency and percentage count were used to determine the distribution of student respondents in terms of the demographic profile such as sex, age, grade level, siblings' position, parents' educational attainment, parents' occupation, parents' civil status, and parents' monthly income. Mean was used to determine the level of implementation of the four groups of respondents on the different components of secondary level interventions. It was also used to measure the fidelity of intervention

implementation in terms of commitment, capacity building and instructional delivery of the school personnel. The researcher used a five-point Likert Scale to determine the respondents' perception on the extent of implementation of the secondary level interventions. To determine the data on the extent of implementation of the different components of secondary level interventions, the study used a 5-point Likert Scale with the following verbal interpretation: 1 – Not Implemented/Never Practiced, 2 – Less Implemented/Sometimes Practiced, 3 – Fairly Implemented/Seldom Practiced, 4 – Highly Implemented/Usual Practiced, and 5 – Very Highly Implemented/Always Practiced. To analyze the extent of fidelity of interventions, Likert scale was used to describe the data with the following verbal interpretation: 1 – Not Consistent, 2 – Less Consistent, 3 – Fairly Consistent, 4 – High Consistent, 5 – Very Highly Consistent.

Results and Discussion

Demographic Profile of Students-at-Risk

Seventy-five (75) or 52.45% of students-at-risk are males and 68 or 47.55% females. Majority of students-at-risk are in 15-16 years of age with a percentage of 53.15%. According to grade level and sibling's position, 72 or 50.35 % of them are grade 10 students and most of the student-at-risks are the eldest sibling which is composed of 54 or (37.76%). Most of the parents of the students-at-risk are high school graduates which is composed of 61 or (42.66%) mother, 53 or (37.06%) father. More than half of the parents of the students-at-risk are married with 60.14%. In terms of parents' occupation, 69 or (48.25%) are just plain housewives, while there are only 3 fathers who are simply household father. Majority of the father are private company employee which is composed of 72 or (50.35%), while 31 or (21.68%) are private employee mother. 29.37% of the parents' income range is as much as 10,000 to 15,000 pesos and another 25.87% of them have 5,000 below to 10,000 pesos income range.

Diloy (2015) asserted that most of the students who need social support belong to grades nine and ten. Travers (2017) stated that birth order is considered by some researchers and psychologists to be one of the most powerful influences on personality, along with genetics, gender, temperament and parenting styles. Sibling position is not the only influence on personality formation, but it is an important consideration (Butterworth, 2015). Socio-economic status, parental education attainment, family size, family structure or marital status, income range and parental involvement affect the academic performance of the learners and have a positive influence on student's academic potential, achievement, and behavior (Kocakaya, Gonen, and Makewa et al., 2012, Salazar and Blanco, 2017).

Table 1:

Level of Implementation of the Secondary Level Interventions

Components	School Heads and Department Heads		Guidance Personnel		Teachers		Students		Composite Mean	Verbal Interpretation
	Mean	VI	Mean	VI	Mean	VI	Mean	VI		
Secondary Level Interventions										
Guidance Counselling	4.08	HI	4.54	VHI	4.34	VHI	3.83	HI	4.20	HI
Peer Counselling	4.08	HI	4.30	VHI	4.43	VHI	4.21	VHI	4.26	VHI
Home Visitation Service	3.88	HI	4.27	VHI	4.31	VHI	3.85	HI	4.08	HI
After-School Activities	3.79	HI	4.31	VHI	4.18	HI	3.76	HI	4.01	HI
Composite Mean	3.96	HI	4.36	VHI	4.32	VHI	3.91	HI	4.14	HI

Legend: *4.21-5.0 - Always Practiced//Very Highly Implemented (VHI), 3.41-4.20 - Usual Practiced/Highly Implemented (HI), 2.61-3.403 - Sometimes Practiced/Fairly Implemented (FI), 1.81-2.60 - Seldom Practiced/Less Implemented (LI), 1.00-1.80 - Never Practiced/Not Implemented (NI)*

Table 1 shows the summary result of each component under the secondary interventions. It can be noted in the table that the computed composite mean is 4.14 which is described as highly implemented. Based on the ratings given by the guidance personnel and teachers, the means were computed as 4.36 and 4.32, which are interpreted as highly implemented. However, school heads and department heads and students rated the secondary interventions as highly implemented with corresponding means of 3.96 and 3.91. Meanwhile, as reflected in the table, peer counselling (mean=4.26) is very highly implemented while guidance and counselling (mean=4.20), home visitation (mean=4.08), and after-school activities (mean=4.01) are highly implemented in schools.

The results above were supported by the data gathered from the different existing documents prepared and interview from the school personnel in the five secondary junior high school pertaining to the implementation of secondary interventions and support program practices for students-at-risk of dropping.

Secondary Intervention Practices

All secondary schools' guidance personnel conduct individual counselling and involve parents or guardians in orientations about guidance and counselling services. Teachers are able to manage students' habitual absences and tardiness through progress and monitoring report. School personnel also facilitate students with special needs to prescribed service providers through diversion program. Guidance personnel, supreme students organization, and their advisers facilitate peer counselling support and mediation activities on bullying, illegal use of substances, early pregnancy, conflict resolution, anxiety, and anger management. As mentioned in DepEd Order No. 18, teachers are able to home visit students-at-risk based on risk assessment of such circumstances encountered. It implies that teachers provided students-at-risk with supplementary learning materials during home visitation, but not all of the them were visited at home, maybe, teachers' personal point of view and somehow reluctance to conduct home visitation. This action is an indicator that there is a need to intensify teacher-parent-community collaboration to address students' academic and behavioural circumstances. Schools will likely experience successes and failures as they move forward with the implementation of secondary interventions.

The five secondary junior high school provides remedial class for students-at-risk. Mentoring and tutorial activities are conducted inside faculty room, laboratory room, and sometimes in the hallway. In one way or another, students are engaged to relevant extra-curricular activities and teachers facilitate students'-at-risk progress and monitoring based on attendance and performance records obtained by the adviser. Several students are referred to Department of Social Welfare and Development (DSWD) for intensive intervention and support program, however, some of them refuse to stay at the center and prefer to stay at home where home study program occurs. It denotes that extensive school-community capacity building activities should empower stakeholders to actively participate in intervention program.

The findings presented in the preceding discussions revealed that secondary interventions are preventive and targeted in nature stipulated in the policy declaration. The strategies of interventions are essential at this level to ensure that school personnel and students are actively involved in the protocol. It implies that these interventional mechanisms strengthen school support system towards students' holistic development. It may manifest that students are responsive and benefiting from the different intervention given to them. The practice of high quality intervention among targeted students-at-risk can maximize student achievement and reduce behavioral and academic problems in school.

Secondary interventions are specifically designed to meet the needs of students who continue to have difficulties after the implementation of the primary interventions (Menzies and Lane, 2011). (Co, et al., 2016 and Sungahid, 2016) reiterated that early intervention strategies for policy improvement help to reduce dropout rates and improved the school retention and rate and students' performance. The potential for enhanced student outcomes makes this a worthy undertaking (King et al., 2012). As mentioned by Kremer et al., (2014), secondary interventions mobilized by teachers are used to prevent adverse outcomes, decrease risks, or improve functioning with at-risk youth in several areas, including academic achievement and behavioral problems, socio-emotional functioning, school engagement and attendance. Kelly (2010) stressed that the school-wide implementation of intervention programs emphasize the creation of programs that support the adoption and resilient implementation of evidence-based practices and procedures that are adequate within enduring school reform initiatives. The construction of a school-wide prevention program facilitates literacy development that provides high quality explicit instructional strategies for at-risk students (Choi et al., 2012). Result of the current study is in consonance with Diloy (2015) that school personnel have full knowledge of the school programs regarding safety and violence in school. The emerging emphasis on management to intervention initiative is being made to link behavioral support and academic support together into a shared problem solving approach with greater emphasis on prevention and support mechanisms.

Table 2:

Extent of Fidelity of Interventions

Components	School Head and Department Head		Guidance Personnel		Teachers		Average Mean	Composite Mean
	Mean	VI	Mean	VI	Mean	VI		
Commitment	3.90	HC	4.17	HC	4.25	VHC	4.11	HC
Capacity Building	3.59	HC	4.23	VHC	4.18	HC	4.0	HC
Instructional Delivery	3.84	HC	4.31	HC	4.25	VHC	4.13	HC
Composite Mean	3.78	HC	4.24	VHC	4.22	VHC	4.08	HC

Legend: *4.21-5 - Very Highly Consistent (VHC), 3.41-4.20 - Highly Consistent (HC), 2.61-3.40 - Fairly Consistent (FC), 1.81-2.60 - Less Consistent (LC), 1.00-1.801 - Not Consistent (NC)*

Table 2 unveils the summary of each component on the fidelity of intervention implementation of the different intervention and support program practices. The computed composite mean of 4.08, interpreted as highly consistent, was the result given by the school personnel. Based on the given ratings of the guidance personnel and teachers, the means were computed as 4.24 and 4.22, which are interpreted as very highly consistent. On the other hand, the computed mean of 3.78 or highly consistent was the mean given by the school heads and department heads. Likewise, the table also shows the means of the three components of fidelity of interventions implementation. Commitment got a mean of 4.11; capacity building got a mean of 4.0; and instructional delivery got a mean of 4.13.

The results above show that the fidelity of interventions across the implementation of various secondary level intervention and support program practices are consistently satisfies the group of respondents.

Resilience across Fidelity

Apparently, school personnel promote the right of all students to quality education at all levels of intervention, both in academic and in behavioural dimensions. Despite limited facilities intended for students-at-risk, there is still the resilience of the school personnel to provide safe learning environment in conducting the intervention activities through scheduled remedial activities according to students' needs and interest. High fidelity of interventions implementation initiatives increases the efficiency of the intervention and support program practices. The fidelity of the secondary level interventions and its successful implementation needs striving intent to overcome barriers towards attaining inclusive education for all. It implies that intervention, prevention, and support program practices are conjecturers of program effectiveness. However, unresponsive on the part of the students to the particular intervention given to them might hinder the success of the program.

The components of effective interventional practices influence the probability of success towards continuous improvement of services. Bell (2009) stressed that a highly consistent fidelity assessment will identify specific components of program implementation that has extreme effect on outcomes. Educators who have a clear vision about where they are going are largely in line with their basic values, allowing them to be involved and motivated in their work (Centeno, 2013).

One most important element in the success and sustainability of intervention program is the commitment of school personnel who are the primary movers of the program (Coffey and Horner, 2012). Skilled leaders who can build high-performance cultures that attain measurable results make everyone around them successful, including teachers and support staff which encourage improvement in all aspects of leadership and building capacity for sustained improvement (Kirtman, 2012). Underlying the policy implementation of program components is the interconnectedness of strategies in optimizing and standardizing fidelity through the quality of delivery, program

differentiation, adherence, responsiveness, monitoring, feedback, and training. The higher the level of implementation fidelity, the higher the level of achieving outcomes (Carroll et al., 2007; Mellard, 2009; and Bell, 2011). Research that advances the understanding of the processes needed to maintain implementation fidelity will be a critical step toward creating sustainable interventions (Breitenstein et al., 2010).

Conclusions

Regardless of determinants that influence students-at-risk, the secondary level interventions are preventive and protective in nature and student needs-specific and age-appropriate interventions that require the active engagement of the students and involvement of the family including the community as an essential support system to ensure and achieve better results. The secondary level interventions are inclusive which promote social fairness and equal opportunity, and engage students-at-risk in proactive and constructive activities geared towards building strengths and character.

The components of secondary level interventions were highly implemented in schools in varying degree. It is apparent to the drivers of the implementation of intervention and support programs for students-at-risk who requires a deliberate, intentional and well-planned initiatives on the part of school personnel at the school level to make the process work are benefit to serve students in need of academic and behavioral support services consistently without compromising the policy. However, the true challenge lies on ensuring that school personnel is trained, creating adequate conducive facilities, extensive school-community capacity building activities, prepared and properly focused on doing what is necessary to implement the intervention, prevention, and support program according to students-at-risk needs.

Seemingly, school personnel appear to be highly consistent with their fidelity of intervention differently. Hence, the consensus of implementation fidelity of interventions needs to be systematically assessed because it remains to be the best concern to determine the implementation of the program proceeds as intended by policymaker towards continuous improvement with fidelity across the different components of secondary interventions.

Recommendations

1. Proactively involve students and parents in every aspect of the implementation of secondary interventions through a collaborative and extensive school-community capacity building activities to be done twice every quarter.
2. Strengthen the implementation of the youth development activities, values formation activities, and health and nutrition program through nurturing sustainable awareness on pressing issues about personal, physical, health, social, and emotional dimensions.

3. School personnel should proactively engage on the procedures in the implementation of interventions for students-at-risk of dropping out with regards to reporting and gathering information, profiling and initial risk assessment, intervention plan, protocols, monitoring system, corrective feedback, and decision making through systematic delegation of duties, roles and responsibilities

4. Intensify the provisions for training, seminar, coaching, mentoring, and coordination of school personnel and ensure that every student receives the right intervention at the right level for the right duration of time to produce the right result equitable to uniformity, consistency, and quality of delivery of the fidelity of secondary interventions.

5. Allocate adequate financial resources for the establishment of essential learning materials and conducive intervention facilities for sustainable development of the implementation of various prevention, intervention, and support program practices.

6. Establish an active multi-disciplinary teams or technical working groups that will focus on gathering adequate documents, extensive planning of activities, monitoring, and evaluation of outcomes of the implementation of the different prevention, intervention, and support program mechanisms.

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EFFECTIVENESS OF SUPPLEMENTARY MATERIAL IN STATISTICS AND PROBABILITY FOR SENIOR HIGH SCHOOL IN THE DIVISION OF IMUS CITY, CAVITE

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Abstract

Statistics is one of the major subjects taught in educational institutions not only in the Philippines but also in the entire world. Statistics is typically portrayed in national documents as a dynamic expanding field of study, in contrast to other views that define this as a static discipline with a known set of concepts, principles, and skills. They say that to know and to understand statistics is to be able to detect patterns in complex and obscure contexts, to transform relations among patterns, to use the language of patterns and to employ knowledge of patterns for various practical purposes.

The study utilized the descriptive survey design for the acceptability of the material. This approach is appropriate wherever the object of any class vary among themselves and one is interested in knowing the extent to which different conditions obtain among these objects. The word survey signifies the gathering of data regarding present conditions. A survey is useful in: (1) proving the value of facts, and (2) focusing attention on the most important things to be reported. For this, the researcher wants to determine the Acceptability of the Enrichment Activity Material in teaching and learning Statistics and Probability for Grade 11 students in relation with the following factors, objectives, content, language and style, presentation, usefulness, evaluation, illustration, and activity.

The salient findings of the study are as follows:(1) the acceptability of the supplementary statistics and probability workbook for Grade 11 is acceptable;(2) there is a significant difference between the pretest and posttest of the students who used the supplementary material; (3) there is a significant difference between the pretest and posttest of the students who did not use the supplementary material; (4)there is no significant difference on the pre-test between the group who utilized the material and who did not utilize the material; (5) there is a significant difference on the post-test between the group who utilized the material and who did not utilize the material.

Introduction

Statistics is more important than jobs. It transcends and it does not need them. Statistics is not necessary, but it is sufficient.

Educators today should help students acquire competencies and skills that make them capable of reacting satisfactorily to problem situations. Learners should be helped to become “highly qualified men, greatly flexible, and capable of resolving problems that are presented to them.

Statistics is one of the major subjects taught in educational institutions not only in the Philippines but also in the entire world. Statistics is typically portrayed in national documents as a dynamic expanding field of study, in contrast to other views that define this as a static discipline with a known set of concepts, principles, and skills. They say that to know and to understand statistics is to be able to detect patterns in complex and obscure contexts, to transform relations among patterns, to use the language of patterns and to employ knowledge of patterns for various practical purposes.

One of the concerns in the field of statistics is the ‘way it is taught’. Many students, both in primary and in junior and senior high school levels, perceive that Statistics is a very difficult subject. Furthermore, most of them have a negative view about the subject. One factor that contributes to this anxiety is the teacher’s lack of preparation to teach Statistics. The classroom teacher’s concept of statistics has a large impact on the way in which statistics is being delivered inside the classroom (Mc Mahon/Mc Mahon, 2012).

Other factors include the methodologies used in teaching and the curriculum in Statistics. Methodologies and the curriculum should be improved from time to time to fit the present day educational standards. The key to an effective curriculum is its ability to make adaptive changes in the profession; some of the elements of an effective school curriculum include appropriate structure and function, as well as the ability to enact changes and to monitor quality standard excellence, relevance and equity of an education program.

Another factor is the lack of instructional materials to be used for teaching and learning statistics. In our 21st century, learners must not be deprived to their right in an improved material that they can be used in their everyday learning of statistics.

These notions among learners about statistics, particularly the last, led to the conduct of this study to make an enrichment material in teaching and learning statistics. It is deemed not only to use a material given by the support of our government but also timely to make an instructional material to improve their conceptual understanding about random variables, probability distributions, normal distribution, sampling and sampling distribution, estimation of parameters, conducting hypothesis testing and correlation and regression analysis.

Research Design

The researcher used a descriptive survey design for the acceptability of the material. This approach is appropriate wherever the object of any class vary among themselves and one is interested in knowing the extent to which different conditions obtain among these objects. The word survey signifies the gathering of data regarding present conditions. A survey is useful in: (1) proving the value of facts, and (2) focusing attention on the most important things to be reported. Since, the researcher wants to determine the Acceptability of the Enrichment Activity Material in teaching and learning Statistics and Probability for Grade 11 students in relation with the following factors:

1. objectives; 2. content;3. language and style; 4. presentation; 5. usefulness;

6. evaluation; 7. illustration; and 8. activity.

The researcher used a questionnaire by Rebecca M. Roxas as his measuring instrument in gathering and collecting data. Each item in the questionnaire may be rated according to five levels to be chosen by the subjects or respondents namely, 5, Very Much Acceptable (VMA); 4, Much Acceptable (MA); 3, Fairly Acceptable (FA); 2, Poorly Acceptable; (PA) and 1, Not Acceptable (NA). The *weighted arithmetic mean* is the statistical tool used to determine the Acceptability of the Enrichment Activity Material in Teaching and Learning Statistics and Probability for Grade 11 students.

From the data gathered, the researcher tabulates, analyzes, and interprets the data. Then, he proves the facts gathered are of value to the researcher and to the Mathematics teachers in general. The researcher should then focus his attention to the least acceptability factor/s.

For the effectiveness, the researcher used an Experimental design. Selection of respondents per group was accomplished using the simple random sampling without replacement technique to avoid bias. The researcher divided the samples into half and classify them to two groups. First group was a class with the utilization of the enrichment material and the other group was a class without the utilization of the enrichment material. In order to control the extraneous variables, the experiment was conducted using two rooms both conducive to learning. After the semester, the researcher gives a post assessment to both groups. Data gathering from their scores will reflect the mean scores per group. From the data gathered, the researcher tabulates, analyzes, and interprets the data.

Research Questions

The main problem of this proposed study will be to determine the acceptability of an enrichment material in teaching and learning statistics and probability for Senior High School. Specifically, the study has answered the following research questions:

1. How acceptable is the supplementary enrichment activity in teaching statistics and probability for Grade 11 students as assess by the school administrators, department heads and teachers in terms of: objectives, content, language and style, presentation, usefulness, evaluation, illustration, and activity?
2. Is there a significant difference between the pretest and posttest of the group which utilized the supplementary material?

3. Is there a significant difference between the pretest and posttest of the group which did not utilize the supplementary material?

4. Is there a significant difference in the pretest between the group which utilized the module and the group which did not utilize the module?

5. Is there a significant difference in the post test between the group which utilized the module and the group which did not utilize the module?

Population, Sample Size and Sampling Technique

Table 1.1

Distribution of Respondents (Acceptability)

Respondents	Population	Sample
School administrators	9	9
Senior and Junior High Math and Statistics Teachers	150	150
School head (Master teachers, Officer in charge, Department head, Coordinator)	9	9
Total	168	168

According to Table 1.1 Statistics and Mathematics teachers, School heads and administrators were utilized to ensure a wide and in-depth assessment of the acceptability of the developed workbook for Grade 11 statistics and probability.

As presented in the data, there are nine (9) school administrators, nine (9) School heads and One hundred fifty (150) teachers with a total of one hundred sixty-eight (168) respondents who were involved in the study.

The population considered for Table 1.2 included all the Grade 11 students of the four public Senior High School in the Division of Imus City enrolled during the second semester of academic year 2018-2019.

Table 1.2

Distribution of Students According to their Strands

Strands	Population	Sample
TVL	489	112
GAS	358	82
STEM	435	100
HUMMS	389	90
Total	1,670	384

To determine the possible number of respondents, scientific sampling was applied. Sample size was determined scientifically using the formula:

$$n = \left(\frac{Z_{\alpha/2}\,\sigma}{e}\right)^2$$

where n = sample size

$Z_{\alpha/2}$ = critical value

e = margin of error

σ = standard deviation.

The computation of the sample size and number of respondents from each stratum were as follows:

The critical value at 95% confidence level is$Z_{\alpha/2}$ = 1.96 , standard deviation is set at σ=0.5

Margin of Error is set at 5%, e=0.05

$$n = \left(\frac{1.96(0.5)}{0.05}\right)^2$$

n=384

Description of Respondents

The respondents of the study for the checking of acceptability of the modules will be the mathematics and statistics public school teachers from both Junior High and Senior High School from the Division of Imus City, Cavite. Grade 11 students from Governor Juanito Reyes Remulla Senior High School, Gen. Pantaleon Garcia Senior High school, Gen. Juan Castaneda Senior High School, and Gen. Flaviano Yengko Senior High School.

The respondents of the study for the utilization of the enrichment material will be the Grade 11 students from Governor Juanito Reyes Remulla Senior High School, Gen. Pantaleon Garcia Senior High school, Gen. Juan Castaneda Senior High School, and Gen. Flaviano Yengko Senior High School.

Data Gathering and Procedures

The following procedures were done by the researcher in the conduct of the study.

For the acceptability of the supplementary enrichment activity material:

1. Secured permission from the Schools Division Superintendent and the five School Principals of the five public Junior High Schools and four School Principals of the four public Senior High Schools in the Division of Imus City.

2. Finalized the research instruments for reproduction and distribution.

3. Distributed the instruments to the School Administrator and Mathematics Teacher respondents.

4. Sorted the collected data.

5. Requested assistance of the university statistician for the computation and textual presentation of the data based on to the sub-problem of the study.

6. Consulted the adviser as to the status and progress of the research study.

For the Effectiveness of the material:

1. Respondents were gathered in two rooms.

2. Respondents were assigned into two groups randomly: group A (first room) and group B (second room)

3. Respondents from group A: were taught without the utilization of the teacher made module.

Respondents from group B: were taught with the utilization of the teacher made module.

4. At the end of the semester, the researcher assessed the conceptual understanding of the students through a validated and reliable test (posttest)

5. Pretest and Posttest of the students from group A and group B were recorded.

6. Requested assistance of the University Statistician for the computation and textual presentation of the data based on to the sub-problem of the study.

7. Consulted the adviser as to the status and progress of the research study.

Presentation, Analysis, and Interpretation of Data

Sub-problem No.1 How acceptable is the enrichment activity in teaching Statistics and Probability for Grade 11 as assessed by the School Administrators, Department Heads and Teachers in terms of:

1.1 Objectives

Table 2 presents the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to objectives.

Table 2

Acceptability of the Proposed Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Objectives

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Specific, measureable, attainable, realistic and time bound.	4.21	VMA	4.18	MA	4.24	VMA	4.21	VMA	2
Enhance positive attitude and critical thinking.	4.16	MA	4.19	MA	4.20	VMA	4.18	MA	5
Lead the learners to enhance understanding of the lesson.	4.19	MA	4.21	VMA	4.25	VMA	4.22	VMA	1
Enjoin the learners to participate in intellectual activities.	4.17	MA	4.21	VMA	4.23	VMA	4.20	VMA	3
Give sufficient time to promote mastery of the topic.	4.16	MA	4.19	MA	4.21	VMA	4.19	MA	4
Composite Mean	4.18	MA	4.20	VMA	4.23	VMA	4.20	VMA	

Legend:

Scale	Numerical Value	Descriptive Value
5	4.20 – 5.00	Very Much Acceptable (VMA)
4	3.40 – 4.19	Much Acceptable (MA)
3	2.60 – 3.39	Fairly Acceptable (FA)
2	1.80 – 2.59	Poorly Acceptable (PA)
1	1.00 – 1.79	Not Acceptable (NA)

1.2 Content

Table 3 shows the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to content.

Table 3

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Content

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Employs varieties of activities for the learners.	4.17	MA	4.19	MA	4.20	VMA	4.19	MA	2.5
Enhance effective cognitive skills of the learners.	4.16	MA	4.18	MA	4.20	VMA	4.18	MA	4
Provides adequate and accurate information relevant to the topics.	4.18	MA	4.20	VMA	4.23	VMA	4.20	VMA	1
Offers wide range of suitable approaches to uplift students' ability and curiosity.	4.18	MA	4.19	MA	4.21	VMA	4.19	MA	2.5
Explains details and principles of the content in clear and precise ways.	4.15	MA	4.17	MA	4.19	MA	4.17	MA	5
Composite Mean	4.17	MA	4.19	MA	4.21	VMA	4.19	MA	

1.3 Language and Style

Table 4 reveals the acceptability of the enrichment activities in teaching Mathematics for Grade 7 as to language and style.

As revealed in the data, all the criteria were rated by the respondents as much acceptable. These are: Use appropriate language/word, suitable for the level of learners (WM=4.18) rank 1; Observe proper and correct grammar (WM=4.17) rank 2.5; Employ clear and wide-ranging terminologies (WM=4.17) rank 2.5; Use conversational and friendly writing style and tone (WM=4.17) rank 2.5; and Develop higher order thinking skills (WM=4.14) rank 5.

Table 4

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Language and Style

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Observe proper and correct grammar.	4.15	MA	4.17	MA	4.19	MA	4.17	MA	2.5
Develop higher order thinking skills.	4.12	MA	4.15	MA	4.15	MA	4.14	MA	5
Employ clear and wide-ranging terminologies.	4.19	MA	4.16	MA	4.16	MA	4.17	MA	2.5
Use appropriate language/word, suitable for the level of learners.	4.17	MA	4.18	MA	4.18	MA	4.18	MA	1
Use conversational and friendly writing style and tone.	4.16	MA	4.17	MA	4.18	MA	4.17	MA	2.5
Composite Mean	4.16	MA	4.17	MA	4.17	MA	4.17	MA	

The computed composite mean value of 4.17 was assessed by the School Administrators, Junior High School Math Teachers and Senior High School Gen.Math/General Mathematics and Statistics Teachers as much acceptable on the acceptability of the enrichment activities in teaching Statistics and Probability for grade 11 as to language and style.

1.4 Presentations

Table 5 reflects the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to presentations.

Table 5

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Presentations

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Present topic in logical and orderly sequences.	4.18	MA	4.17	MA	4.23	VMA	4.19	MA	3.5
Give directions that are concise, readable and easy to follow.	4.16	MA	4.19	MA	4.22	VMA	4.19	MA	3.5
Make topics that fit the sequence of the course.	4.16	MA	4.20	VMA	4.25	VMA	4.20	VMA	1.5
Fit reading level of the text to the grade level of the students.	4.17	MA	4.21	VMA	4.21	VMA	4.20	VMA	1.5
Emphasize content with clarity and understanding.	4.19	MA	4.19	MA	4.20	VMA	4.19	MA	3.5
Composite Mean	4.17	MA	4.19	MA	4.22	VMA	4.19	MA	

As reflected in the data, two (2) criteria were interpreted by the respondents as very much acceptable: Make topics that fit the sequence of the course (WM=4.20) rank 1.5; and Fit reading level of the text to the grade level of the students (WM=4.20) rank 1.5. However, the remaining criteria were rated by the respondents as much acceptable. These are: Present topic in logical and orderly sequences (WM=4.19) rank 4; Give directions that are concise, readable and easy to follow (WM=4.19) rank 3.5; and Emphasize content with clarity and understanding (WM=4.19) rank 3.5.

Generally, the computed composite mean value of 4.19 was rated by the respondents as much acceptable on the enrichment activities in teaching Statistics and Probability for Grade 11 as to presentations.

1.5 Usefulness

Table 6 portrays the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to usefulness.

Table 6

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Usefulness

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Helps them to think logically and critically.	4.19	MA	4.23	VMA	4.26	VMA	4.23	VMA	4.5
Organization and presentation suits the target level.	4.21	VMA	4.27	VMA	4.27	VMA	4.25	VMA	2.5
Provides adequate information relevant to the topics discussed.	4.20	VMA	4.25	VMA	4.25	VMA	4.23	VMA	4.5
Presents concept that are simple.	4.23	VMA	4.25	VMA	4.27	VMA	4.25	VMA	2.5
Provides easy and fun instructional materials for learning.	4.25	VMA	4.25	VMA	4.28	VMA	4.26	VMA	1
Composite Mean	4.22	VMA	4.25	VMA	4.27	VMA	4.24	VMA	

1.6 Evaluation

Table 7 depicts the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to evaluation.

Table 7

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Evaluation

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Provides evidence of effectiveness of learning.	4.15	MA	4.18	MA	4.21	VMA	4.18	MA	5
Allows the teacher to conduct continuous and periodic evaluation of the students' mastery of the lesson.	4.17	MA	4.19	MA	4.23	VMA	4.20	VMA	2.5
Secures students' mastery and consistency on the lesson learned.	4.17	MA	4.21	VMA	4.23	VMA	4.20	VMA	2.5
Develops skill's fixing ability.	4.18	MA	4.23	VMA	4.25	VMA	4.22	VMA	1
Uses consistent and effective measuring device for self-check and learning enhancement on the part of the learner.	4.16	MA	4.20	VMA	4.21	VMA	4.19	MA	4
Composite Mean	4.17	MA	4.20	VMA	4.23	VMA	4.20	VMA	

1.7 Illustrations

Table 8 shows the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to illustrations.

Table 8

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Illustrations

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Strategically place illustrations within the text.	4.19	MA	4.21	VMA	4.23	VMA	4.21	VMA	4.5
Shows updated illustrations.	4.21	VMA	4.20	VMA	4.25	VMA	4.22	VMA	2.5
Relate illustrations in classroom teaching.	4.20	VMA	4.23	VMA	4.27	VMA	4.23	VMA	1
Uses illustrations that can be use in classroom teaching.	4.23	VMA	4.20	VMA	4.23	VMA	4.22	VMA	2.5
Gives clear and vivid images and Photographs.	4.20	VMA	4.20	VMA	4.22	VMA	4.21	VMA	4.5
Composite Mean	4.21	VMA	4.21	VMA	4.24	VMA	4.22	VMA	

1.8 Activity

Table 9 reveals the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to activity.

Table 9

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Activity

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Depth of Content	4.19	MA	4.17	MA	4.21	VMA	4.19	MA	3.5
Accuracy of Content	4.18	MA	4.19	MA	4.19	VMA	4.19	MA	3.5
Clarity of Purpose	4.18	MA	4.21	VMA	4.22	VMA	4.20	VMA	1.5
Organization	4.15	MA	4.21	VMA	4.20	VMA	4.19	MA	3.5
Visual Format: Use of space and color	4.17	MA	4.23	VMA	4.21	VMA	4.20	VMA	1.5
Composite Mean	4.17	MA	4.20	VMA	4.21	VMA	4.19	MA	

1.9 Degree of Acceptability

Table 10 depicts the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11 as to degree of acceptability.

Table 10

Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11 as to Degree of Acceptability

Criteria	School Administrators		Department Heads		Teachers		Composite Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
The Outcome-Based workbook in Teaching Statistics and Probability for Grade 11 Students has adequate provisions for cost – effectiveness.	4.19	MA	4.21	VMA	4.23	VMA	4.21	VMA	2.5
It has given due consideration to adequacy and completeness of facts presented, its logic and orderliness rendering it are unified and coherent.	4.19	MA	4.20	VMA	4.21	VMA	4.20	VMA	4
It is practical enough to warrant adoption and implementation.	4.21	VMA	4.23	VMA	4.23	VMA	4.22	VMA	1
It will benefit the school/district/division in terms of efficiency and effectiveness of services.	4.20	VMA	4.21	VMA	4.22	VMA	4.21	VMA	2.5
It is flexible enough to adapt the different conditions for which it is intended.	4.18	MA	4.19	MA	4.21	VMA	4.19	MA	5
Composite Mean	4.19	MA	4.21	VMA	4.22	VMA	4.21	VMA	

Summary

Table 11 presents the summary on the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11.

Table 11

Summary on the Acceptability of the Enrichment Activities in Teaching Statistics and Probability for Grade 11

Criteria	School Administrators		Department Heads		Teachers		Overall Mean		Rank
	WM	VI	WM	VI	WM	VI	WM	VI	
Objectives	4.18	MA	4.20	VMA	4.23	VMA	4.20	VMA	4.5
Content	4.17	MA	4.19	MA	4.21	VMA	4.19	MA	6.5
Language and Style	4.16	MA	4.17	MA	4.17	MA	4.17	MA	9
Presentation	4.17	MA	4.19	MA	4.22	VMA	4.19	MA	6.5
Usefulness	4.22	VMA	4.25	VMA	4.27	VMA	4.24	VMA	1
Evaluation	4.17	MA	4.20	VMA	4.23	VMA	4.20	VMA	4.5
Illustrations	4.21	VMA	4.21	VMA	4.24	VMA	4.22	VMA	2
Activity	4.17	MA	4.20	VMA	4.21	VMA	4.19	MA	6.5
Degree of Acceptability	4.19	MA	4.21	VMA	4.22	VMA	4.21	VMA	3
Overall Mean	4.18	MA	4.20	VMA	4.22	VMA	4.20	VMA	

The computed overall mean value of 4.20 was interpreted by the respondents as very much acceptable on the acceptability of the enrichment activities in teaching Statistics and Probability for Grade 11.

Sub-problem No.2 is there a significant difference between the pretest and posttest of the group which utilized the module?

Table 12

Paired T-Test Computation on the Difference in Pre-test and Post-test of the Group which Utilized the Supplementary Material

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre.T.M	12.8854	192	4.76872	.34415
	Post.T.M	32.5521	192	7.38028	.53263

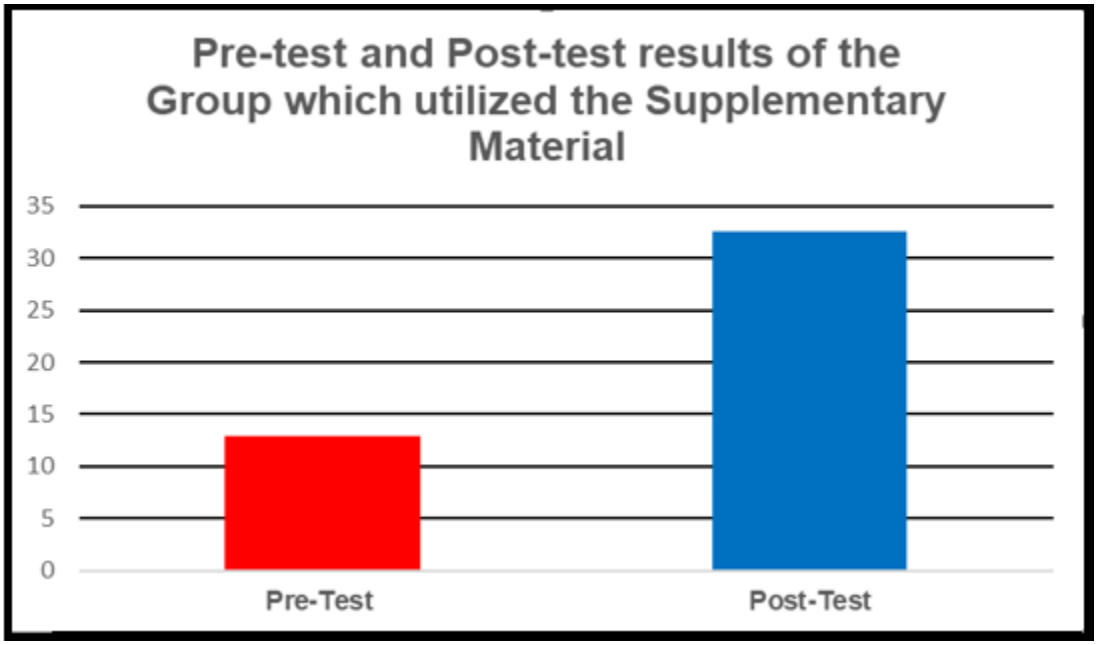

Table 12 showed a p value of 0.000 which is less than 0.05. It means that there is a significant difference between the pretest and posttest of the students who used the supplementary material.

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre.T.M - Post.T.M	-1.97	8.76	.63	-20.91390	-18.41943	-31.10	191	.000

Sub-problem No.3 is there a significant difference between the pretest and posttest of the group which did not utilize the supplementary material?

Table 13

Paired T-Test Computation on the Difference in Pre-test and Post-test of the Group which did not utilize the Supplementary Material

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre.T	11.4219	192	3.79641	.27398
	Post.T	12.5521	192	4.77531	.34463

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Pre.T - Post.T	-1.13021	5.71108	.41216	-1.94318	-.31723	-2.742	191	.007

Summary

The salient findings of the study are as follows:

1. Acceptability of a Proposed Supplementary Material

The respondents assessed the acceptability of the supplementary statistics and probability workbook for Grade 11 is acceptable with an overall computed mean of 4.21.

2. Significant difference between the pretest and posttest of the group which utilized the module.

The analysis showed a p value of 0.000 which is less than 0.05. It means that there is a significant difference between the pretest and posttest of the students who used the supplementary material.

3. Significant difference between the pretest and posttest of the group which did not utilize the supplementary material.

The analysis showed a p value of 0.007 which is less than 0.05. It means that there is a significant difference between the pretest and posttest of the students who did not use the supplementary material.

4. Significant difference in the pretest between the group which utilized the supplementary material and the group which did not utilize the supplementary material.

The analysis showed a p value of 0.398 which is greater than 0.05. The study failed to reject the null hypothesis. It means that there is no significant difference on the pre-test between the group which utilized the material and which did not utilize the material.

5. Is there a significant difference in the post test between the group which utilized the module and the group which did not utilize the module?

The analysis showed a p value of 0.000 which is less than 0.05. It means that there is a significant difference on the post-test between the group which utilized the material and which did not utilize the material.

Conclusions

From the findings of this study, the following conclusions were drawn:

1. Apparently, the developed supplementary statistics and probability workbook for Grade 11 was acceptable as assess by the respondents.
2. There is an increase in the post test scores of the students when a supplementary material is used in teaching statistics and probability. The increase in the post test scores shows that the supplementary material is effective.
3. There is an increase in the post test scores of the students even though there is no supplementary material used in teaching statistics and probability. The increase in the post test scores shows that the students are learning because of the teaching and learning process.

4. Before the students were grouped accordingly, it shows that the skills and conceptual understanding of the students towards statistics and probability are limited.
5. The group who utilized the module showed a higher mean on their posttest indicating that the supplementary material is effective.

Recommendations

From the conclusions drawn, the following recommendations were forwarded:
1. The developed supplementary statistics and probability workbook for Grade 11 be tried out in other schools in the different regions to further evaluate its effectiveness.

2. Encourage teacher and researcher in the division to integrate instructional materials in teaching to cut across subject areas in the K to 12 education curriculum.

3. Recommend the enrichment activities for higher level of mathematics.

4. Provide moral support and logistics to those capable teachers in developing instructional materials.

5. Parallel studies in other subject areas to be done to achieve the desired outcomes base on the functional literacy program.

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"I did not expect to study research": The Challenges of Student-Researchers in the Senior High School

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Abstract

This study, which is anchored on the fundamental process of teaching and learning research under the steps in the broader context of pedagogy by Grima-Farrell (2017), presents a basic research design (Merriam, 2009) that offers insights into the challenges that the students faced and the ways they dealt with the conduct of research in the senior high school. This study is determined to call for measures that would eventually provide clearer path and common knowledge on research, which will benefit the student-researchers.

The participants of the study were seven (7) students from the Academic Track who were purposefully selected using selection criteria. Data were gathered from online interviews through Facebook Messenger application that were analyzed using Merriam's (2009) approach. The highlights of the transcripts were coded through various stages from open coding to axial coding where the themes were generated until the selective coding phase where the theory was realized.

Findings revealed that the participants had struggled with the lack of provision like internet connection and technical facilities. Also, majority of the participants were confused with the concepts, procedures, and structures of the different sections of research. Though, the participants still perceived the invaluable importance of research in their life. In view of the findings, the study recommends that the training-workshop on teaching research should be initiated to equip the teachers with substantial knowledge on the approaches and establish a common understanding of the procedures in research. Furthermore, a subsequent action research study on curriculum mapping is recommended for enhancing the curriculum for research in the senior high school.

Key words: *Culture of research, Collaborative approach, Cognitive Load Theory, Curriculum*

Introduction

No man has ever been born and dealt with life without having struggled from discomfort, difficulties, and anxieties from which research has been one of the means to alleviate these complications. It is vital in the production of knowledge from what is unknown and contribute to the body of knowledge that is already existing. Hence, institutions strive to uphold a learning community where research is at the core. Indeed, the purpose of establishing a culture of research in institutions is to enable the individuals to be critical thinkers, problem-solvers, and knowledge producers that are essential to the professional life of individuals, afterward. Brew (2007) said that "Research and inquiry is not just for those who choose to pursue an academic career. It is central to professional life in the twenty-first century" (p.7). There are also various studies that support the importance of research in the lives of a learner (Imafuku, Saiki, Kawakami, & Suzuki, 2015; Ulla, 2018; Eisenberg & Head, 2019). With this, it is crucial for the school administrators, teachers, and other concerned individuals to immerse the students in researching and use it to capitalize on new learning, which may solve current problems or fill in the gap between what is known and unknown. It can never be denied that any individual whether they are students or professionals that research has its benefits to the personal, professional, or to the society at large. This is congruent with the various studies from Borg (2014); Cain and Milovic (2010); Hine (2013); Hong and Lawrence (2011); Grima-Farrell (2017); Mahani (2012); and Morales (2016).

Theoretical Support

Researching is said to be a process-oriented activity. Thus, students must be aware of the different expected outcomes in the different sections or chapter in research (Bocar, 2013). This may not be realized if the student encounters personal problems. According to Logan (as cited in Bocar, 2013), personal problems can occupy the mind of the individual, which may interfere in any academic engagements he or she is undertaking. Aside from the students' personal problems, Horowitz, Rosenberg, & Bartholomew (as cited in Locke, 2005) asserted that problems in interpersonal relationship might affect one's performance in such a way that the expectations for the 'self' depends on others. Another problem that situates a student, based on my observation, is the fact that they lack time management. Time management is essential to achieving academic success (Kelly, 2004). Other studies support this claim like that of Fazal (2012); Mercanlioglu (2010); Yilmaz, Yoncalik & Bektaş (2006); and Sabelis (2001). Aside from this, facilities and provision for easier internet access may also affect the way the students perform. Hughes (2005) and Lyons (2001) concluded that condition of the school facility is a factor that affects a student's performance. Facilities in the library also must improve as they are the best venue for the students to do research in the school. A research conducted by Gilbert, Hulseberg, Monson, & Gratz (2010), expressed the importance of libraries in the academic performance of students. Though the school administration where I am currently in exhaust all means to satisfy the needs of the students, the problem seems to be persisting. With this, I strongly believe that the factors mentioned here affect the process during the conduct of their research, which leads to

greater challenges in conducting research—I operationally defined the word ‘challenge’ as congruent with ‘complications.’

With the advent of implementing the K to 12 Curriculum in the additional two-year senior high school, the urge to further strengthen the conduct of research is much realized. This is in accord with Jenkins and Healey (2012) when they asserted that the experiences of the learners in research should be a vital consideration in the curriculum. Hence, this calls for an experiential approach on teaching research in the senior high curriculum. The enhanced curriculum further promotes research as an essential activity in the lives of the senior high learners. It follows the spiral progression approach that makes it more focused on mastery and application (Ramos-Sala, 2018), and this means that concepts are integrated across the different subjects. This is mandated by the Philippine Constitution under the Republic Act No. 10533, otherwise known as the “Enhanced Basic Education Act of 2013”, Rule 2. Curriculum, Section 10.2.g. Standards and Principles, which states that “The curriculum shall use the spiral progression approach to ensure mastery of knowledge and skills after each level.” It shall be noted that research should be treated and anchored on the students’ learning of the different concepts, models, theories, and so on from the different subjects. This knowledge must be appreciated and applied in the subject like Practical Research. Hence, the culture of research will only champion in institutions if there are clear realizations of the purpose of research, various facilitation of experiential activities, satisfaction of the needs, and acquired fundamental knowledge on the part of the learners and facilitators in the 21st century.

Teachers are at the forefront, and their roles as facilitators of learning impact the performance of students (Blazar, 2016). Furthermore, Blazar (2016) argued that:

Therefore, using findings from Jacob and Lefgren (2008), Rockoff, Staiger, Kane, and Taylor (2012), and Rockoff and Speroni (2010) as a benchmark, estimates describing the relationship between observed classroom practices and student achievement are, at a minimum, substantively meaningful; at a maximum, they may be viewed as large. (p.11)

Then I must say that the way the teacher facilitates the learning experiences of the students must affect their performance. Though this may not be conclusive at this point, I suppose that this relationship exists. It is noteworthy for me to assert that with all the complications that students experience in the conduct of research, the teacher should be able to provide directions and guidance for the students.

Insofar as the implementation of the new curriculum in the senior high school is concerned, public or private institutions struggle to satisfy its demands. I have observed how the different subjects would demand piles of paperwork and other requirements to satisfy the course. This, I assume, leads to the gradual decrease in the number of students who are interested in undertaking researches. This situation could be explained by the Cognitive Load Theory (Sweller, 1994) from which the concept of Overload hypothesis can give light to the decrease in performance among the students. There had been studies conducted that reviewed how the faculty approach teaching in such level

such as Leckie (1996); Simmons (2005); and Cope & Sanabria (2014). Furthermore, the facilitation of experiential learning has not been observed which may have promoted a 'freezing' pedagogy in dealing with Practical Research. The approach might greatly affect the performance of the students in conducting their research. Additionally, Axelson and Flick (2011) asserted that students, instructors, and cultures are the ones responsible for the students' engagement. This is further supported by Korobova and Starobin (as cited in Caruth, 2018) when they claimed that students become more engaged due "to inspiring and supportive experiences and interactions with colleagues" (p.2). There is really so much to consider in improving the quality of learning experience the students should acquire.

In connection with the decrease in performance among student-researchers, there seems to be a weakening competence and lack of interest in the conduct of research among students. This is evident on the academic performances of the students in research-based subjects like Practical Research. I strongly believe that the purpose of strengthening a culture of research might cease to continue if the problem prevails and is not given immediate attention. The challenges that the students have faced during the conduct of their research and the possible means to deal with it are central in this study, which lead to the realization on how the teachers' way of facilitating the research activities might have contributed to such challenges. The steps to encourage the individual to do research from Grima-Farrell (2017) will be the framework of this study. The four steps are perceived to be under the broader context of pedagogy. The four steps that must be considered:

1. The needs of the researcher must be provided to ensure that motivation is increased.
2. The individual must be given appropriate opportunities to equip himself or herself with fundamental knowledge and skills to do research.
3. There must be a research collaboration for the researchers to share their insights and ideas, skills and knowledge, and constructive criticisms.
4. There must be a support system or guidance from anyone that should be initiated.

Research Questions

The aim of this study is to establish an understanding of the challenges encountered by the students in the conduct of their research. Specifically, the following questions are sought in this study:

1. How do senior high school students deal with the conduct of their research?
2. What challenges do they encounter in the conduct of their research?

Methodology

Research Design

This paper uses the basic qualitative research by Merriam (2009) which is best suited to obtain an in-depth understanding of a process. She describes that a basic qualitative research is brought by the philosophy and principles of constructionism, symbolic interaction, and phenomenology. Furthermore, Merriam (2009) noted that the overall purpose of this design is to establish an understanding of "how people make sense of their lives and their experiences" (p. 23). This research design attempts to uncover the participants' experiences, the meaning that the participants establish in the experiences, and the process in which the participants were involved in the conduct of research in Practical Research. Hence, the focus of this research is to establish a framework of understanding of the challenges faced by the students. I intended not to focus solely on beliefs, preferences, and attitudes on things involved in research because it is not the prime goal of the paper to solicit such inclinations.

Participants and Sampling

The participants of the study were seven (7) students who took Practical Research from the Academic Track, and they are named as Participants 1, 2, 3, 4, 5, 6, and 7. They vary in terms of their academic performance level in Practical Research, gender, age, culture, and perspectives. In order to satisfy the sampling, the following general criteria were observed: (1) must have taken Practical Research, (2) enrolled in the Humanities and Social Sciences Strand under Academic Track, and (3) must have attended regularly the class sessions, were considered before selecting the participants and until data was saturated or nothing new could be produced. I purposively selected the participants from the Humanities and Social Sciences (HUMSS) strand since the answers sought from the questions asked pertain to what occurs, the implications of occurrences, and the relationships that bind such occurrences (Merriam, 2009).

Data Collection Technique and Procedure

In the course of gathering the necessary data, I conducted interviews online using the Facebook Messenger application. I practically considered this because the participants were not available physically for a face to face interview nor they could not afford to do such for there were no more classes. Virtual answers from the participants through "chatting" were encoded as transcripts. Virtual as defined in Merriam (n.d.) is anything that is existing primarily online. No video calls nor audio recording was done because the participants had limited access to the internet.

As for the procedure, the first step I did was to plan for the research that was conducted in the school. Then, I selected the participants based on my criteria. After I had selected the participants, they were informed of their scheduled individual interviews online. During the conduct of the interviews, I oriented the participants of the purpose of my research. I also prepared an interview protocol to ensure continuous flow of

questioning. Also, there were follow-up questions asked to exhaust the items in the interview protocol. The interview was held in the convenience of the participants for 10 to 20 minutes. The number of minutes consumed was depending on the typing speed of the participants and the speed of the internet connection. The answers of the participants were then encoded as transcripts. The transcripts were coded, categorized, and analyzed from which different themes for this research were realized. I asked the participants to validate their responses before the generation of the results. Another validation with the participants and colleagues were done to ensure that the responses were aligned to prevent any misunderstanding or misinterpretation of the results. After the procedure was met and satisfied, the report was produced.

Data Analysis

The data from the transcripts were analyzed using Merriam (2009) method of data analysis. All the data gathered were organized and broken down to manageable and comprehensible units for easier analyses. The coding procedure was also done from which I realized the different themes for the study. During the open coding phase, I read through the data several times from the transcripts. Moreover, I did memos on the transcripts that involved my reflections, additional ideas, and opinions. The transcripts were printed out separately for manageable analyses. I started creating tentative labels for the responses, which were relative. The labels were done based on the meaning that emerged from the data. In the axial coding phase, I identified relationships among the data in the open coding phase. From the primitive list of labels, I was able to determine the different themes. The themes were realized based on the research questions posed in this paper and frame them in the context of the goal of this paper, which is to establish an understanding of the challenges encountered by the students who took Practical Research. The final list of themes was prepared, revisited, and discussed with the participants. The themes in this paper are in logical order as was presented in the prior coding scheme. All files were saved in the Google Drive, which is a safe database for securing files, for easier access in the future or whenever necessary.

To ensure that the data would not be contaminated and that the research is valid and reliable, certain strategies were done. Merriam (2009) provided different ways in dealing with validity and reliability issues that I have done in this research. The first strategy was to do triangulation where multiple sources of data were considered to confirm the study's findings. I considered my personal observations and the data generated from the interviews conducted in the course of gathering the data. There was ample time for the participants to answer; thus, this helped them think and reflect on their answers before they respond to my questions online. Another strategy employed in this paper is reflexivity in which I did a critical self-reflection on my observations, assumptions, perspectives, theoretical inclinations, and other relationships to the study, which, I believe, to have affected the analyses of the data. Moreover, peer review with my colleagues who handled practical research was also done as another strategy to look into the processes involved in the course of doing the research and emerging findings from the data. The last strategy employed was the audit trail. A detailed record of the methods,

procedures, and findings were revisited to ensure that all of these matched the context of research and the findings. All these strategies ensure that the findings of the research are valid and reliable.

Trustworthiness

Establishing an atmosphere of trust with the participants during the conduct of this research can make the process of justifying the trustworthiness of the study more advantageous. According to a web blog by La Banca (2010), trustworthiness might be defined as a "Demonstration that the evidence for the results reported is sound and when the argument made based on the results is strong." In doing so, Lincoln and Guba (1985) have proposed four ways to assess the trustworthiness of a qualitative research, that is, credibility, dependability, conformability, and transferability. To establish credibility, the researcher must identify and describe accurately the participants of the study. This establishes the truthfulness of the findings. Dependability pertains to the stability of data over time and under different conditions. Confirmability refers to the objectivity, that is, the potential for congruence between two or more independent people about the data's accuracy, relevance, or meaning. Transferability relies on the reasoning that findings can be generalized or applied in other contexts.

Credibility

To establish an environment of trust, I blended in the environment with the participants for them not to feel anxious or threatened during the course of gathering the data. Though the environment referred was virtual, the manner in which I introduced the purpose of the paper, greeted the participants, and ensured that they feel relatively comfortable through Facebook Messenger helped established rapport. Through this, the participants were able to openly and honestly answer my questions. The action can be supported by Merriam (2009) when she asserted that the researcher should blend into the environment of the participants so that there will be no contamination of the data by the prevention of changes in the behavior of the participants. I expected that some of them would lie answering to my questions because they might have thought that the answers I expected of them must always be positive or without any prejudice; thus, I informed them that any information that may reveal the identity of the participants would not be disclosed in my paper.

Dependability

Furthermore, to justify the trustworthiness of the data gathered for the study, the data were broken down into categories and coded to ensure manageability and comprehensibility. The data would be compared with the observations done. Cross checking of the data through follow-up interviews online with the participants and through the comparison of the data among the participants were conducted. I was able to examine thoroughly the categories and emerging themes. The participants will be asked again to

revisit the data and interpretations to prevent any misunderstanding or misinterpretation of the essential data. Peer review with my co-teachers will be done that will focus on the raw data, emergent findings, analyses, and interpretations as they are involved in this endeavor.

Confirmability

Research bias is a primary concern in doing a research. Researchers tend to consider their personal biases before they conduct their research (Rajendran, 2001). Having said this, personal biases may not be separated in the course of doing the research; however, it is the prime duty of a researcher to be neutral in all aspects of the research, most especially during the gathering and analysis of data. I have personally re-evaluated my preconceptions and any theoretical inclinations in the course of doing the research that provided me enough space—a supposed empty place in the mind—to accept any positive or negative answers.

Transferability

Lincoln and Guba (1985) stated that "the burden of proof lies less with the original investigator than with the person seeking to make application elsewhere" (p. 298). Thus, researchers must provide substantial data and explications to make transferability possible. The diversity of the participants and their responses might satisfy other relevant conditions in another research-oriented subject. The teachers of the participants have previous experiences dealing with the students and the subject. Therefore, the readers might have enough opportunity to do comparisons with their own situations.

Ethical Consideration

As a research, it is assured that confidentiality of any information related to the participants are my utmost consideration. The participants were given aliases that ensured anonymity. Also, the paper presents a composite picture of the situation rather than an individual picture. In the course of data gathering, I conveyed to the participants that they would be part of this research and that they would not be engaged into any deception just for my personal intentions. However, no consent forms were given because they were at their legal age and that the research will not, in anyway, harm them. The participants were selected regardless of their gender preference, culture, and religion.

Results

A thorough and rigorous reading and analysis of the 23-page transcript of students relative to the challenges and other experiences met during the conduct of their research through individual online interview on Facebook Messenger resulted in several themes

that are presented in this section under two categories, namely: Ways students' deal with research and Challenges encountered in conducting research.

Research Question No. 1. Ways Students' Deal with Research

The participants (P) had different ways of dealing with the conduct of their research in Practical Research. This is highlighted through the different themes: *observed proper procedures* (+) and *confused with the procedures* (-). The first theme, which is *observed proper procedures (+),* means that the procedures that the students had undertaken were clearly followed and observed. Conversely, the second theme, which is *confused with the procedures (-)*, pertains to the way the students mishandled the conduct of their research. This is shown in Table 1.

Table 1

The number of ways the students positively and negatively dealt with research

Participants	(+)	(-)
P 1	9	2
P 2	5	6
P 3	4	7
P 4	9	2
P 5	5	6
P 6	4	6
P 7	4	7

As shown in Table 1, Participant 1 has the greatest number of recognized (+), which means that the student had a clear understanding of the procedures when conducting the research. This is evident with some of her answers below:

> *Interviewer: What procedures did you undertake in doing your study?*
> P 1: Ang pagsunod sa tamang proseso ng sinasagawang pananaliksik. Mayroon po tayong tinatawag na metodolohiya kung saan nakapaloob ang proseso ng pagsasagawa ng pag-aaral (personal communication, April 23, 2019, Appendix B, Line 52-55).

> *Interviewer: What did you consider in choosing the topic of your study?*
> Participant 1: Kung ito ba interesting at ang availability ng sources, environment at respondents kung saan alam mong sapat ang mga datos na iyong makakalap upang mabuo at mapagtibay ang iyong pag-aaral. Gayon na rin kung kaya mong panindigan ang lawak ng sakop ng iyong pananaliksik (personal communication, April 23, 2019, Appendix B, Line 57-61).

Interviewer: How about the Methodology? How did you do it…
Participant 1: Titingnan mo palang kung ano ang epektibong paraan ang iyong gagawin para makakalap ng datos. Kung saan mas mapapadali ang pagkuha ng impormasyon. Kung ano ang pwedeng tanong, sino ang respondents, ano ang respondents at s'yempre sa statistics dahil mahirap lalo na kung wala kang prior knowledge sa pagtitimbang… (personal communication, April 23, 2019, Appendix B, Line 117-126).

The excerpts above show that student-researcher has observed clear procedures when choosing a topic and dealing with the methodology part. The rest of the transcripts suggest that the students had understood and that the procedures in conducting research, which can be seen in lines 70-73, 75-78, 80-83, 85-88, 90-94, 128-136 (see Appendix B). However, there are concerns that the participant had when dealing with the Results and Discussion part of her research when she responded:

Interviewer: How did you work on the Results and Discussion parts of your study…
P 1: So far sa recent study namin hindi kami gan'on ka na hirapan kasi tatlo lang naman ang respondents namin, bukod pa roon ay may scale kaming ginawa kaya di kami gaanong nahirapan sa paggawa ng results. At nakatulong rin na halos pare-parehas sila ng perspective kaya hindi kami nahirapan sa discussion ng kanilang mga sagot (personal communication, April 23, 2019, Appendix B, Line 138-144).

The answer suggests that the participant failed to observe reliability of the sampling procedure done when they had the data discussed in the Results and Discussion section of her research. Though she felt that her work was easy, her understanding of the methods part of the research may not be clear. This might have affected the way she understood the appropriate means to do the Results and Discussion of the research.

Second in rank for the highest number of recognized (+) is Participant 4. Two of his responses provide a clear understanding of the procedures when conducting research.

Interviewer: What procedures did you undertake in doing your study?
P 4: For our case study research our procedure was to first create possible interview questions that would answer the basis of our study. Then we had to make a consultation form for all males in our school that explains the purpose of our research, it is also included in this form the permission that a Male may give the researchers to undergo an interview with the researchers if they consider themselves to be a "gay" person. Afterwards the interview and then the translation of the participants answer from tagalog to English. (personal communication, April 16, 2019, Appendix B, Line 514-520).

The excerpt above presents a more detailed procedure the student had undertaken during the conduct of his research. Though the translation from Tagalog to English may not be necessary, the student still had the initiative to include it as part of the procedures. Another response that suggests his comprehension with the procedures is excerpted below:

> *Interviewer: How about the Methodology? How did you do it…*
> P 4: I had to consider past researches on how they did their methodology, so I had to do some research. The definition of methodology itself had to be very clear for our group in order to make the methodology to make errors with its content. Since our research differs from some or common researches there were some parts that were not needed in the content of our case study research (personal communication, April 16, 2019, Appendix B, Line 576-583).

The knowledge of the student on dealing with the conduct of his research is consistent all throughout the interview. He managed to present the procedures in his own expressive language that resulted to his possible success in his research. However, he seems to have difficulty with the sampling procedure when he said that: “For our study we did not select, rather we gave them the option to take part of our research” (personal communication, April 16, 2019, Appendix B, Line 539-541).

The least number of recognized (+) while they got the highest number of (-) are Participant 3 and 7. Their responses are relatively the same in terms of how they conducted their research. They are most likely aware of the procedures in conducting research, however, their answers suggest that their knowledge is unsubstantial. This is the reason why their responses got the highest number of (-). The selected excerpts below from the two participants provide an insight into the way they handled research.

> *Interviewer: How did you select the participants of your study?*
> P 3: Our group selected participants according to the study that we will be conducting. Participants should be affected of the research so that their answers in the surveys will be suitable (personal communication, April 17, 2019, Appendix B, Line 385-388).
> P 7: It depends on the requirement of the research I have conducted but most likely, I select those who are involve and have the capability to answer the questions of the research (personal communication, April 26, 2019, Appendix B, Line 944-945).

In here the participants, had difficulty with the synthesis of the results and findings, which is apparently the same as their confusion with the sampling procedure they should have done prior to the results and discussion.

> *Interviewer: How did you synthesize the results and findings?*
> P 3: By translating the answers from Tagalog to English which helped us to formulate and answer the basis of our research.

P 7: I could not interpret the findings only by my own observations, so based on the answers, I still research about it with substantial evidences (personal communication, April 26, 2019, Appendix B, Line 957-958).

Remarkably, majority of the participants had the same confusion with synthesizing the data for the Results and Discussion. This is observed in other responses of the participants below in the same question of the interviewer:

P 2: We managed to tally all possible data for the mathematical computations (personal communication, April 17, 2019, Appendix B, Line 256-257).
P 4: By analyzing the answers of the participants to conclude in which side their answers may lead to (personal communication, April 16, 2019, Appendix B, Line 554-556).
P 5: There are three categories on our survey questionnaires were related to each other. This method let us do this easier than doing it one-by-one (personal communication, April 20, 2019, Appendix B, Line 691-693).
P 6: Through evaluating the answers from the result and formulating a conclusion to specify the findings of the research (personal communication, April 20, 2019, Appendix B, Line 820-822).

The responses of the participants helped establish my understanding of the procedures they understood and the procedures they observed or undertaken in the course of doing the research in Practical Research. In the next sub-section, the challenges the students met while doing the research are presented.

Research Question No. 2. Challenges encountered in conducting research

As they deal with their research studies, I realized they encountered different challenges that I believe could prevented them to appreciate research and finish their research satisfactorily as well. This is explicated through the three themes that were generated from the transcript. The themes are *availability of resources*, *knowledge on the procedures*, and *curricular quandary*.

Availability of resources

There are various needs students have to be satisfied with in order to effectively accomplish their tasks. Nevertheless, I found out that there are essential resources that were not satisfied with the student-researchers. One participant said that she was challenged when the teacher asked them to look for 10 local studies and 10 foreign studies, which in that case might have been a burden to the student. Also, almost all the students had difficulty looking for related literature and studies. These are evident with the responses of the participants below:

P 1: Kasi po sir sa practical research 1 po namin problema na po talaga ang paghahanap ng rrl po pero nakayanan naman po namin yun sir kasi may binibigay naman po sa amin si [Anonymous] na site na mas legit at reliable ang mga posible

studies na makukuha namin for the study na ginagawa namin. Then sa practical research 2 po mas nahirapan po kami kasi po inadvice po samin ni [Anonymous] po na kailangan po 10 local na studies/literature at 10 international po. So nahirapan po kami nun na kahit di ganon ka related kinuha nalang po namin. Tapos po para makatawid na po sa next chapter pinasa nalang po namin nang walang consultation ang RRL naming (personal communication, April 23, 2019, Appendix B, Line 30-37).

P 3: We chose Local and Foreign that could help support our research study. The challenges that I have encountered while looking for an RRL is there are a lot of literature from the internet that is not valid and I am having a hard time to figure it out most especially if the author didn't include the date of publication on his works (personal communication, April 17, 2019, Appendix B, Line 433-436).

P 4: The reliability of the related literature was a big challenge. Looking for researches both from local and international studies really made it time consuming and stressful (personal communication, April 16, 2019, Appendix B, Line 588-589).

It could be noted that they have similar concerns with regard to related literature. Apparently, the other participants had difficulty determining the credibility of the sources. A participant also noted that the references they got from the internet were way too old, which make them not appropriate for their research when he said that "…When we found a good rrl for our topic, its date of publication is also one of the struggle" (Participant 5, personal communication, April 16, 2019, Appendix B, Line 725-726).

There are other resources that need to be satisfied. One of these resources are the provision for internet connections and technical facilities. The lack of internet connection can be seen in the response of Participant 2 when she said,

P 2: Regarding po sa research, ung internet connection po saka additional computers po kasi kapag binibigyan po kami ng research adviser namin ng time na mag research sa comlab lagi pong nagkakataong walang internet or kaya punuan yung comlab (personal communication, April 17, 2019, Appendix B, Line 217-219).

Knowledge on the procedures

Research involves a systematic procedure that needs to be followed in order for it to be successful. The transcripts presented instances where the students managed to conform with the systematic procedure of research while there are some who employed conflicting procedures. When Participant 1 answered the question: "*What did you consider in choosing the topic of your study?*" she was able to provide a fitting response when she said,

P 1: Kung ito ba interesting at ang availability ng sources, environment at respondents kung saan alam mong sapat ang mga datos na iyong makakalap upang mabuo at mapagtibay ang iyong pag-aaral. Gayon na rin kung kaya mong

panindigan ang lawak ng sakop ng iyong pananaliksik (personal communication, April 23, 2019, Appendix B, Line 58-61).

Other answers suggest similar positive observance of the procedures when dealing with the topic of the research as seen from the transcript of Participant 2 when she said that “Its relevance in our current situation and the significance of this to our audience, time framework and deadlines” (personal communication, April 17, 2019, Appendix B, Line 233-234); Participant 3 when she said that “The first thing that we consider in choosing the topic of our study is the problem and why does it need to be solve. After that we started to consider the location of the research study and its respondents” (personal communication, April 17, 2019, Appendix B, Line 376-378); and Participant 4 when he said, “We considered time, money, and the research that we think best suits the capabilities of our group” (personal communication, April 16, 2019, Appendix B, Line 523-524).

When the participants were asked about the way they dealt with the related literature, most of the answers reflected the burden they had. This complicated the way the student-researchers have to handle the conduct of the review of related literature. This is evident in the responses of Participant 1 and 5.

P 1: Kung bago ang issue mo, mahihirapan ka talaga dahil wala pa masyadong studies at literature kang makakalap gawa ng nageexpand pa lamang ang topic ninyo pero s’yempre sinusukat pa rin namin kung gaano ito kakonektado, kung makakatulong pa ba talaga ito. Halimbawa na lamang sa recent study namin about vloggers, talagang mahirap kasi bilang lamang sa kamay ang nakalap naming related literature/study kasi wala pa gaanong researches n’on (personal communication, April 23, 2019, Appendix B, Line 131-136).

P 5: Gathering the RRL is one of the part where we spend too much time to find a suited rrl to our study. When we found a good rrl for our topic, its date of publication is also one of the struggle (personal communication, April 20, 2019, Appendix B, Line 724-726).

The Participant 1 seem to find difficulty looking for related studies that are enough to support their claims in their research on “vloggers.” This might be one of the effects by the lack of provision like internet connection. Also, Participant 5 asserts that whenever they find a literature, the possibility of using it is questionable because of its date of publication—this might an issue in terms of the credibility of the sources.

Furthermore, the participants’ answers to the question on the challenges they had when dealing with the conduct of research as a whole suggest that the said challenges prevail, which impede them from performing at their best. The responses below provide evidences with regard to this:

P 4: The conceptual framework, and the overall layout of the research paper itself. This wasn't made clear to me because the teachers all had their own method/way of making a research paper. One teacher would say I'm doing the right thing while the other says I'm doing something wrong (personal communication, April 16, 2019, Appendix B, Line 509-512).
P 5: May mga bagay po sa research ang di po talaga.malinaw sa akin, at eager naman po ako matuto. Gaya po ng sa chapter 1 ,2, at 3 po. Pati na rin po ang pag calculate ng data, gusto ko po siyang matutunan kaso kaunti lamang po ung kaalaman ko na siyang naging challenge kaya medyo natagalan po kami (personal communication, April 20, 2019, Appendix B, Line 656-659).

P 6: nahirapan po ako sa Chapter 2 RRL po kase need mo po talaga ng oras at pasensya sa pagahahnap ng mga Related Literature at Studies na magpapatunay sa inyong pag-aaral. Next po is yung sa part rin po ng pagsa-cite or pagko-quote ng mga studies or literature (personal communication, April 20, 2019, Appendix B, Line 789-791).

In the transcripts above, the answers suggest that their knowledge on the procedures in conducting research were still not clarified. Additionally, Participant 7 exclaimed from the same question that they had limited knowledge on the conduct of research as evident in the transcript below:

P 7: Nagkaron kami ng karanasan kung saan, hindi napaliwanag ng maayos ang "theoretical framework" kung kaya't sa pagtungtong ng ika labin dalawang baitang ay nagkaroon kami ng ibat ibang interpretasyon na nagdala sa amin sa maling content (personal communication, April 26, 2019, Appendix B, Line 922-924).

The problem on theoretical framework persisted until they reached grade 12. This resulted to a number of interpretations that needed further clarifications. In the case of the different sections, the student-researcher also were met with different problems. With regard to the introduction part, the student-researchers tend to struggle in structuring it. As such, the answer of Participant 2 implies that her knowledge on introduction and how it should incorporate the background of the study seem to be problematic.

P 2: Sometimes we struggled in identifying what are the differences of Introduction and Background of the Study. Hence, we work our Introduction by researching the ethics in working this part of the chapter 1 and having consultation with our research teacher (personal communication, April 17, 2019, Appendix B, Line 274-276).

Her confusion emerges as a similar confusion with the other participants such as participants 3 and 4. Participant 3 with the same question said that “We work on the Introduction by simply giving an idea about our topic. The challenges that we had encountered while doing the introduction is on how to give an idea in just few words” (personal communication, April 17, 2019, Appendix B, Line 417-419). The challenge met

by the participant is rather a simple confusion on how to work on the introductory paragraphs. This is similar with the answer of Participant 4 when he said,

> P 4: We established the rationale of our paper and formulated our statement of the problem. The problems we encountered were: how to start the Introduction; the content of the Introduction; and the limited information needed to not give too much facts about the study itself (personal communication, April 16, 2019, Appendix B, Line 572-574).

In the transcript, Participant 4 explicitly stated that the challenges met were all about the structure and content of the introduction section of the research. This problem on introduction appears to be a prevailing struggle among the participants. Though, the excerpt would suggest that Participant 4 managed to cope with the difficulty of structuring his introduction.

In terms of the Methods section, the student-researchers appears to have gained knowledge on the structure of this section. However, there were challenges that led to some difficulties and confusions as such Participant 7 said that "…It is very hard when I have to create questions based on the main question of my research" (personal communication, April 26, 2019, Appendix B, Line 982-984). In this response, the participant had difficulty dealing with the questions for her instrument. This is similar with the difficulty met by Participant 6 when she said that "I've been encountered on undecided what would be the instrument or type of procedure to work effectively the research also the participants most especially the number who is willingly answer the surveys" (personal communication, April 20, 2019, Appendix B, Line 845-847). It is also appalling on my part that students had fostered confusion regarding the structure of the methods section in the case of Participant 3 when she expressed,

> P 3: The first thing that our group consider is the choice of words. Instead of giving a description of methodology using the 1st person's, our group manage to use the 3rd person's. One of the challenges that we had encounter is on how to explain each method in a paragraph form. We sometimes make a methodology with just 2 sentences and we are having a hard time to add another information that is related to the topic. (personal communication, April 17, 2019, Appendix B, Line 424-428).

This raises argumentations whether the 1st and 3rd person point of view should be observed and the substantiality of the different subsections under the methods part of the research.

The final part of the research report deals with the results and discussion. The student-researchers had a communal understanding of the final section. Indeed, most of the participants said that the idea of structuring and presenting the results and discussion was relatively clear. This is evident in the responses of Participant 1 when she said, "So far sa recent study namin hindi kami gan'on ka na hirapan kasi tatlo lang naman ang respondents naming…" (personal communication, April 23, 2019, Appendix B, Line 141-142); Participant 3 when she said, "The presentation of Results and Discussion is not

hard if you have patients. The Discussions is not really hard for our group" (personal communication, April 17, 2019, Appendix B, Line 441-442); and Participant 4 when he said, "The results and discussion were not as difficult..." (personal communication, April 16, 2019, Appendix B, Line 594).

Curricular quandary

The senior high school curriculum suggests that teachers have to employ strategies that are experiential and integrative of the other concepts across the disciplines. In the transcripts, the participants had some reflections with regard to the way the teachers facilitated the teaching of research. At an instance, Participant 2 expressed when asked how the teacher handled the class that there were times the way the teacher taught them conflicts with the other teachers' perspectives. This could be inferred from her response: "Hmmm quite po. Minsan po kasi iba-iba yung tinuturo or iaadvise sa amin ng mga teachers about research kapag nagpapaconsult kami kaya nalilito po kami kung ano po bang mas tama or susundin" (personal communication, April 17, 2019, Appendix B, Line 211-213). Other responses from the same question led me to realize that the teachers had played a vital role in the success of the research studies the students conducted. This is manifested from the responses of Participant 3 when she said, "…malaking tulong po siya sa amin yung mga advise nila" (personal communication, April 17, 2019, Appendix B, Line 353); Participant 4 when he said, "…The help provided by the teachers allowed my group to finalize and craft the research paper in the best of our knowledge" (personal communication, April 16, 2019, Appendix B, Line 499-500); Participant 5 when she said, "…Madalas po nakakatulong sila sa amin kasi madami po kming ginaguide nila" (personal communication, April 20, 2019, Appendix B, Line 645-646); and Participant 7 when she expressed, "Opo, ang mga karanasan din nila ang nagsisilbing halimbawa sa amin" (personal communication, April 26, 2019, Appendix B, Line 912).

Considering that the senior high school curriculum should be integrative in one way or another, I believe that the continuous effort of the teachers to facilitate an integrative approach will provide better opportunities for the students to learn research as this is evident in the responses made by the student-researchers. In this circumstance, Participant 1 detailed the way she appreciated the spiraling and integrative approach of the curriculum. She said,

> P 1: Opo dahil magagamit mo ito upang mas maiintindihan mo ang gagawin sa iyong pananaliksik…Sa DIAS, daming behavior, personality and social studies ang maeencounter mo, kasi mostly don ka naman dedepende sa topic mo, sa society na ginagalawan mo. Sa statistic syempre, kailangan na kailangan ng research upang mas makita ang result na makukuha mo. 21st century literature, para madagdagan ang RRL mo. Creative writing, upang madagdagan ang skill mo sa pagsusulat ng research sir. Kung di lang po magfofocus sa iisang subject po, mas makikita mong konektado sa isa't isa ang mga subjects. Mas makakatulong pa to

samin upang mas maintindihan ang kahalagahan ng bawat subject (personal communication, April 23, 2019, Appendix B, Line 98-108).

The response provided insightful realization that the approach would eventually provide opportunities for the students to learn meaningfully. The instances that the Participant 1 provided established a sense of urgency to strengthen the integrative approach in the curriculum. Likewise, other participants had the same realization with the effectiveness of this approach. As such, Participant 2 said, “Yes. In our other subjects like Philosophy there are many theories tackled in our class that definitely used in lot of research” (personal communication, April 17, 2019, Appendix B, Line 265); Participant 3 said, “I think the only relation of research to other subjects is senior high school is the class of statistics and probability which had a significant help to those who may have conducted a quantitative research” (personal communication, April 17, 2019, Appendix B, Line 566-568); and Participant 6 said, “…Tsaka rin po yung Reading and Writing at EAPP na nakatulong sa paggawa ng write-ups ng research” (personal communication, April 20, 2019, Appendix B, Line 834-835).

After all the challenges met by the student-researchers, they all believe that research is not an easy writing task. Just like the words from Participant 1 when she said, “Ang paggawa ng pananaliksik ay hindi biro, may kailangan kang sundin na proseso upang mas mapagtibay mo ang pag-aaral na ginagawa mo. Ang availability ng sources, respondents at references at s’yempre kung interesting, napapanahon at makakatulong ba ang research na ginagawa mo” (personal communication, April 23, 2019, Appendix B, Line 168-171). Convincingly, Participant 7 expressed that the way the researchers approach the conduct of research would eventually make researching much more meaningful as implied in her answer: “They must be aware on the challenges they could encounter, their interest to the research will keep the research active. They must love learning the strategies and hardships brought by the research” (personal communication, April 26, 2019, Appendix B, Line 1014-1016).

Discussion of Results

Careful analysis of the data gathered from the transcripts has provided insights into the challenges encountered by the student-researchers. The insights dwell on the ways the students dealt with research in which the concept of dealing positively and negatively was realized. The realization I had was based on Grima-Farell (2017) where the needs of the student-researchers must be provided in order for them to better perform in doing their research. Thus, I assume that if the students had difficulty in conforming with the expected procedures in conducting research, the more likely that the need of the students were not given enough attention. This relationship might have resulted to the decrease in performance of the student-researchers in Practical Research.

The transcripts also provided insights into the challenges encountered by the students. The challenges are distinctly categorized into three themes: availability of

resources, knowledge on the procedures, and enhancement of the curriculum. The lack of necessary provision like internet connection and substantial holdings in the library prevented the student-researchers to substantially perform the review of related literature. Hughes (2005) and Lyons (2001) in their study concluded that the condition of the school facility affects the performance of the students. In this case, the student-researchers still managed to exhaust means to strengthen their stands through a substantive review of related literature; however, it seems to have been another burden.

There were instances that the student-researches tend to confuse themselves of the concepts and procedures taught to them. Different perspectives from teachers who taught them led to some confusions with regard to the content and the structure of the different sections in the research. Indeed, the role of the teacher in the teaching-learning process greatly impacts the performance of the students. This is highly argued by Blazar (2016) when he established relationship between the two. Nevertheless, answers of the student-researchers offered insights into how they managed to cope with the difficulties in conducting research. Piles of work and demands of the different subjects were seen to be one of the problems that made the experiences of the student-researchers much more problematic. The problem on the workload might paved the way toward the realization of its effects to the student-researchers. The Overload hypothesis by Sweller (1994) provides substantive understanding of the said problem.

When they dealt with the Introduction part of the research, they struggled working on the content. The confusion might have been the result of misguided teaching. Strategies should have been employed by the students for them to realize how to construct the introduction section. On the other hand, the way the students dealt with the methods part seem to have challenged them as this section requires them to deliberately establish the plan for gathering the data, the instrumentation to be used, and the participants to be involved. In spite of these challenges in the introduction and methods part of the research, the student-researchers expressed their capabilities to do the results and discussion part of the research. This might be the result of a collaborative learning experience the students had when dealing with their research. The collaboration is supported by Grima-Farrell (2017) when it was highlighted that collaboration provides opportunities for the students to share their insights and ideas, which is considered to be one of the highlighted approaches in the K to 12 Curriculum. Furthermore, the spiral progression and integrative approach of the curriculum helped the students create meaningful learning throughout the conduct of research. Eventually, the student-researchers expressed that research is not an easy task, but it is considered to be essential among them as research, according to Brew (2007), is a vital component in the academe and in the professional world.

Conclusions and Recommendations

The answers of the student-researchers in the online interviews conducted in different schedules unveiled remarkable insights into the challenges the students faced during the conduct of their research in Practical Research. The analysis of the transcripts

based on the basic qualitative design by Merriam (2009) helped established the communal relationship between the teachers and the students throughout the completion of their research papers. One of the fundamental considerations in this paper is the work of Grima-Farrell (2017) that provided directions to understanding the needs and challenges of the student-researchers. Indeed, the students had struggled with the problems on understanding the constructs of the different sections in the research paper. Though, at some point, they were able to cope with the problem as some of them managed to observe proper procedures.

The way the students struggled while conducting their research seems to persist with the other student-researchers who had similar issues. This occurred because of the confusion they had when different teachers taught them research. Technically, the paper does not deal with the teachers' competence in teaching research; however, it is deemed significant that the guidance the teacher had to provide must ensure clearer directions for the student when conducting their research papers. Experiential learning appears to go with the integrative or collaborative approach employed and facilitated by the teachers. The student answers evidenced the different opportunities they had to establish meaningful learning even the challenges seem to persist.

The challenges they faced with the lack of provision like internet connection and technical facilities added to the struggle of the students. This affected their performance in conducting their review of related literature, which is deemed essential in a research. The confusion they had on the different sections in the research they worked on might misinform them when they reach the higher level of education. Though, they seem to complete their research, it is evident form the answers of the student-researchers that their knowledge on procedures is unsubstantial. This seem to be appalling as this concern could persist when they are asked to do another research. Also, the enhancement of the curriculum seems to satisfy its purpose as the suggested approaches are employed. However, it is still a prerogative for the teachers to equip themselves with substantive competence in dealing with the teaching of research through a training-workshop that is devoted only to teaching research.

My study, which builds on the previous findings and relevant theories could provide a framework of understanding the challenges met by the students that calls for an intensified enhancement of the curriculum through collaborative or integrative approach to be employed by the teachers. This could also serve as the basis for a subsequent research on the strategies employed by the teachers when teaching research and the learning strategies employed by the students. Finally, an action research on curriculum mapping might serve as the solution for a common understanding of the spiraling approach of the curriculum.

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IMPLEMENTATION OF TECHNOLOGY INTEGRATION IN IMUS NATIONAL HIGH SCHOOL

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Abstract

This study employed the descriptive method of research. It was concerned with description, recording, analysis and interpretation of the extent of adequacy in the Information and Communications Technology (ICT) implementation. It provided a valid and reliable assessment on the implementation of technology integration as perceived by teachers in Imus National High School-Main during the School Year 2018-2019. Also, it identified the adequacy of ICT facilities and the ICT skills and knowledge of the teachers. In the conduct of the study, descriptive survey method was utilized. All the 150 teachers in different subject areas served as the respondents of the survey. Several methods of statistical treatments and analyses such as weighted mean, ranking, and Chi-Square Test of Independents were employed to answer specific questions. Based on the findings, it concluded that the ICT facilities were moderately adequate to support the delivery of knowledge and skills among learners which made the school moderately ready to ICT integration in teaching, while the teachers possessed very proficient of ICT skills and knowledge in Microsoft applications which supported them in doing their task in the teaching-learning process. In addition, there was a significant association established between the teachers' readiness to integrate technology in the teaching-learning process and the skills they had in using ICT.

Key Words: *Readiness, Implementation, and Technology Integration*

Introduction

The rapid growth in Information and Communications Technology (ICT) has brought remarkable changes in the twenty-first century, as well as affected the demands of modern societies. ICT is becoming increasingly important in the people's daily lives and in the educational system. Therefore, there is a growing demand on educational institutions to use ICT to teach the skills and knowledge students need for the 21st century.

Realizing the importance and effect of ICT on the workplace and everyday life, today's educational institutions try to restructure their educational curricula and classroom

facilities, in order to bridge the existing technology gap in teaching and learning. This restructuring process requires effective adoption of technologies into existing environment in order to provide learners with knowledge to promote meaningful learning and to enhance professional productivity.

The Department of Education (DepEd) is committed to integrate ICT in public schools. DepEd 's ICT4E Strategic Plan identifies the following as the role of ICT in Philippine education: revitalize schools to make them into dynamic, collaborative and innovative learning institutions where students can become more motivated, inquisitive and creative learners; link up students with the vast networked world of knowledge and information to enable them to acquire a broad knowledge base and a global outlook and provide them with the resources for the development of a creative mind; develop in the students skills and capabilities to critically and intelligently seek, absorb, analyze, manage and present information; create new knowledge and products; and develop in the students habits of self-learning to nurture the attitude and capability for lifelong learning.
Achieving the vision of ICT in Philippine education in the next five years, DepEd commits to completely integrate ICT into the curriculum, which includes the development of multimedia instructional materials, and ICT enabled assessment; intensify competency based professional development programs; establish the necessary ICT infrastructure and applications. Develop processes and systems that ensure efficient, transparent and effective governance.

Intel Education Initiative, Philippines, believed that students everywhere deserve to have the tools needed to become the next generation of innovators. Each year Intel invests money to help teachers teach, students learn and universities around the world innovate particularly in the areas of Math, Science and Technology. Intel Teach Program has been helping teachers to be more effective educators by training them on how to integrate technology into their lessons, promoting problem solving, and critical thinking and collaboration skills among their students.

The Schools Division Office of Imus City in partnership with the city government launched an E-learning system, a move to embrace technology and go beyond conventional teaching for the benefit of 21st century learners in a program coinciding with the division fellowship of teachers held in Imus Sports Complex on December 12, 2013.

Imus National High School had an equal opportunity and empowering process to teach and learn through information and communications technology.

Literature Review

Several studies in the last two decades confirm the positive effects that ICT have on teaching and learning in schools. According to Peeraer and Petergem (2011), ICT benefits schools in several ways: (i) enhancing learning in classroom; (ii) improves management of school (for example, it helps in timetabling, record storage, secretarial work like, typing staff meeting minutes, examinations and letters); (iii) improves

accountability, efficiency and effectiveness in school activities; (iv) use of PowerPoint presentations and internet. Hennessey (2010) takes a cautionary view by stating that putting ICT infrastructure in school does not itself create stimulating new learning environment that are about shifting the culture of classroom teaching and the ethos of schools.

By implementing ICT, schools can present high quality teaching and learning. Keengwe and Onchwari (2011) identified four different ways schools can offer quality education supported by ICT: real time conversation, learning by doing, directed instruction, and delayed time conversation. Higgins and Moseley (2011) observed that the use of ICT can improve teaching, learning, performance and management; improve impact on school as a whole, and develop significant skills in the marginalized communities (hence helping in liberation and their transformation). Education for All (EFA) Global Monitoring Report (2012) observed that the use of ICT could help in achieving EFA goals. The report recommended that ICT should be harnessed to sustain EFA goals at affordable cost. The report went further to note that these technologies had great potential for effective learning, knowledge and development of more efficient school services. According to Hennessy (2010), ICT should be used as a tool to support school objectives like cooperation in school, problem solving, communication, developing skills, assessing and searching information which are essential in preparation of students for knowledge society.

ICT should be used as a tool to support school objectives like cooperation in school, problem solving, communication, developing skills, assessing and searching information which are essential in preparation of students for knowledge society. A study by Higgins and Moseley (2011) found that teachers who used ICT in classroom perceived it as useful for personal work and for teaching and were prepared to continue using it due to its usefulness. Some of usefulness of ICT by teachers this study found were: making teaching more interesting, easier, and more diverse, more fun for them and students, more enjoyable and motivating to students. Additional personal usefulness was found to be: allowing larger access to computer for personal use, improving presentation of materials in class, giving more prestige to teachers, giving more power to teachers in school, providing professional support through the internet and making management in school more efficient and effective.

Literature shows that if ICT is well-utilized in schools it has a potential to enhance the teaching and learning process in many ways, such as engaging students in learning since it is generally learner centered. Research shows that students are motivated when learning activities are challenging, authentic, multisensory and multi-disciplinary. Dzidonu (2010) established that students report higher attendance, motivation and academic accomplishment as a result of ICT programs. To address the challenge of high school drop-out rates experienced in sub-Sahara Africa, ICT can be used to make school curriculum more interesting. Studies have established that children enjoy learning using technology. This motivation may discourage students from dropping out of school. Rebecca and Marshall (2012) described how using internet in school for street children in Colombia enticed a higher than usual number back to classroom.

Research showed that ICT, if fully utilized, can reduce the cost of education and increase efficiency. Aguyo (2010) pointed out that ICT in school can be viewed as cost effective especially in terms of manpower as one teacher can reach many learners through internet, interactive white board, and video conference technologies. Parents are also spared the agony of buying many textbooks because many of them would be available online. Study and teaching materials are very sparse in many schools in developing countries; ICTs can play a significant role in providing teachers and students with access to educational content and up to date resources. The usage of ICT by students helps develop future workforce that can effectively participate in the increasingly networked world and the emerging knowledge economy.

The main aim of ICT in education means implementing of ICT equipment and tools in teaching and learning process as media and methodology. The purpose of ICT in education is generally to familiarize students with the use and workings of computers, and related social and ethical issues. ICT has also enabled learning through multiple intelligence as ICT has introduced learning through simulation games; this enables active learning through all senses. According to Natividad (2009), rapid development of ICT is perceived to accelerate the transmission and use of information and knowledge, and when appropriately applied to a sector, it becomes a powerful force that can change the way people live, and redefine the way firms, industries and nation do business. When properly executed, CT application is a powerful tool that levels-off the playing field and, is inclusionary.

Llaneta (2008) stated that students today are very different from students ten years ago. They are very mobile, very techno-savvy, able to do multitasking. So teachers need to match their abilities. The instructional materials, teacher develop are not just texts need to be read from page to page. The students are able to interact with teachers and technology allows it. Llaneta added that classroom captured students' imagination as the temple of learning and education, where students most to receive instruction from a teacher in an atmosphere of genteel, erudite totalitarianism. For generations, it has been the primary mode of learning in many schools and academic instructions. Envisioning any other way, aspect in the case of few gifted individuals was mostly unheard off. The study of Llaneta (2008) emphasized that generations today are more advanced in terms of technologies, this was also what the researcher tried to point out. The need for teacher' developments on information and communication technologies is important to cope out on these generations.

Rodriguez (2007) stated in his study that one must remember that technology requires administrative and community support and involvement that are critical to its successful integration in education. Commitment and interest of teacher and school heads is the most critical factor for successful implementation of any school innovation, especially technology. Furthermore, Policarpio (2010) concluded that Chief Learning Officers should realize that there is a need to redesign the learning environments into an information ecology that is conducive to the free flow of content band knowledge between and among teachers and students. Schools that do not alter their structures to meet new societal needs and that do not face on the challenges that change brings will

find their influence in the community diminishing in the coming years. Rodriguez (2007), Basas (2008), Camacho (2011) and Policarpio (2010) studied on the importance of supports from the officials and stakeholders of education for teachers' development in ICT.

Research Questions

The study tries to determine the extent and implementation of technology integration in the delivery of instructions in Imus National High School-Main, a public secondary school under the Schools Division of Imus City, as perceived by teachers. Specifically, the study seeks to answer the following questions:

1. How do the teacher-respondents perceive the adequacy of Information and Communications Technology (ICT) facilities in terms of:
    1.1 ICT-enhanced Computer Laboratory, and;
    1.2 Educational Technologies?
2. What is the level of ICT skills and knowledge of the teacher-respondents in using the following:
    2.1 Microsoft Word,
    2.2 Microsoft Power Point, and
    2.3 Microsoft Excel?
3. Is there a significant relationship between the perception of the teacher-respondents in their perceived adequacy of ICT facilities and the overall level of ICT skills and knowledge?
4. Based on the outcomes of the study, what implication may be derived from the implementation of technology integration?

Scope and Limitation

This study focused on the implementation of technology integration in Imus National High School. It was conducted in S.Y. 2018-2019 with proposed time frame of six months. Intervening factors like the preparation for the study; meeting with the school principal, Officers-in-Charge (OICs), departments heads, teachers and students; administration of questionnaire; and interpreting the result.

Methodology

The researcher used the descriptive analytic method of research. As pointed out by Hannington and Martin (2012), descriptive method is used to describe the condition that exists and the extent of adequacy in implementation of the E-learning/ ICT in the public secondary school in the division of Imus City. The study employed the descriptive method research and concerned with description, recording, analysis and interpretation of the extent of adequacy in the ICT implementation. The questionnaire was the chief

instrument in gathering data and information in relation to the present understandings from the respondents.

The respondents were the 150 teachers of Imus National High School. To determine the number of teacher-respondents as sample of the study, stratified sampling was used. Stratified sampling is a sampling technique which the researcher divides the entire population into different subgroups, then randomly selects the final subjects proportionally from the different strata.

The researcher performed the following data-gathering processes: submitted a letter of request asking permission to conduct the study to the Office of the Principal of the school; upon approval to conduct the study, distributed questionnaire to the selected teacher- respondents based on stratified sampling; and after the questionnaires were retrieved, the researcher proceeded to the encoding, tallying, tabulation, and statistical treatment and analysis of the data.

Weighted mean was used to determine the perceptions of the teacher-respondents with regard to the adequacy of ICT facilities in Imus National High School terms of ICT-enhanced Computer Laboratory and Educational Technologies, the teachers' level of ICT skills and knowledge in using the Microsoft Word, Microsoft Power Point and Microsoft Excel as well as the readiness of implementing ICT. The following Likert Scale is used to interpret the responses of the teachers.

Scale	Value	Interpretation
5	4.50 – 5.00	Very Adequate / Very Much Ready / Expert
4	3.50 - 4.49	Adequate / Ready / Very Proficient
3	2.50 - 3.49	Moderately Adequate/Moderately Ready/ Proficient
2	1.50 - 2.49	Less Adequate / Less Ready / Less Proficient
1	1.00 - 1.49	Inadequate / Not Ready / No Skill

Ranking was also used to determine the ranking of the different indicators and domains considered. The highest weighted mean got Rank 1.

Chi-Square Test of Independence was used to determine if there was a significant relationship between the perception of the teacher-respondents in their readiness of implementing ICT and the overall level of ICT skills and knowledge.

Results and Discussion

This part of the research presents the findings of the study in illustrative tables and analysis as well as the interpretation based on the statistical treatment of the data.

1. How do the teacher-respondents perceive the adequacy of Information and Communication Technology (ICT) facilities in terms of:
   1.1 ICT-enhanced Computer Laboratory, and
   1.2 Educational Technologies?

Table 1

Respondents' Perception on the Adequacy of Information and Communication Technology (ICT) Facilities in Terms of ICT-Enhanced Computer Laboratory

Indicators	WM	Interpretation	Rank
1. Rooms for laboratory/ hands-on activity.	3.21	Moderately Adequate	3
2. Rooms for computer lectures	3.25	Moderately Adequate	1
3. Rooms for PC hardware and paraphernalia's	3.13	Moderately Adequate	4
4. Air Conditioning Unit (ACU)	2.98	Moderately Adequate	9
5. Internet Connection	2.99	Moderately Adequate	8
6. Separate line for Electrical Supply	3.09	Moderately Adequate	5
7. Provisions of UPS (Uninterrupted Power Supply)	3.01	Moderately Adequate	7
8. Provisions for fire extinguisher	3.03	Moderately Adequate	6
9. Telephone Line	2.94	Moderately Adequate	10
10. Clear policies in using personal computer in school	3.23	Moderately Adequate	2
Composite Weighted Mean	**3.09**	**Moderately Adequate**	

Table 1 presented the perception of the teacher-respondents on the adequacy of Information and Communication Technology (ICT) facilities in terms of ICT-enhanced Computer Laboratory. It revealed that there is “moderately adequate” availability of rooms that is exclusively used for computer lectures receiving the highest weighted mean of 3.25 (Rank 1). In the same degree, there is “moderately adequate” policies clear enough to be understood by everyone in using personal computer in school (Rank 2), rooms available for laboratory/ hands-on activity (Rank 3), as well as rooms for studying PC hardware components and peripherals (Rank 4). Moreover, the teachers perceived that there is “moderately adequate” internet connection which can be used in interactive browsing and activities that can be integrated in the lesson (Rank 8), air conditioning unit in the classrooms used in computer classes (Rank 9) and telephone line that is used as access to internet connections (Rank 10).

In general, the teachers of Imus National High School believed that there is “moderately adequate” ICT-enhanced computer laboratory available to implement technology integration as they deliver their lessons to the students. This is indicated in the composite weighted mean of 3.09 which means that there is enough classrooms in the school to where ICT-integrated lessons can be delivered to the students.

Table 2

Respondents' Perception on the Adequacy of Information and Communication Technology (ICT) Facilities in Terms of Educational Technologies

Indicators	WM	Interpretation	Rank
1. LCD Projector	3.08	Moderately Adequate	1
2. Slide Projector	2.83	Moderately Adequate	3
3. Overhead Projector	2.69	Moderately Adequate	4
4. Multimedia (VCD, DVD, TV)	2.66	Moderately Adequate	5
5. Computer set	2.95	Moderately Adequate	2
6. Trainer kits	2.43	Less Adequate	6
7. Printer	2.41	Less Adequate	7
8. Tablet	2.13	Less Adequate	9.5
9. Photocopy machine/scanner	2.30	Less Adequate	8
10. Digital Camera	2.13	Less Adequate	9.5
Composite Weighted Mean	**2.56**	**Moderately Adequate**	

The perception of the teacher-respondents on the adequacy of Information and Communication Technology (ICT) facilities in terms of educational technologies was shown in Table 2. As disclosed, they viewed that there is “moderately adequate” number of LCD projectors that is used when integrating technology in teaching garnering the highest weighted mean of 3.08 (Rank 1). Likewise, they expressed that there is “moderately adequate” number of computer sets available for use (Rank 2), slide projector (Rank 3) and overhead projectors (Rank 4) when integrating ICT in the delivery of lessons. Further, the school is believed to have “moderately adequate” photocopy machine/scanner (Rank 8), tablet (Rank 9) and digital camera (Rank 10) as ICT tools in integrating technology in teaching. As a whole, the teachers of Imus National High School perceived that there is “moderately adequate” educational technologies that is used to incorporate ICT in the teaching-learning process as indicated in the composite weighted mean of 2.56. This suggests that there is an average number of educational technologies that can be integrated to deliver instructions among learners.

2. What is the level of ICT skills and knowledge of the teacher-respondents in using the following:
   2.1 Microsoft Word,
   2.2 Microsoft Power Point, and
   2.3 Microsoft Excel?

Table 3

Respondents' Level of ICT Skills and Knowledge in Using Microsoft Word

Indicators	WM	Interpretation	Rank
1. Create new document	4.28	Very Proficient	5
2. Open an existing file	4.30	Very Proficient	3
3. Change font style and size	4.34	Very Proficient	1
4. Insert text	4.29	Very Proficient	4
5. Insert pictures	4.21	Very Proficient	7.5
6. Insert tables	4.16	Very Proficient	10
7. Insert page numbers	4.21	Very Proficient	7.5
8. Insert columns and sections	4.25	Very Proficient	6
9. Insert textbox	4.17	Very Proficient	9
10. Print document	4.32	Very Proficient	2
Composite Weighted Mean	**4.25**	**Very Proficient**	

The teacher-respondents' level of ICT skills and knowledge in the use of Microsoft Word was displayed in Table 4. As revealed, they are "very proficient" in changing the font style and size used in creating documents with the use of the aforementioned word processor receiving the highest weighted mean of 4.34 (Rank 1). In almost similar magnitude, they expressed that they are "very proficient" in printing the documents encoded (Rank 2), in opening their existing file for editing and/or viewing (Rank 3), in inserting text whenever needed (Rank 4) and even in creating new document (Rank 5). Although at the bottom of the listed indicators, teachers are seen as "very proficient" in inserting pictures (Rank 7.5), in inserting page numbers (Rank 7.5), in inserting textbox (Rank 9) and in inserting tables (Rank 10) which can enhance document presentation. Generally, teachers of Imus National High School possess "very proficient" ICT skills and knowledge on the use of Microsoft Word in making documents as revealed in the composite weighted mean of 4.25. This means that they are very knowledgeable in using the stated word processor in making the needed documents like lesson plans, quizzes, seatwork, periodic examinations and even when making letters and/or reports required. They have very good competency is utilizing the Microsoft Word to produce documents that can be encoded using a word processor.

Table 4

Respondents' Level of ICT Skills and Knowledge in Using Microsoft PowerPoint

Indicators	WM	Interpretation	Rank
1. Create new slide	4.19	Very Proficient	4
2. Open an existing slide show	4.22	Very Proficient	3
3. Change font style and size	4.27	Very Proficient	1
4. Insert text	4.19	Very Proficient	5
5. Insert pictures	4.13	Very Proficient	6
6. Insert tables	4.09	Very Proficient	7
7. Insert videos	3.95	Very Proficient	9
8. Insert hyperlinks	3.80	Very Proficient	10
9. Add animation and transition	4.05	Very Proficient	8
10. Print document	4.26	Very Proficient	2
Composite Weighted Mean	**4.12**	**Very Proficient**	

Table 4 exhibited the level of ICT skills and knowledge of the teacher-respondents in using Microsoft PowerPoint application. It revealed that they possess “very proficient” skills in changing font styles and sizes when creating presentations to be used teaching and reporting posting the highest weighted mean of 4.27 (Rank 1). Similarly, they have “very proficient” skills and knowledge on how to print the presentation documents (Rank 2), on how to open an existing slide show files (Rank 3), on how to create a new slide (Rank 4) and on how to insert text (Rank 5). Likewise, the teachers are “very proficient” in adding animation and transition effects in the presentation files (Rank 8), in inserting video which further enhances their presentation (Rank 9) and in inserting hyperlinks which connects the presentation file to other files and access other existing files or internet linkages (Rank 10).

In totality, the teachers possess “very proficient” ICT skills and knowledge in the use of Microsoft Power Point as reflected in the composite weighted mean of 4.12. This suggests that they have very adequate capabilities to utilize the stated application in creating presentation files which can enhance their pedagogical approaches in delivering instructions. Further, the skills of the teachers in using Power Point in the teaching-learning process can benefit them as well as their students.

Table 5

Respondents' Level of ICT Skills and Knowledge in Using Microsoft Excel

Indicators	WM	Interpretation	Rank
1. Create new spreadsheet	4.21	Very Proficient	4
2. Open an existing spreadsheet	4.28	Very Proficient	2
3. Change font style and size	4.29	Very Proficient	1
4. Insert graphs and tables	4.10	Very Proficient	8
5. Insert and delete rows and columns	4.21	Very Proficient	4
6. Format cell	4.14	Very Proficient	6
7. Create new charts (graphs)	4.01	Very Proficient	10
8. Enter data on existing spreadsheet	4.13	Very Proficient	7
9. Sort cell	4.07	Very Proficient	9
10. Print document	4.21	Very Proficient	4
Composite Weighted Mean	**4.17**	**Very Proficient**	

Displayed in Table 5 is the level of ICT skills and knowledge of the teachers in using the Microsoft Excel. Similar to their skills in using Microsoft Word and Microsoft Power Point, they are “very proficient” in changing the font style and size when creating spreadsheet files recording the highest weighted mean of 4.29 (Rank 1). Also, they are “very proficient” in opening an existing spreadsheet previously created (Rank 2), in creating a new spreadsheet (Rank 4), in inserting and deleting rows and columns whenever necessary (Rank 4), and in printing the spreadsheet (Rank 4). Moreover, they possess “very proficient” skills and knowledge on how to insert graphs and tables (Rank 8), on how to sort a range of cells (Rank 9) and on how create new graphs or charts (Rank 10) which can further improve the spreadsheet document presentation. Overall, the teacher-respondents expressed that they possess “very proficient” skills and knowledge in using Microsoft Excel as disclosed in the composite weighted mean of 4.17. This means that they have already acquired very adequate knowledge on how to use the stated ICT application in creating spreadsheet files or documents. With these skills, they can be able to create a better class record system where they can enter and compute the grades of the students. This can contribute in easing the burden of computing grades using the manual calculators. Further, the skills they possess in utilizing this spreadsheet application greatly benefit them in other reports required of them like the overall performance of the students, a sorted list of students based on their grades, etc.

Table 6

Respondents' Overall Level of ICT Skills and Knowledge

Domains	CWM	Interpretation	Rank
1. Using Microsoft Word	4.25	Very Proficient	1
2. Using Microsoft Power Point	4.12	Very Proficient	3
3. Using Microsoft Excel	4.17	Very Proficient	2
Overall Weighted Mean	**4.18**	**Very Proficient**	

Table 6 summarized the teacher-respondents' level of ICT skills and knowledge in using Microsoft applications. As revealed, they are "very proficient" in using all the stated applications of which Microsoft Word, a word processing software package, garnered the highest composite weighted mean of 4.25 (Rank 1), followed by the Microsoft Excel, a software package used to create spreadsheet documents (Rank 2 with composite weighted mean of 4.17) while Microsoft Power Point registered the lowest composite weighted mean of 4.12 (Rank 3). Further, the overall weighted mean of 4.18 implies that teachers of Imus National High School possess "very proficient" level of ICT skills and knowledge in using the Microsoft applications which supports them in disposing their tasks in the teaching-learning process. Teachers' ICT skills and knowledge play a significant part in implementation of ICT integration in schools.

3. Is there a significant relationship between the perception of the teacher-respondents in their readiness of implementing ICT and the overall level of ICT skills and knowledge?

Table 7

Cross Tabulation of Teachers' Perception on Their Readiness of Implementing ICT and Their Level of ICT Skills and Knowledge

Adequacy	Level of ICT Skills and Knowledge				Total
	Less Proficient	Proficient	Very Proficient	Expert	
Not Ready	2	1	N/A	1	4
Less Ready	N/A	7	9	32	48
Moderately Ready	4	20	18	27	69
Ready	N/A	2	13	10	25
Very Much Ready	N/A	N/A	2	2	4
Total	**6**	**30**	**42**	**72**	**150**

Table 7 presented the cross tabulation (frequency distribution table) of teachers' perception on their readiness of implementing ICT and their level of ICT skills and knowledge. It reflected that of the 69 teachers who expressed that they are "moderately ready" to implement ICT and integrate technology in teaching, 27 teachers possess

“expert” ICT skills and knowledge, 20 teachers have “proficient” skills, 18 teachers have “very proficient” skills while four teachers have “less proficient” skills. In addition, of the 48 teachers who expressed that they are “less ready” to implement ICT, 32 teachers have “expert” ICT skills, nine teachers have “very proficient” skills while seven teachers possess “proficient” ICT skills and knowledge. Moreover, of the 25 teachers who believed that they are “ready” to implement ICT integration, 13 teachers acquired “very proficient” ICT skills, 10 teachers possess “expert” ICT skills while two teachers have “proficient” ICT skills. Further, four teachers viewed that they are “very much ready” to implement ICT integration wherein two teachers have “expert” ICT skills and the other two teachers have “very proficient” ICT skills. Contrastingly, four teachers have expressed that they are “not ready” to implement ICT.

Table 8

Result of the Chi-Square Test of Independence between Teachers' Readiness of Implementing ICT and Their Level of ICT Skills and Knowledge

Variables	χ2-VALUE (α = 0.05)		Df	Asymp. Sig. (2-sided)	Interpretation	Remarks
	Critical	Computed				
Adequacy vs. ICT Skills		44.841	12	0.000	Significant	$p < 0.05$

Table 8 revealed the result of the Chi-Square test of independence to determine if the perceptions of the teacher-respondents on their readiness to implement ICT and their level of ICT skills and knowledge are significantly related.

As revealed, a significant relationship exists between the two (2) stated variables. The computed chi-square value (χ^2) is 44.841 (Critical Value =) with two-sided asymptotic significance equal to 0.000 tested at the degrees of freedom (df) of 12 and at a level of significance of 0.05 (α = 0.05). This means that how the teachers perceived their readiness of implementing ICT integration in teaching is observed to have a significant correlation with the level of ICT skills and knowledge they possess. Moreover, the result suggests that there is a significant association established between the teachers’ readiness to integrate technology in the teaching-learning process and the skills they have in using ICT. Further, there is an indication that teachers who believed there is enough ICT facilities in school that can support technology integration and expressed that they are ready to implement ICT in teaching are the same teachers who possess very adequate ICT skills and knowledge. In relation to the observation made by Yilmaz (2011), if there is no technical support for teachers, they become frustrated resulting in their unwillingness to use ICT. There is no significant relationship between the perception of the teacher-respondents in their readiness of implementing ICT and the overall level of ICT skills and knowledge is henceforth rejected.

4. Based on the outcomes of the study, what implication may be derived from the implementation of technology integration?
   The implications derived from the study with regards to the implementation of technology integration are the following:
   a. There are enough classroom facilities as well as educational technologies in the school to where ICT-integrated lessons can be delivered to the students;
   b. There is “moderately adequate” presence of ICT facilities to support the delivery of knowledge and skills among the learners which make the school “moderately ready” to implement ICT integration in teaching;
   c. Teachers of Imus National High School possess “very proficient” level of ICT skills and knowledge in using the Microsoft applications which supports them in disposing their tasks in the teaching-learning process; and
   d. Teachers’ ICT skills and knowledge play a significant part in implementation of ICT integration in schools.

Conclusions

In consideration of the aforementioned findings, the following conclusions are drawn:

1. There are enough classroom facilities and educational technologies in the school where ICT-integrated lessons can be delivered to the students.
2. There is a “moderately adequate” presence of ICT facilities to support the delivery of knowledge and skills among the learners which makes the school “moderately ready” to implement ICT integration in teaching.
3. Teachers of Imus National High School possess a “very proficient” level of ICT skills and knowledge in using the Microsoft applications which supports them in disposing of their tasks in the teaching-learning process. Teachers’ ICT skills and knowledge play a significant part in the implementation of ICT integration in schools.
4. There is a significant association established between the teachers’ adequacy to integrate technology in the teaching-learning process and the skills they have in using ICT.

Recommendations

1. Provide capacity building activities for teachers and school staff on the utilization of technology in the teaching-learning process.
2. Conduct regular monitoring, assessment, and evaluation to find out the realization of the program.
3. Provide more needed physical facilities and equipment. Prepare computer laboratory, update electrical wiring, build computer tables and chairs, install computers, acquire netbooks/ laptops/tablets and projectors etc.
4. Include the stakeholders to get involved in recognizing the most functional ICT laboratory.
5. Create an updated school website.

6. Develop ICT modules and guides, prepare PowerPoint presentations and other similar computer-based/ assisted instruction to be utilized during classroom teaching, remediation and enhancement programs.
7. For future study, integration of contextualized teaching-learning through the use of ICT and technology-modified instruction

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THE EFFECT OF AUDIO-VISUAL MATERIALS IN TEACHING LETTER SOUNDS TO GRADE II STRUGGLING READERS OF MALAGASANG II ELEMENTARY SCHOOL

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Abstract

Malagasang II ES embarked on identifying struggling readers in Grade 2 using Phil-IRI reading materials. Results revealed that many pupils struggle to read. A total of 192 pupils out of 748 were classified as struggling readers in which the letter sounds are not fully developed.

To determine the improvement in oral reading performance of struggling readers using the audio-visual materials as applied intervention, this research is conducted utilizing Phil-IRI as the oral reading assessment tool to determine if improvement in the oral reading performance is achieved during the post-test reading evaluation. Further, t-test was used to compare the result of oral reading test from pre-test to post- test to determine if there is a significant difference in the oral reading after the application of the reading intervention. Perception of teachers, parents and students are sought to verify if the intervention applied marks beneficial effect to the oral reading performance of the learners involved in the oral reading program.

The results and findings in this action research were utilized to craft an enhanced action plan for succeeding School Reading Program to provide struggling readers with reading interventions, thus achieve goal of making learners become readers specifically for Grade 2 pupils, the transition year to Grade 3.

Keywords: struggling readers, oral reading, reading materials, intervention

Introduction

Oral reading performance is used as an indicator of students over all reading ability. It is used to measure the three components of reading: accuracy, rate and fluency which have been shown to relate to comprehension. Students are asked to read aloud from selected grade-level passages, and scores are based on accuracy, rate, and fluency (Stefanco, 2011).

Seeing the significance of reading as the foundational skill of every child to become lifelong learner and in line with the national goal of making each child a reader as cited in DepEd Order No. 18, s. 2017, Malagasang II Elementary School embarked on identifying struggling readers in Grade 2 using Phil-IRI reading materials. Struggling readers are learners who have poor oral language comprehension skills and struggle with word reading. Many learners reading below grade level who fall in this category will improve with frequent one-on-one interactive, shared reading (i.e. Active Reading) to build language, vocabulary and oral comprehension skills as well as systematic phonics instruction.

The significance of oral reading fluency is beyond question to make students read with comprehension. It is a skill that will make students enjoy reading and be developed as a lifelong learner. To be fluent readers, children must be able to read new and familiar words quickly. To understand the meaning of texts, children must have sufficient language comprehension skills. Phonemic awareness, phonics, fluency, vocabulary and comprehension are the key skills that children need to develop to become good readers. McCormick and Zutell (2011) explains as cited by Ose, 2016 shared that reading depends first and foremost on visual letter recognition. They explained that recognition is important because students need to recognize letters and their distinguishing features in order to effectively work with print. Seeing the need of struggling readers to phonological awareness and processing to address reading difficulty, reading interventions must be in place. Knowledge of letter-sound correspondences and phonological awareness skills are the basic building blocks of literacy learning. These skills are strong predictors of how well students learn to read, (Janice Light & David MacNaughton, August 2012).

These previous study motivated the researchers to use downloaded audio-visual assisted reading materials to the respondents as a tool to remediate their problem in reading. Varied reading materials such as letter sounds, sight words and short stories were researched from the internet and stored using flash drive and hard drive. The Grade II teachers served as facilitators. Then the respondents were instructed how to use the program; to watch and listen to the downloaded materials using laptop and led television and follow along the recorded audio while reading the text. In this manner, the respondents would be trained how to read with proper speed, accuracy and prosody.

The purpose of this strategy was to provide struggling readers with reading interventions that will enhance their reading performance, and ultimately achieve their goal of making learners become readers with fluency in Grade 2 and comprehension to the next Grade levels.

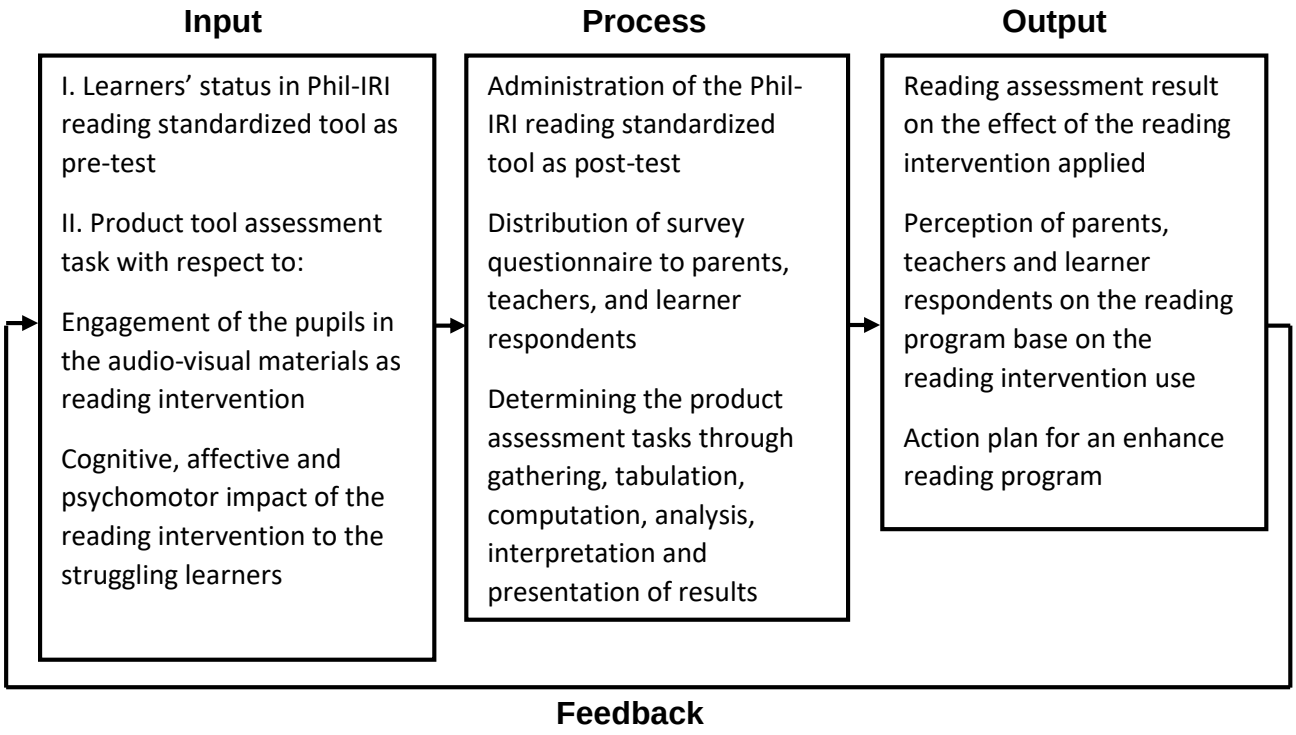
Conceptual Framework

This study is designed to determine the effect of audio – visual reading materials to the reading performance of Grade II pupils of Malagasang II Elementary School. This utilized an experimental pre-test-post-test design by assessing the Phil IRI result after the reading intervention program. This likewise determines if there is a significant difference between the pre and post-test results in the oral reading performance of Grades 2 struggling readers with the reading interventions applied.

Perception of parents, teachers and learner respondents on the cognitive, affective and psychomotor domains were also taken using a survey questionnaire to determine the effect of the reading intervention and craft an action plan for an enhance reading program.

Figure 1

Conceptual Paradigm



The research was developed using the standardized Phil-IRI reading tool in English. The tool is utilized for the pre-test to identify the struggling readers while the post-test is administered to the identified group after the implementation of the reading intervention. The result determined if there is a significant difference in the oral reading performance from pre-test to post-test after the application of the reading intervention and is highlighted with the perceptions of teachers, parents and learners including the

comments/suggestions/recommendations that made the reading program better. The data is utilized to craft the enhanced reading program action plan which helped the struggling readers and the reading teachers.

Research Questions

The research was completed to determine the effect of audio-visual materials in teaching letter sounds to Grade II struggling readers of Malagasang II Elementary School for the School Year 2017-2018.

Specifically, it sought to answer the following research questions:

1. What is the result of the oral reading pre-test in English of Grade 2 learners?
2. What is the result of the oral reading post-test in English of Grade 2 learners?
3. Is there a significant difference between the test scores?
4. What are the effects of the oral reading program using audio visual materials in the cognitive, psychomotor and affective learning domains of struggling readers as perceived by teachers, parents and learners themselves?
5. What are the comments/suggestions/recommendations on the reading program?
6. What actions be considered in our reading program plan to achieve reading improvement of the learners?

Hypothesis

There is no significant difference between the pre and post-test results in oral reading performance of Grades 2 struggling readers in Malagasang II Elementary School with the reading interventions applied for the SY 2017-2018.

Scope and Limitation

The research covered the difference in the oral reading performance of the 192 identified Grade 2 struggling readers in English of Malagasang II Elementary School for the School Year 2017-2018 after the application of the reading interventions. Oral Reading in English Pre-test was taken from the start of the School Year of 2017-2018. The identified struggling readers were given with an intensive reading intervention. After 6 months, the struggling-readers were given with oral reading post-test in English. The result was used to determine the significant difference of the oral reading performance in comparison to the pre- test after the reading interventions.

Methodology

The study is a quasi-experimental research which determine the significant difference in the oral reading proficiency of Grade 2 struggling readers in English. The study utilized t-test to determine the significant difference of pre-test and post-test. Purposive sampling was used to identify the population under experiment which composed of the identified struggling readers based on the Phil-IRI standardized test result. Use of audio-visual materials were utilized in the reading program for the struggling readers. The difference between the pre and post- test after the implementation of the reading intervention used determine the significance of the research.

A survey questionnaire on the perception of the teachers, parents and learners to the reading program was administered and identified the correlation of responses using the Likert scale of 1 to 4. This scale aimed to identify the weighted mean of the responses that were gathered from the responses and categorized as 1- never (1-1.49); 2- sometimes (1.5-2.49); 3- often (2.5-3.49); and 4- always (3.5-4). The weighted mean of the responses was gathered and analyzed to determine the perceptions and correlation of the respondents' response to the reading program using the questionnaire.

Research Findings

Table 1

Pre-test and post-test scores in English oral reading proficiency using t- test

Reading area	N		t-test	Df	value	Decision	Description
English	Pre-test	192	1.729 at 0.05 level of significance	15	7.361	Reject Ho	Significant
	Post-test	67					

The table showed that the oral reading proficiency in English of Grades 2 struggling learners' population lowered from 192 during pre-test to 67 in the post-test. The t-test computed value in the oral reading proficiency of ± 7.361 was beyond 1.729 at 0.05 level of significance with 15 degrees of freedom. The null hypothesis was therefore disconfirmed in favor of the research hypothesis. This revealed that the post-test results were higher than the pre-test results. It implied that the use of audio-visual in teaching letter sounds as intervention materials provided positive effect in addressing the oral reading difficulties of Grades 2 struggling readers.

Table 2

The effect of the oral reading program as perceived by teachers based on the cognitive, psychomotor and affective learning domains.

Cognitive	Ẋ	Psychomotor	Ẋ	Affective	Ẋ
1.Read words with CVC	2.81	1.Participate in board Work	2.7	1.Read with confidence	2.3
2.Read basic sight Words	2.63	2. Participate actively in class	2.5	2.Socialize with peers/classmates	3.1
3.Read phrases	2.44	3.Respond to questions	2.6	3.Appreciate printed texts	2.3
4.Read sentences	2.31	4.Do assigned task responsibly	2.4	4.Establish lesson focus through eye	2.4
5.Read paragraphs	2.25	5.Recite in class	2.1	5. Exhibit happiness in class	2.8
6. Read short stories	2.06	6.Show cooperation in group activities	2.6	6.Increase self-worth by reading orally and talking	2.5
7.Comprehend and answer questions from story read	2.13				
8.Build vocabulary	2.25				

The table revealed that reading words with CVC pattern and reading the basic sight words with the weighted mean of 2.81 and 2.63 respectively were often observed. The two highest weighted means were followed by reading phrases, reading sentences, reading paragraphs building vocabulary, answering questions correctly from a selection read, reading short stories and comprehending the story read that ranged from 2.13 to 2.44, all dropped to sometimes observe. Moreover, reading short stories was the lowest among the means.

On the other hand, participating in board work got the highest weighted mean of 2.75 under psychomotor domain followed by responding to questions about the lesson, showing cooperation in group activities and participating actively in class, all were often observed. Further doing assigned task responsibly, and reciting in class fell to sometimes observed.

Interestingly, in the area of affective domain socializing with peers got the highest mean of 3.13, exhibiting happiness in class followed with a weighted mean of 2.89 and increasing self-worth of 2.5, all were often observed. Establishing lesson focuses through

eye contact, appreciating printed text, reading with confidence ranging from 2.44 to 2.31 fell to sometimes observed.

Generally, the teachers' perception over the readers acquired learning was affirmative. Reading interventions applied created a positive effect. Once the cognitive learning domain in the area of reading was addressed it influenced the learners' psychomotor ability and made them more active and participative in class. Moreover, a deeper effect was noticed in which the learners were developed socially and expressed happiness while attending classes. Thus, making the atmosphere conducive to learning process particularly in reading.

Table 3

The effect of the oral reading program as perceived by students based on the cognitive, psychomotor and affective learning domains.

Cognitive	Ẋ	**Psychomotor**	Ẋ	**Affective**	Ẋ
1.Read words with CVC	2.62	1.Participate in board work	2.4	1.Read with confidence	2.26
2.Read the basic sight words	2.48	2.Participate actively in class	2.3	2.Socialize with peers/classmates	2.96
3.Read phrases	2.38	3.Respond to questions about the lesson	2.3	3.Appreciate printed texts	2.43
4.Read sentences	2.31	4.Do assigned task responsibly	2.5	4.Establish lesson focus through eye	2.39
5.Read paragraphs	2.22	5.Recite in class	2.1	5. Exhibit happiness in class	3.04
6. Read short stories	2.23	6.Show cooperation in group activities	2.5	6.Increase self-worth by reading orally and talking	2.76
7.Comprehend story read	2.22				
8.Build vocabulary	2.21				
9.Answer questions correctly from a selection read	2.24				

Data in Table 3 revealed that eight (8) of the weighted mean of the learning domains ranging from 2.21 to 2.48 fell to sometimes observe under cognitive. They read the words with CVC pattern better as it gave the highest mean of 2.62. In like manner, the learners' psychomotor learning domains were mostly observed with doing assigned task responsibly as often observed. Moreover, in the area of affective domain exhibiting

happiness in class of 3.04 was the highest and often observe. Socializing with peers and increasing self-worth by talking and reading orally with 2.96 and 2.76 weighted mean followed. All the rest of the domains fell to sometimes observe.

Learners' perception to reading was not as welcoming as the other areas of their interest as revealed by the weighted mean ranging from 2.21 to 2.62 in the cognitive and 2.16 to 2.53 in the psychomotor domain. However, affective learning domain got an affirmative view as it revealed a positive effect on how struggling readers felt in class. They often exhibited happiness in class with a weighted mean of 3.04. Results of survey questionnaire conducted to learners themselves implied that along with their interest in learning to read and develop their cognitive and psychomotor learning domains, their interest in reading led them to happiness in class. Once they demonstrated happiness, a positive effect on the learners learning capability was enhanced. A happy mind and a happy disposition created positive energy favorable to learning.

Table 4

The effect of the oral reading program as perceived by parents based on the cognitive, psychomotor and affective learning domains

Cognitive	$\dot{X}$	***Psychomotor***	$\dot{X}$	***Affective***	$\dot{X}$
1.Read at home with printed materials	2.2	1.Want to read at home	2.2	1.Proud to read in front of others	2.1
2.Do assignments independently	2.2	2. Interested in reading stories	2.4	2.Interested to attend the reading	2.5
3.Show diligence in studies	2.5	3.Show eagerness to read	2.4	3.Happily share experiences in reading	2.6
4.Ask parents/guardians	$\hat{2}.5$	4.Read aloud in front of people	$\bar{2}.2$		4
5.Attempt to read words in the surroundings	2.68		9		

Table 4 showed that under the cognitive domain parents perceived that their children often showed diligence in studies. Their children often asked help in reading and interested to read words in the surroundings. These perceptions were strengthened by the weighted mean of 2.58, 2.59 and 2.68 respectively. While doing assignments independently, reading at home with printed materials fell to sometimes observed with a weighted mean average of 2.21 to 2.28. Psychomotor domain of having interest in reading got the highest weighted mean of 2.46 as perceived by parents next was showing eagerness to read, followed by reading aloud in front of people and wanting to read at home, all were sometimes observe as the weighted mean range from 2. 26 to 2.46.

Moreover, a remarkable result was seen under the affective domain in which among the strands, sharing experiences in reading happily was the highest with an average weighted mean of 2.64. Interest to attend the reading program followed with 2.55. While being proud to read in front others was the lowest with an average weighted mean of 2.19.

Generally, the overall perception of parents to the reading program in which the cognitive, psychomotor and affective domains in learning of sometimes observed was acceptable considering that the learners subjected to the reading program were struggling readers. On the lighter side, data revealed that the top weighted mean among the strands in the three domains was the children's attempt to read words in the surroundings, happiness in sharing experiences in reading, developed interest in reading stories by asking parents help and maintained interest to attend the reading program. An implication that the struggling readers regained their love for reading and stimulate their interest to read.

Table 5

Summary of the respondents' perceptions towards the oral reading program in the cognitive, psychomotor and affective domains.

Respondents	**Learning Domains Weighted Mean**		
	Cognitive	Psychomotor	Affective
Teachers	2.35	2.54	2.61
Students	2.32	2.39	2.64
Parents	2.47	2.37	2.5

The table above revealed that affective domain got the highest weighted mean data on the teachers, students and parents perception of 2.61, 2.64 and 2.5 respectively and often observe as to the range of frequency. Next to affective are psychomotor domains with a mean of 2.54 from teachers, 2.39 from students and 2.37 from parents. On the other hand, cognitive domains ranged from 2.32 to 2.47. Results of survey questionnaire conducted to parents, teachers and students implied that reader's behavior in class was affected on how he managed himself in reading. Once he managed himself happily and enjoyed his reading journey, his cognitive and psychomotor domains were also positively developed. Therefore, reading program must be implemented continuously since it allows struggling readers acquire knowledge, skills and attitudes that made them develop as lifelong learners.

Conclusions

The research concluded that the use of audio-visual in teaching letter sounds as intervention materials provided positive effect in addressing the oral reading difficulties of Grades 2 struggling readers. A deeper effect was noticed in which the learners were developed socially and expressed happiness while attending classes, thus, making the atmosphere conducive to learning process particularly in reading.

Therefore, with the affirmative comments, suggestions and recommendations from the respondents, the Reading Intervention was found to be successfully implemented. Thus, it should continuously be done with the enhanced reading action plan to help more students learn and develop the love for reading.

The results and findings in this quasi experimental research were utilized to craft an enhanced action plan for succeeding School Reading Intervention. The purpose in utilizing an improved action plan based on research is to provide struggling readers with reading interventions that will effect change in their reading performance, and ultimately achieve their goal of making learners become readers with fluency in Grade 2 and comprehension to the next Grade levels.

Recommendations

The teachers viewed the Reading Intervention as significant to students' learning. Parent – teacher coordination regarding learners' performance to address reading problem is highly suggested. Based from the result of the study, Reading must be focused to letter sounds, then to CVC patterns, syllabication, phrases, paragraphs, short stories to strengthen reading foundation. Partnership of parents and teachers to make learners read was also viewed as significant. Teachers shared that grouping the struggling readers according to their level and inviting parents to witness the process in teaching to make children read would help. Reading stories for fun could also augment learners' interest in reading including peer reading. A time table of the reading intervention would also help achieve the objective. Individual exposure to audio-visual materials helped struggling reader learn. A regular reading remediation program that enhanced teaching reading process could make the program more effective. Using audio-visual materials in reading particularly letter sounds and attractive IM's for reading were significant to attract learners' reading interests. Levelling of giving remedial reading instructions should be done to address different cases of struggling readers using modules. More reading materials for reading, including audio- visual games that would make learners participate, activities that would encourage them to read more were also needed.

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INSTRUCTIONAL COMPETENCIES OF GRADE SIX TEACHERS: BASIS FOR PROPOSED INSTRUCTIONAL SUPPORT

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Abstract

This study was conducted to determine the instructional competencies of Grade Six teachers in relation to their performance rating on Individual Performance Commitment and Review Form (IPCRF). Teachers are the most important resource in imparting knowledge, skills and attitudes to learners. Therefore, they should be equipped with learning competencies and methodologies in order to implement effective teaching. Teachers are also leaders that win the hearts and minds of the students. They are the key factors in the teaching learning process. They should also observe the value of developing good rapport and working with others including parents, colleagues and actively seek out opportunities for professional collaboration within and beyond the school. These were the reasons why the researchers aimed to conduct this study to determine the needed support program for teachers to improve their instructional competencies to be able to perform their best function in their chosen field of endeavor. This study focused on determining the level of Instructional Competencies among Grade Six Teachers of Anabu 1 Elementary School (ES), Malagasang1 ES and Tinabunan ES. The result of data analysis would be the basis for crafting instructional support program for the upgrading of teachers for the betterment of the teaching learning process. A non-experimental descriptive–quantitative method of research was utilized to determine the valid result. The respondents consisted of fourteen (14) Grade Six teachers from the three (3) mentioned schools. The study revealed that among the given competencies, laboratory skills got the lowest mean range of 4.50 with a descriptive rating of Very Effective. However, mastery of the subject matter, communication skills, classroom

management, teaching strategies, evaluation techniques and human relation got a descriptive rating of Very Effective.

Keywords: *academic performance**,** classroom management skills, evaluation skills, human relation skills, instructional competency, laboratory skills*

Introduction

According to the Department of Education (DepEd), competent teachers are great factors in the academic achievement of the students. Competent teachers mean globally competitive learners and youth of today who will surely be the nation's future. There is no question that learners are now in the midst of an increasingly competitive world which is complex and uncertain. They have to adopt to the advancement of science and technology that they need to be educated and trained in a way by which they will be equipped with technical knowledge and skills essential to keep abreast to the fast-changing society.

More so, Education Act of 1982 explicitly directs schools to provide broad general education that will assist each individual in the peculiar ecology of his society to acquire the educational foundation for his development into a productive and versatile citizen; develop the high level professions that will provide leadership for the nation, and advance knowledge through research, and apply knowledge for improving the quality of human life; and respond effectively to the changing needs and conditions of the nation through a system of educational planning and evaluation.

Elementary education is the preparation of the youth for a more challenging work as provided by the provisions of the Education Act 1982 and the Governance of the Basic Education Act of 2000. This is the phase where students are trained and prepared so that they can competitively cope up with the needs and demands of modern times.

The goal of quality instruction will not be attained without the teachers. Every educator knows the value of teachers in the implementation of instructional goals. It is a must that every teacher has instructional competencies that will enhance learning. It is the purpose of this study, to explore the instructional competencies of Grade Six teachers aligned with the view on conceptualizing an instructional support program for them to effectively deliver the necessary knowledge and skills to improve the Achievement Test scores of Grade Six pupils.

The main objective of the study is to determine the instructional competence of Grade Six teachers of Anabu 1 Elementary School, Malagasang 1 Elementary School and Tinabunan Elementary School as basis for instructional support program.

The results of the study will be the basis for crafting instructional support for the betterment of the teaching-learning process. Thus, the study is beneficial to teachers, school administrators, curriculum planners, parents and pupils.

Literature Review

The empirical initiative of Basic Reform Agenda (BESRA) is the creation of the National Competency-Based Teachers Standards (NCBTS). This framework establishes the competency standards for teachers' performance. This complex set of knowledge, skills, and attitudes that each teacher should possess in order to demonstrate the adequate performance of their duties and responsibilities, (Carreon, 2018).

Teachers need to improve knowledge and skills to enhance, improve and explore their teaching practices… Teachers' competencies have been broadening with respect to reform studies in education, development of teacher education, scientific results of educational science and other fields (Selvi et al., 2010). According to them, the aims of education change very quickly depending on the demands of the era requiring more capability. These demands directly affect educational system. Finally, Selvi et al., (2010) commented that teachers are responsible for operating educational system and they need strong and efficient professional competencies.

According to Kizlik (2018), classroom management and management of student conduct are skills that teachers acquire and hone over time. These skills almost never "jell" until after a minimum of few years of teaching experience. Ganguly (2017), said that in today's world communication seems to be the most important aspect of education. A student's learning is incomplete without developing the language skills- listening, reading, speaking and writing. The main objective of education is not limited to acquiring knowledge but it has expanded to the utilization of the same in the practical life. Here comes the need for communication skills.

The concept of instructional competence may offer a third route of understanding teacher success. Based on definitions from several domains, competence can be defined as the skills, knowledge, attitudes, and motivational variables that form the basis for mastery of specific situations (Klieme et al., 2010). According to them, skills, knowledge, attitudes, and motivational characteristics are not innate, but learnable and thus teachable. The term "instructional competence" is the application of the concept to working life, particularly in highly complex and demanding teaching professions, in which mastery of situations is especially dependent on the interplay of knowledge, skills, attitudes, and motivation. Several researchers have suggested that the concept of professional competence may be fruitfully applied to the teaching profession (Goodman et al., 2008) and that the multidimensional concept of professional competence makes it possible to integrate several strands of empirical research on the necessary characteristics of teachers. There is ample evidence that aspects beyond knowledge may be important in determining teacher success. These aspects include teachers' beliefs, work-related motivation, and ability for professional self-regulation. Teachers' beliefs are

implicit or explicit conceptions about school- and learning-related matters that influence their perceptions of the environment and their behaviors. Theoretical distinctions have been drawn between professional values, epistemological beliefs, and beliefs about learning content and instructional practice. Two sets of beliefs concerning the teaching and learning of mathematics have been described (Baumert et al., 2013). A "transmission view" that draws on traditional learning theories which tends to see students as passive receivers of information, and a "constructivist view" that endorses the principles of active and constructive learning in a social context. Studies show that teachers who are more constructivists provide better learning support and select more demanding tasks, resulting in better student learning outcomes and motivational orientations and self-regulation skills (Dubberke et al., 2019). The teaching profession is characterized by a relative lack of external constraints on teachers' behavior. The typical career path offers few direct incentives or rewards to enhance occupational commitment. At the same time, the profession makes high demands on teachers' attention, energy, and tolerance for frustration. Motivational research has identified inter individual differences in motivational orientations and shown that these differences are manifested in the quality and persistence of behavior. Thus, adaptive motivational orientations are vital for teachers to succeed in their profession in the long term (Peklaj et al., 2015). Furthermore, studies of intrinsic motivation indicate that teachers who experience their job as enjoyable and intrinsically rewarding provide more support to students, which in turn has a favorable impact on their students' motivation (Sutton et al.2009).

The transformational power of an effective teacher is something many have experienced. Intuitively, the link between teaching and student academic achievement may seem obvious, but what is the evidence for it? Research confirms this common perception of a link and reveals that of all factors under the control of a school, teachers are the most powerful influence on student success. What separates effective teachers from ineffective ones, and how can this information be used to support better teaching? We can now begin to build a profile of exemplary classroom instruction derived from effectiveness research (Peklaj et al., 2015).

Statement of the Problem

The research was completed to determine the level of instructional competence of teachers in the three selected schools, namely: Anabu 1 ES, Malagasang 1 ES and Tinabunan ES.

Research Questions

1. What is the level of performance based on IPCRF rating of the Grade Six teachers in the three elementary schools for School Year 2018– 2019?

2. What is the extent of instructional competencies of the Grade Six teachers in terms of:
   a. mastery of subject matter,
   b. teaching strategies,

c. classroom management,
d. communication skills,
e. laboratory skills, and
f. evaluation techniques?

3. Is there a significant relationship between the IPCRF rating of teachers and their instructional competencies?

4. What instructional support program may be proposed to improve teachers' instructional competencies?

Null Hypothesis

This null hypothesis will be tested in this study.

1. There is no significant correlation between the IPCRF rating and the instructional competencies of Grade Six teachers.

Methodology

In this study, a non-experimental descriptive –quantitative method of research was used. The primary data were gathered from the 14 Grade Six teacher-respondents of Anabu 1 ES, Malagasang ES and Tinabunan ES through an interview via social media. Secondary data included the data gathered from survey questionnaire and Class Observation Tool (COT) and IPCRF ratings.

The research instrument used to gather the pertinent data needed to answer the problem of the study was employed by the researchers. It was structured in a form of checklist to promote convenience in answering questions. It focused on Teachers' Competence in terms of Mastery of the Subject Matter, Teaching Strategies, Classroom Management, Communication Skills, Laboratory Skills as well as Evaluation Skills which were very essential in determining the teachers' competence and ability in catering quality education among our pupils.

To ensure a valid and reliable interpretation of the result, the researchers utilized various statistical techniques. To determine the level of performance, instructional competence of the Grade Six teachers, the frequency count, percentage, mean and Paerson's r were used.

A 5-point Likert Scale was used with 5 as Very Effective, 4 as Effective, 3 as Moderately Effective, 2 as Fairly Effective and 1 as Ineffective. The statements were stated positively with score of five (5) indicating the most effective. In this manner, high score was a manifestation of the teachers' effectiveness on instructional competence.

1. To determine the significant relationship between the IPCRF rating of teachers and their instructional competencies percentage and weighted mean were used.

Formula:

$$P = \frac{x}{N} \times 100$$

Where P = percentage
x = number of respondents
N = total number of cases
100 constant

2. **Weighted Mean** was used to find out the extent of responses as to teachers' competence. The formula utilized for weighted mean would be:

$$X = \frac{\Sigma fx}{N}$$

Where: X=weighted mean

Σfx = the sum of all the product of f and x, f being the frequency of each

Weight of each operation

N= total number of respondents

3. **Pearson's r Correlation** was used to find out the linear relationship between teachers' instructional competence and IPCRF rating.
Pearson's r is used to prove the null hypothesis. It is defined by the formula

$$r = \frac{N\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{[N\Sigma x^2 - (\Sigma x)^2][N\Sigma y^2 - (\Sigma y)^2]}}$$

Where:

N	=	number of pairs of scores
Σxy	=	sum of the products of paired scores
Σx	=	sum of x scores
Σy	=	sum of y scores
Σx^2	=	sum of squared x scores
Σy^2	=	sum of squared y scores

Research Questions/Design

Research Question	Research Tool	Scale Research Tool	Time Point
What is the level of performance (performance rating) of the Grade Six teachers in the three Elementary school for Year 2018– 2019?	Documentary Analysis	Likert Scale to rank the teachers performance rating	June 2018– April 2019
What are the instructional competencies of the Grade Six teachers assessed by their principals and teachers themselves as to: Mastery of the Subject Matter, Communication skills, Classroom management , Teaching Strategies, Laboratory Skills, Evaluation Techniques and Human Relations	End of the semester survey of teacher instructional competencies through the use of Survey Questionnaire	5-point Likert Scale asking teachers to rank their confidence in the design competencies in Weighted Mean 5– Very effective, 4– Effective, 3- Moderately Effective, 2– Fairly Effective, 1– Ineffective	February 2019-April 219
Is there a significant relationship between the level of performance of teachers and their instructional competencies?	IPCRF Rating Survey Questionnaire	Pearson R	
What instructional support program may be proposed to improve teachers' instructional competencies?	Survey Questionnaire	Action Plan,	June 2019- Onwards

Results of the Study

This part of the research presents the results of the study in illustrative tables and analysis as well as the interpretation based on the statistical treatment of the data

Level of Performance Based on IPCRF Rating of Grade Six Teachers in the Three Elementary Schools for School Year 2018-2019

Figure 1

Level of Performance based on IPCRF Rating of Grade Six Teachers

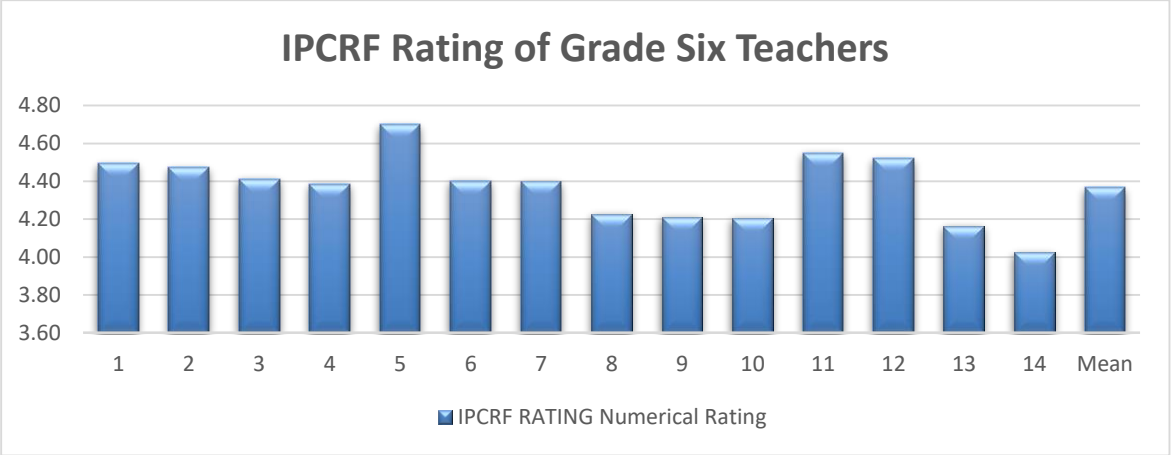

Figure 1 showed the level of performance based on IPCRF rating of Grade Six teachers from the three selected schools for School Year 2018-2019. The table revealed that out of 14 teacher-respondents, 14 or 100% got Very Satisfactory rating with an average mean of 4.37 with an equivalent adjectival rating of Very Satisfactory.

The Extent of Instructional Competencies of the Grade Six Teachers

Figure 2

Teachers' Instructional Competence

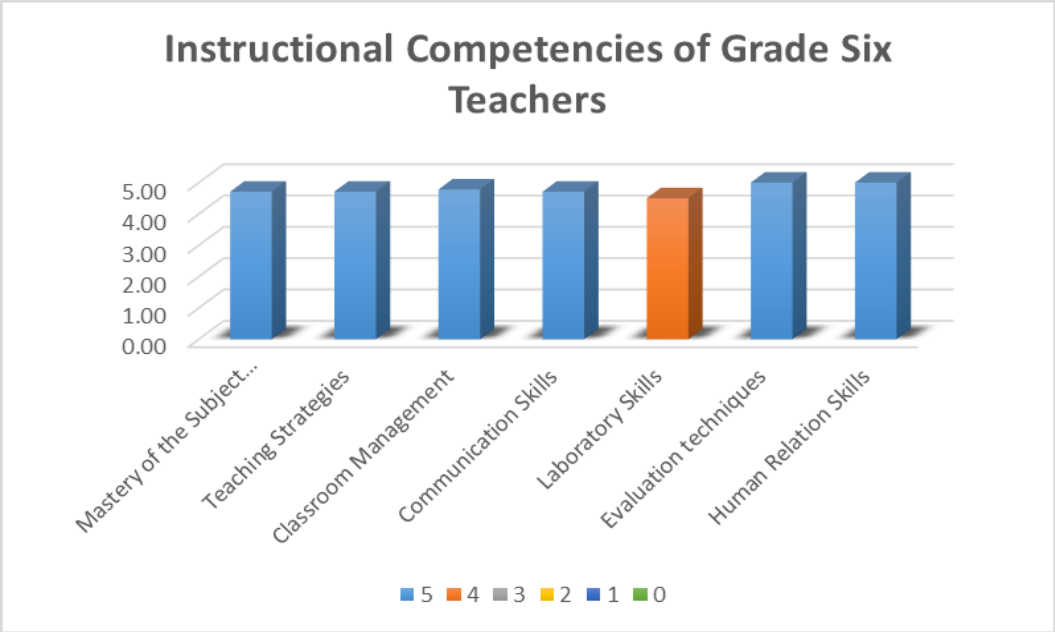

Figure 2 showed that among the competencies cited, laboratory skills got the lowest mean of 4.50, while mastery of the subject matter, teaching strategies, and communication skills had the mean of 4.71. Classroom management got 4.79 while evaluation techniques and human relation got the highest mean of 5.0 with an adjectival description of Very Effective.

The weighted mean was given the following values and verbal descriptions.

Scale	Mean Range	Adjectival Description
5	4.5 – 5.00	Very Effective
4	3.5 – 4.49	Effective
3	2.5 – 3.49	Moderately Effective
2	1.5 – 2.49	Fairly Effective
1	0.1 – 1.40	Ineffective

Relationship between the IPCRF Rating of Teachers and their Instructional Competencies

Table 1

Significant Relationship between the Level of Instructional Competencies of Grade Six Teachers and their IPCRF Rating

	IPCRF RATING		INSTRUCTIONAL COMPETENCIES								
Teacher	Numerical Rating	Adjectival Rating	Mastery of the Subject Matter	Teaching Strategies	Classroom Management	Communication Skills	Laboratory Skills	Evaluation Techniques	Human Relation Skills	MEAN	Adjectival Description
1	4.50	VS	5	5	5	5	5	5	5	5.00	Very Effective
2	4.47	VS	5	5	5	5	5	5	5	5.00	Very Effective
3	4.41	VS	5	5	5	5	5	5	5	5.00	Very Effective
4	4.39	VS	5	5	5	5	4	5	5	4.86	Very Effective
5	4.70	VS	5	5	5	5	5	5	5	5.00	Very Effective
6	4.40	VS	5	5	5	4	5	5	5	4.86	Very Effective
7	4.40	VS	5	5	5	5	5	5	5	5.00	Very Effective
8	4.23	VS	5	5	5	5	4	5	5	4.86	Very Effective
9	4.21	VS	5	5	5	5	5	5	5	5.00	Very Effective
10	4.21	VS	5	5	5	5	4	5	5	4.86	Very Effective
11	4.55	VS	4	4	5	5	4	5	5	4.57	Very Effective
12	4.52	VS	4	4	4	4	4	5	5	4.29	Effective
13	4.16	VS	4	4	4	4	4	5	5	4.29	Effective
14	4.03	VS	4	4	4	4	4	5	5	4.29	Effective
Mean	**4.37**	VS	**4.71**	**4.71**	**4.79**	**4.71**	**4.50**	**5.00**	**5.00**	**4.78**	**Very Effective**

Table 1 showed that 11 out of 14 Grade Six teachers got Very Effective in terms of instructional competence. They obtained an average mean of 4.78. All of the 14 teachers were Very satisfactory in their IPCRF rating with an average mean of 4.37.

Table 2

Inferential Statistics Using Pearson's r

Teachers	Teachers' Competence	IPCRF Rating	Difference
1	5.00	4.50	0.50
2	5.00	4.47	0.53
3	5.00	4.41	0.59
4	4.86	4.39	0.47
5	5.00	4.70	0.30
6	4.71	4.40	0.31
7	5.00	4.40	0.60
8	4.86	4.23	0.63
9	4.86	4.21	0.65
10	4.86	4.21	0.65
11	4.57	4.55	0.02
12	4.57	4.52	0.05
13	4.29	4.16	0.13
14	4.29	4.03	0.26
Average Mean	**4.78**	**4.37**	**0.41**

The data presented in Table 2 supported the data in Table 3.

Table 3

Significant Relationship between IPCRF Rating and Instructional Competencies of Teachers

	Pearson R Correlation	P-value	Remarks
IPCRF Rating	0.155	0.597*	Not Significant
Instructional Competencies			
**p-value > 0.05 not significant*			

Table 3 showed that the level of performance of teachers in terms of IPCRF rating and their instructional competencies were not related and not directly affected, thus, there is no statistically significant relationship between IPCRF rating and Instructional competencies of teachers. The null hypothesis is rejected.

Proposed Instructional Support Program to Improve Teachers' Instructional Competencies

ACTION PLAN

Instructional Support Program to Improve Teachers' Instructional Competencies

Objective: Monitor the progress on identified weaknesses in instructional competencies.					
SPECIFIC OBJECTIVES	**TIME FRAME**	**PERSON IN CHARGE**	**RESOURCES**	**BUDGET**	**COMPLETION EVALUATION**
Provide tools and equipment to enhance teachers laboratory skills.	June-March	School Principal, BAC	Supply Officer	MOOE GPTA	Accomplish ment Report
Provide pre-test measures and multiple posttest measures on Instructional Delivery, Classroom Management through classroom visitations.	All year round	School Principal/ Master Teachers/ LAC Leader	Materials from LRMDS Online Available Materials	MOOE	Individual Plans, Journals, Records of Classroom Visits

Provide teacher evaluations based on parent and student feedback on every grading period to assure other sources of data for teacher evaluation are taken into consideration.	1st-4th Quarter	School Principal	Monitoring Tool		Record of Attendance of the Quarterly Meeting, Result of the Evaluation, Parents Feedback

Objective: Improve Grade VI teachers' Overall IPCRF Scores					
SPECIFIC OBJECTIVES	TIME FRAME	PERSON IN CHARGE	RESOURCES	BUDGET	COMPLETION EVALUATION
Conduct LAC Sessions on Least Mastered Competency, Content and Padagogy-21st Century teaching Strategy.	October 2019	Principal, LAC Leader	SLAC Sessions	MOOE	SLAC Completion Report
Increase teachers involvement in academic and scholarly work in the beginning of the semester that can be included in their IPCRF ratings.	June 2019 onwards	Principal/LAC Leader	SLAC Sessions	MOOE	Action Plan
Assign Master Teachers and other senior teachers to monitor other teachers' and their self-progress in the interventions listed in IPCRF.	All year round	Master Teachers/ LAC Leader	Monitoring tool		Result of Assessments of Master Teachers, Journals Research

Conclusions

Based on the findings in research questions 1 to 4, the following can be concluded:

1. Teachers' IPCRF rating revealed that Grade Six teacher-respondents were Very Satisfactory with an average mean of 4.37;

2. Instructional competencies of teachers were Very Effective with an overall mean of 4.78;

3. There is no significant relationship between the IPCRF rating and instructional competencies of teachers and the level of performance of teachers in terms of IPCRF rating and their instructional competencies were not related and not directly affected; and

4. Among the instructional competencies cited in the study, laboratory skills of teachers obtained the lowest score with an average mean of 4.50, therefore, this will be given consideration in crafting strategic instructional support program.

Recommendations

In relation to the findings of the study, the following are recommended:

1. For the future researcher, it is suggested not to limit the number of respondents in one grade level only. Give focus to newly- hired and proficient teachers to find out their needs as basis for crafting instructional support.

2. The teachers' instructional competencies should be reviewed consistently in parallel with the changes and reform through scientific studies.

3. Conduct LAC/INSET sessions on the least mastered competencies and content pedagogy. Assign Master Teachers and other senior teachers to monitor newly-hired teachers and provide technical assistance needed.

4. Increase teachers' involvement in academic and scholarly work which can help them to be abreast the latest trends in education system.

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POINTS OF VIEW OF SDO IMUS CITY LEVEL 1 NON-TEACHING PERSONNEL ON FINANCIAL LITERACY: BASIS FOR PROGRAM FLOWS (FINANCIAL LITERACY OPPORTUNITIES FOR WORKERS OF SDO IMUS CITY)

by:

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Abstract

In 2017, due to the issue that public school teaching and non-teaching personnel have been mired in aggregating debts amounting to P178-billion from private lending institutions, the need for a financial literacy program was highlighted by no less than Education Sec. Leonor M. Briones.

As a result, financial literacy has varied in conceptual definitions, as well as diverse operational definitions and values.

This study sought to explain people's preference in relation to consumption and saving, and find if there is a gap between the perception of financial literacy and how it is being practiced.

The researchers employed a qualitative method of research. The data were gathered from 7 key informants who are all Level 1 non-teaching personnel of SDO Imus City. Researchers used focus group discussion and data coding and analysis to support the objectives of the study.

Findings revealed four (4) coded themes on financial literacy. These are *stashed amount*, *breadwinners*, *self-discipline*, and *reinforcement*. Majority (6 out of 7) among the key informants do not have sufficient savings due to life's difficulties. All of them agreed that financial literacy is a good program but aside from it, policies on how to limit lending should be improved. These policies should also be designed on how to give opportunities to earn extra income.

It was recommended that more key informants be included in the qualitative study or total enumeration for valid results, specifically Teachers I to III in future studies. Hence, financial literacy opportunities should be given to both teaching and non-teaching personnel and further studies should be conducted to measure other intervening socio-economic factors on how to be financially literate such as training and experience.

Keywords: Financial Literacy, Savings, Consumption, Awareness, Intervention Program

Introduction

Due to the issue that public school teaching and non-teaching personnel have been mired in aggregating debts from private lending institutions, the need for a financial literacy program was highlighted by no less than Education Sec. Leonor M. Briones. The secretary revealed in October 2017 that these personnel are mired in aggregating debts—with an incurred P178 billion worth of loans. More so, Sec. Briones emphasized the urgent need for an established financial literacy program which is crucial to help teachers and non-teaching personnel manage their finances. Scholars, policy officials, financial experts and consumer advocates have used the phrase “Financial Literacy” to describe the knowledge, skills, confidence and motivation necessary to effectively manage money.

However, as a result, financial literacy has varied in conceptual definitions in existing researches, as well as diverse operational definitions and values. A clearer definition, especially in the case of teachers, should be established. Who else other than themselves should be asked to have a better understanding of the situation? Thus, it is imperative to get their points of view to explain the phenomenon of “loan culture” and “financial illiteracy.”

According to Kempson, Collard and Moore (2006) as cited in Starček & Trunk, 2013 individuals who can effectively manage money specifically credit, debts and able to look into the benefits of insurance and insurance in relation to future possibilities of having savings, money and deposits are financial literate. On the other hand, people who have very little care or poor planning for the future such as inevitable expenses, early retirement or/ and have more liabilities and too little savings are considered financial illiterate (Kozup and Hogarth, 2008 as cited in Starček & Trunk, 2013).

In this paper, we sought to explain people’s preference in relation to consumption and saving over the course of their lives and find if there is a gap between the perception of financial literacy and how it is being practiced.

The remainder of the paper is organized as follows: Section 2 presents the methodology using analytical framework and inter-temporal mode. Whereas, Section 3 discusses the issues, and the point of view of the key informants regarding the financial literacy and savings. Section 4 presents the conclusion and recommendation.

Methodology

Research Design

This study employed qualitative method of research specifically, case study approach through focus group discussion (FGD). The approach is both advantageous to the informants and researchers because of the setting and the circumstance.

In the FGD, the informants of the study were asked about their concept of financial management and their practices of saving. Informants were also asked to describe in-depth their personal experiences and cite examples vividly in answering the question.
It is also through FGD that the proponents were able to undermine the degree or depth of their understanding and perception of financial literacy.

Research Locale

The study was conducted in the Schools Division Office of Imus City in the City of Imus, Cavite. DepEd- Imus, established in 2012, has been a home of 35 public schools, specifically, 26 Elementary Schools, 5 Junior High Schools and 4 Senior High Schools. Although the office is categorized as small division, it is still composed of three main functional divisions namely: Office of the Schools Division Superintendent (OSDS), Curriculum and Implementation Division (CID), and School Governance and Operations Division (SGOD). Combining all LSB and nationally funded, the SDO-Imus is composed of 70 personnel, majority are locally funded.

Participants of the Study

The key informants of this study were the seven (7) Level 1 Non-Teaching Personnel of the two functional divisions of the office who are holding national plantilla positions. Of the 7 informants, 6 were from the OSDS and only 1 from the CID. Among them, are 2 males and 5 females. Majority of the 7 have been part of LSB or local government funded before they secured national plantilla.

Research Instrument

The main instrument used in conducting this qualitative research is the moderator's guide on financial literacy. It is designed by proponents and used to structure the discussion. To avoid bias and remain unattached with the key informants, this paper employed the service of a moderator. The moderator was the sole person involved in delivering the questions to key informants. She/ He refrained from asking questions not included in the moderator's guide. The following questions were included in the moderator's list of questions:

1. What is your definition of savings?
2. When did you start saving and understood the concept?

3. At present, do you have sufficient savings? If no, why?
4. How do you save?
5. What is your idea of financial management?
6. Do you think that the financial literacy seminar mandated by Sec Briones will help you in managing your finances?

Data Gathering Procedures

The method used by Oak Ridge Institute for Science Education (2015) was employed in this study. In gathering data, the steps suggested by the above mentioned institution was followed during the conduct of the focus group discussion.

Data Coding and Analysis

Following the framework analysis of Gale, et al. (2013) in which it highlighted the responses of informants and classify their answers according to emergent key issues and themes, the proponents' started transcribing verbatim or word per word the audio recording of the interview with informants. This familiarized the researchers with the data collected wherein key concepts from lines or passages that best describe informant's concepts of financial literacy were labeled or coded. Interpretations were compared and reconciled to come up with similar data labels or codes according to definition and underlying principles. These served as themes in the analysis. The researchers also designed a working diagram as analytical framework then charted data into a framework matrix to summarize their points of view. For ease of interpretation, the charted data were gleaned against the framework.

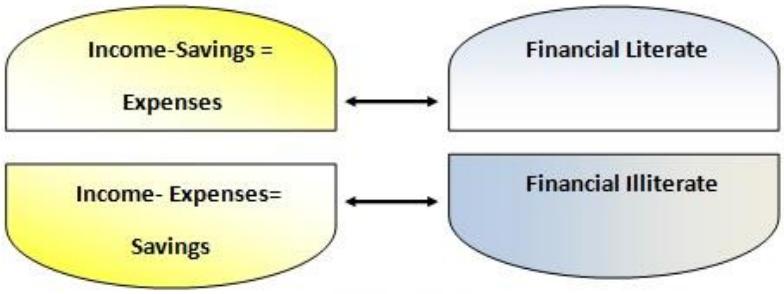
When the informants were asked to define the meaning of savings, majority of them responded that savings are the ***stashed amount*** of their earnings after the expenses and payments have been made. As to the sufficiency of savings, the informants collectively answered that they didn't have enough savings since they were all ***breadwinners*** due to family obligation, payment of bills, sibling support and expenses on food. The emergent theme on how to save money, they mutually replied that ***self-discipline*** is the key point of saving money. Katona (1974) as cited in Su and Kyang (2018) stated that one's determination is much more important than the person's ability to save money. The fourth theme is Financial Literacy as ***reinforcement*** to capacitate them, guide them and help them in managing their finances wisely. The informants' responses were supported by the study conducted by Grinstead et.al (2011) that understanding the important effects of a saving plan increases the possibility of developing a plan as such educating them intensifies the chances of savings.

Results and Discussion

It can be gleaned in Figure 1 that key informants defined savings as the money that is left after the expenditures. Key informants spend their income as they see it fit or to cover for their food, family support or giving off stipend to siblings. This is in contrary to the actual definition of savings which is the money being set aside before expenses or a portion of money you keep from your income. While Atkinson in Messy (2012) define financial literacy as a combination of being aware of, knowledge, skills, behaviour that is necessary for a suitable financial decision and to reach its own financial wealth. On a layman's terms it is simply not falling into debt, spending just within your means and having a decent savings and investments which will in return affect your future economic and financial status.

Figure 1

Analytical Framework



Seven key informants agreed about this definition. However, in real life, majority of the key informants never prioritize savings rather they tend to spend before they save their money. Also, if nothing's left from their income, they can't save anything. More so, informants added that due to life's difficulties, they can't save money. Sometimes there is enough but most of the time, there is none. As to whether a person is financial literate or not, other factors may be considered such as socio economic factors. The scenario pointed by the informants echoes the importance of financial literacy in making eligible financial decisions and managing family budget with implications on further generations (Trunk and Dermol, 2015; and Szovics 2012 as cited in a book Contemporary Issues of Societal Development 2017, p. 49)

When asked if the financial literacy seminar mandated by Secretary Briones helps in managing their finances, the Key Informant 2 said:
"Syempre oo nman po, kasi lahat ng additional knowledge magiging beneficial po siya kung gagamitin mo."

Key Informant 1 on the other hand said that:
"Makakatulong naman po, pero ang tulong kasi nagsisimula sa sarili natin."

Key Informant 6 added that:
"Makakatulong siya kasi pede mo siya maging guide and pwede mo din siyang gamitin as additional knowledge na magagamit mo."

As stated in the intertemporal consumption model (as cited in Diptimai, 2015), the model seeks to explain people's preferences in relation to consumption and saving over the course of their lives. The life-cycle model of consumption suggests that consumption is based on average lifetime income instead income at any given stage. This means that most people consume money based on the average income that they receive during their lifetime. Regardless of how high or low their income is they will set aside or defer consumption at 20%.

Financial literacy is the "peoples' ability" to process economic information and make informed decisions about financial planning, wealth accumulation, debt and pensions." (Jappelli, 2011). The question now is whether financial literacy seminar is important for SDO Imus City personnel to manage their finances well. From the results gathered from key informants, the said seminar is not only a good program of DepEd but there should also be a policy on how to limit lending and provide programs providing opportunities.

Conclusions and Recommendations

The following conclusions were drawn from the findings of the study:

1. Majority of the key informants do not have sufficient savings as of this time due to life's difficulties.

2. All of the key informants agreed that financial literacy seminar is a good program.

3. Programs not only on financial literacy should be implemented but improve policies on how to limit lending.

4. Policies should also be designed to give opportunities on how to earn extra income.

Based on the conclusions, the following are recommended:

1. More key informants be included in the qualitative study or total enumeration for more valid results.

2. Include Teachers I to III as key informants in future studies.

3. Financial literacy seminar be given to both non-teaching and teaching staff.

4. Further study is recommended that will measure other intervening socio-economic factors on how to be financially literate such as training and experience.

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GENDER INEQUITY IN TECHNICAL VOCATIONAL LIVELIHOOD (TVL) TRACK OF SENIOR HIGH SCHOOL BASIC EDUCATION: BASIS FOR GENDER DEVELOPMENT PROGRAM

by:

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Abstract

The urgent need to promote gender equity in every program implementation brings this study focus. Thus, this study was conducted to look into the gender Inequity in Technical Vocational Livelihood (TVL) track of Senior High School Basic Education. The study served as guide for sustainable development program strategies for expansion and improved quality, equity and efficiency of the delivery of Senior High School Basic Education. The study aimed to determine the teachers profile and the extent of gender inequity in Senior High School TVL Track in the areas of curriculum, learning materials, physical facilities and programs and projects. Using the descriptive research design, the respondents of this study involved 22 TVL Teachers, 3 Master Teachers and 3 School Heads in three Stand-Alone Senior High School in the Division of Imus City. The study used the frequency count, mean with a 5-piont rating scale, and t-test to describe the statistical data. The research instrument was adapted and was pre-tested for reliability and validity. The salient findings revealed that (a) demographic profile varies majority of the respondents were 31-35 years old, new in the service or in their first year, married, in the Teacher II position, SG 12 and with MA/MS Units and had one-day training in Gender and Development and (b) all areas measured revealed to a great extent of gender inequity: Curriculum (4.0), Learning Materials (3.7), Physical Facilities (3.68) and Programs and Projects (3.91). Sports and sanitary assistance facilities and the bias towards selection of candidates for school programs and events and restrictions of either gender in participating in field trips, excursions and external visits yields sense of gender equity. Thus, schools should continuously promote gender equity for equal opportunity in all programs and projects such as Integration of GAD (Gender and Development) in the Classroom Program in all secondary schools of the Division of Imus City and Work with universities such as Cavite State University- Main Campus (2014 and 2015 Awardee for being the Best Implementer in GAD in CALABARZON and promote research studies on gender issues to be conducted by faculty and students.

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Introduction

As education deals with formation of habits of human beings and the means for social continuity of life, an education that seriously focuses on promoting the equal participation of women and men in making decisions; reducing enrollment gap between women's and men's access; giving equality in learning process, educational outcomes and external results; and providing equal benefits for both sexes is needed (Sahin, 2010).

Numerous studies showed that society often treats boys and girls differently. Although gender inequalities in education have seen much change in recent decades, the fight for women's rights and inequity between the sexes continues to flourish nowadays (Sahin, 2010). Furthermore, Sahin (2010) emphasized that gender equity in education means that males and females have equal opportunities in terms of economic, social, cultural, and political developments. If gender equity is exactly achieved, this will contribute to future of girls and boys more than approaches men-centered, and girls will get benefits from public and domestic life as much as boys.

In the Philippines, government agencies are mandated to establish and institutionalize the provision for equal access and elimination of discrimination in education, scholarships, and training. Thus, "expulsion, non-readmission, prohibiting enrollment, and other related discrimination of women students and faculty due to pregnancy out of marriage shall be outlawed as mandated in RA 9710 of the Magna Carta of Women while Philippine Millennium Development Goal (MDG) 3 promotes gender equality and empower women.

Department of Education (DepEd), on the other hand, has committed itself to continue exerting its efforts and resources to eliminate gender biases. More so, as an organization, DepEd is tasked to collectively nurture the full potential of an individual through education and committed to the realization of women's strengthened participation in evolving a caring and responsive community.

Gender Equity was defined as the process of being fair to men and women. To ensure fairness, measures must often be put in place to compensate for the historical and social disadvantages that prevent women and men from operating on a level playing field. Equity is a means. Equality is the result (UNESCO). Ensuring that gender equity in the education is in place had been a century-long issue not only in the Asia-Pacific but also the entire world (Blumberg, 2008; Hartl, 2009; Jagannathan, 2013). Inequity in education is ever present and thus, inequality. Though not all are lost in the cause of gender equity due to the determined effort to realized UNESCO's Education for All (EFA) specifically Access and Completion Rate in elementary level.

There is much left to desire in Senior High Schools especially in Technical Vocational Livelihood Program. Studies have shown that there exists gender inequality in Technical Vocational Educational Training maybe in developing or highly industrialized countries (Kirkup, 2011; Hartl, 2009; Wider Opportunities for Women, 2010; and Towery, 2007). Despite limited literature, it is evident that curriculum, learning materials or

textbooks, apprenticeship programs and school facilities are all contributory in achieving gender equity in education. However, they all established that gender gaps in enrolment, retention and learning outcomes still persisted and agreed that “it is essential to eliminate systemic gender disparities, where they persist, amongst girls and boys, throughout the education system – in enrolment, achievement and completion; in teacher training and career development; in curriculum and learning practices and learning processes.

Empirical studies showed that societies that discriminated on the basis of gender tend to experience poverty, slower economic growth and a lower quality of life. In addition, one lesson from past experience revealed that educating girls is one of the most effective ways to promote development. In the Philippines, there is a limited access of women to non-traditional vocational courses such as automotive technology, industrial electrician and building wiring electrician. In studying the SHS curriculum, textbooks, teacher classroom practices, physical facilities, programs and projects of the Schools Division of Imus City, gender biases will be eliminated through analyzing gender equity gaps.

With the numerous studies about gender equity, only the primary level has been the focus of considerable attention within the Education for All Framework of Action, but much less at the secondary level. It is in this light that this present study will determine if there are gender equity or biases in the school’s curriculum, textbooks, teacher classroom practices, physical facilities, programs and projects in the four Stand Alone Senior High Schools of the Schools Division of Imus City. With the initial implementation of the Senior High School Education, SY 2016-2017, out of the 4,319 junior high school completers from the five junior high schools last SY 2015-2016, only 922 (508 are males and 414 females) enrolled in the four Stand Alone Senior High Schools (EBEIS 2016).

This thematic study was undertaken to collect, analyze and summarize existing practices in Gender Inequity in the areas of SHS Curriculum in TVL; Learning Materials; Physical Facility and Programs and Projects and to identify sustainable strategies to improve quality, equity and efficiency on the delivery of Senior High School Education. It will serve as an additional guide to curriculum developer in producing a gender sensitive curricula that is vital in shaping the teaching and learning process. Thus, it will benefit teachers and administrators to realize and understand the importance of their role as an adult in authority in developing a gender sensitive culture in their own schools, hence, classrooms thru activities and projects. The result of this study will also serve as literature to other researchers who will be interested to undertake a similar study. It is in this light that the current study was conducted.

Statement of the Problem

This study is designed to further examine the gender Inequity in TVL Track of Senior High School in the Division of Imus City as basis for action plan instituting gender and development program.

Specifically, it sought answer to the following questions:

1. What is the demographic profile of the respondents in term of:
   1.1 Age;
   1.2 Sex;
   1.3 Civil Status;
   1.3 Length of Service;
   1.4 Position;
   1.5 Salary Grade;
   1.6 Highest Education Attainment; and
   1.7 Training in Gender and Development Program?

2. What are the extent and nature of gender inequity in SHS in the following areas:
   a. SHS Curriculum in TVL;
   b. Learning Materials;
   c. Physical Facilities; and
   d. Programs and Projects?

3. Is there significant difference that exist between the natures of gender inequity when group according to age and civil status?

4. What plan of action can be formulated to institutionalize gender and development program in the TVL Track of the 3 Stand-Alone Senior High Schools in the Division of Imus City?

Scope and Limitation of the Study

The study focused on the gender inequity of a stereotyped course in Technical Vocational Livelihood Track of Senior High School Basic Education. The research study will be limited with the findings of demographic profile such as age, sex, civil status, length of service, position and salary grade; highest education attainment; and training in gender and development program of 22 TVL Teachers, 3 Master Teachers and 3 School Heads to the three Stand Alone Senior High Schools of the Schools Division of Imus City offering Technical Vocational Livelihood (TVL) where the study is being held during this school year 2017-2018. The three Senior High Schools are General Juan Castaneda, General Pantaleon Garcia and Governor Juanito Reyes Remulla. Under TVL track are the following six (6) initial strands of DepEd Imus City: (1) Electrical Installation; (2) Shielded Metal Arc Welding (SMAW); (3) Computer Service System; (4) Dressmaking; (5) Home Economics (HE) Wellness; and (6) Agriculture and Fishery Arts (AFA)-Crop Production.

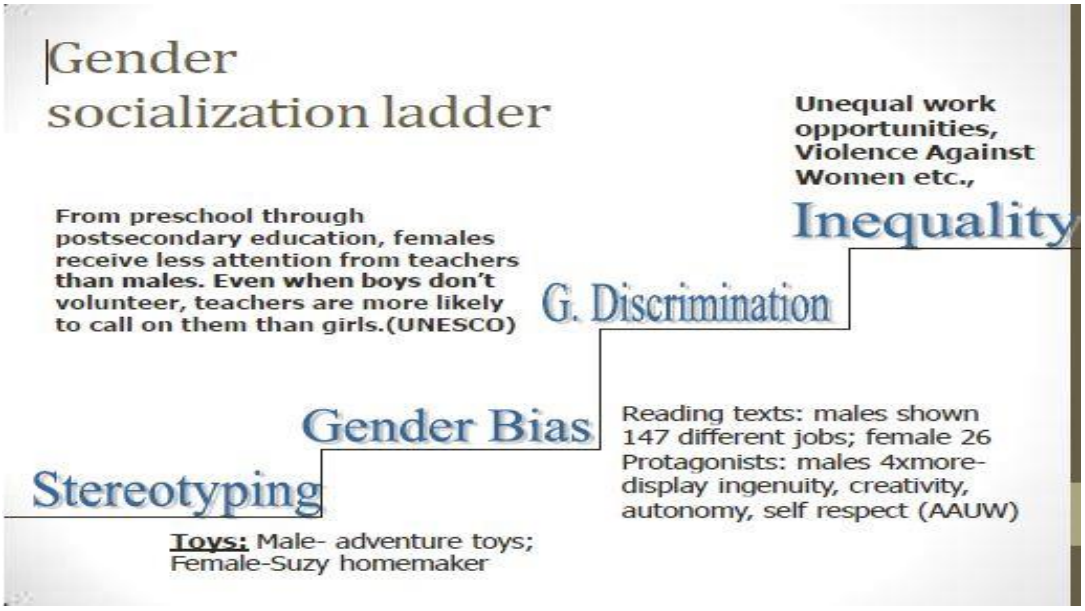
The data were solely based from the responses of respondents as a primary source of data where study was held during the mentioned school year. In addition, future research might explore gender inequity in other learning discipline as an important aspect to consider as they are just likely to affect inclusivity and sensitivity of school programs and projects their association to other extraneous variables.

Theoretical Basis

This study was based on the theory about the viewpoints of authors and experts on the Sociological Theory of the Gender Socialization Ladder.

Figure 1

Gender Socialization Ladder



Gender socialization is the process of learning the social expectations and attitudes associated with one's sex. Sociologists explain through gender socialization why human males and females behave in different ways: they learn different social roles. Gender socialization occurs through such diverse means as parental attitudes, schools, how peers interact with each other, and mass media. Sometimes gender roles lead to inequality.

Figure 1 shows that in a school setting, from preschool to post-secondary education, females receive less attention from teachers than males. Even when boys don't volunteer, teachers are more likely to call them than girls (UNESCO).

The gender socialization ladder of gender inequality starts from gender stereotyping, followed by gender bias, then gender discrimination and finally reaching its highest stage which is inequality.

Conceptual Framework

Figure 2

Research Paradigm

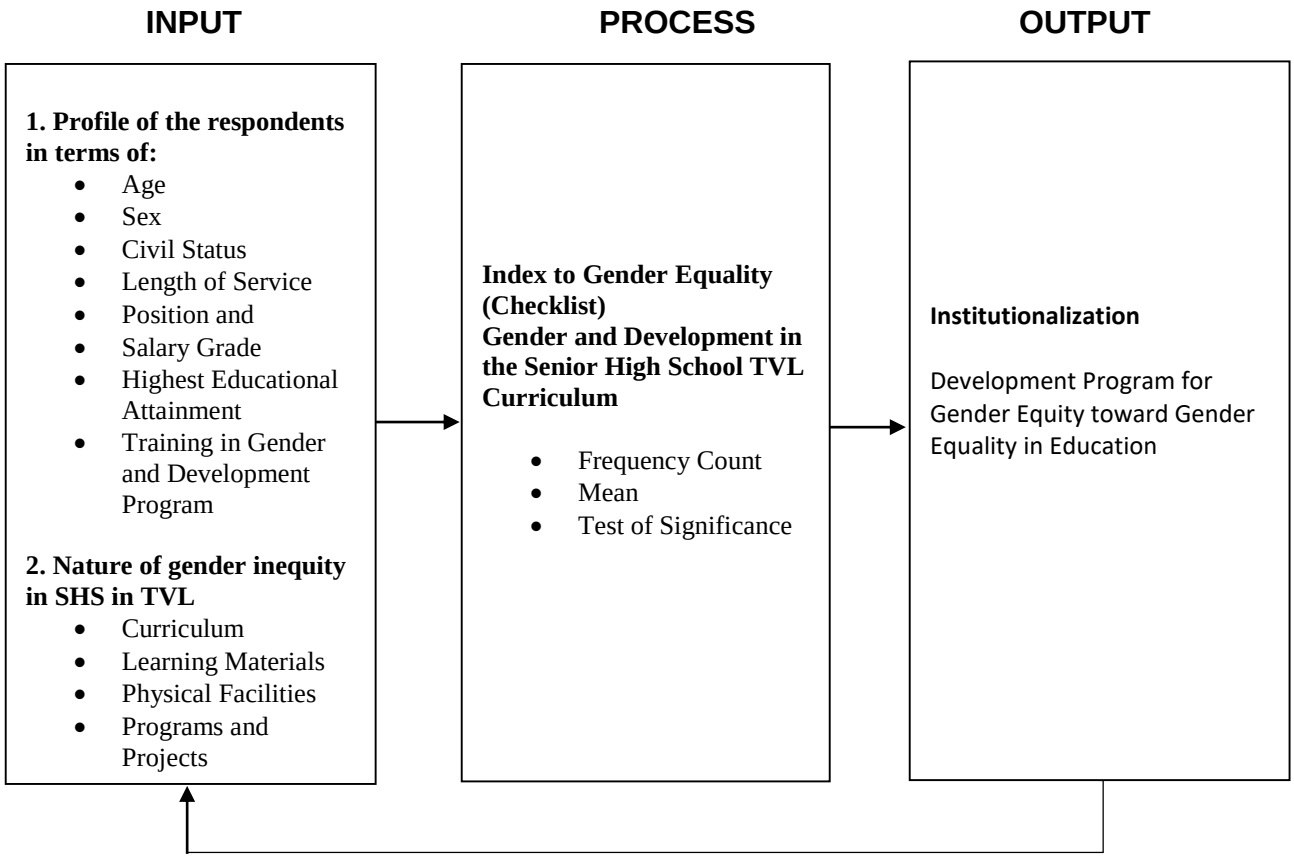


Figure 2 presented the Input –Process-Output (IPO) system framework to present concepts of the current study. This diagrammatic representation of a conceptual research paradigm depicts the outline of the entire study as it shows the key variables and their interrelationship.

Input box referred to the profile of the respondents in terms of age, sex, length of service, position and salary grade, highest educational attainment, and training in gender and development program. It included also strategies for reducing gender inequity and programs and projects of the three stand- alone Senior High Schools pertaining to SHS TVL curriculum, learning materials, physical facility.

The process box contained the Index to Gender Equality (Checklist) Gender and Development in the Senior High School TVL Curriculum and the statistical treatment of the study.

Lastly, the output box was the expected output of the study as regard to Institutionalized Gender and Development Program.

Methodology

This section discussed the research design, research locale, sample and sampling technique used, research instrument, data gathering procedure, and statistical treatment of data.

Research Design

The researcher utilized the descriptive research design in this study aimed to observe used of questionnaire to gather data. Descriptive design research defined as a process of gathering, analyzing, classifying and tabulating data about prevailing conditions, practices, beliefs, processes, trends and then making an adequate and accurate interpretation with the aid of statistical methods (Calderon and Gonzales, 2012).

Population and Sampling of the Study

The purposive sampling technique was utilized in the study. It involves twenty-eight (28) respondents: 22 TVL Teachers, 3 Master Teachers and 3 School Heads in three Stand-Alone Basic Education Senior High School in the Division of Imus City offering Technical Vocational Livelihood (TVL) track of the K to 12 curriculum. The respondents are considered as pioneer school personnel of the grade 11 and grade 12 senior high school.

Research Instruments

The research instrument was adapted from the dissertation of Douglas D. VandeJagt entitled: Student Thoughts and Perceptions on Curriculum Reform. It consists of two (2) parts. First part elicited socio demographic characteristics of the respondents while the second part consisted of questionnaire about the nature of gender inequity. The research instrument underwent pre-testing prior to check the reliability and validity of the descriptive research questionnaire prior to its modification. The researcher sent an email asking the permission and confirmation from the author to use the instrument.

The questionnaire was also validated by the Curriculum Developer and Learning Materials Evaluator and Writer of six (6) strands; Physical Facilities Coordinator and Engineer for School Facilities; and Division Monitoring, Evaluation, and Adjustment Coordinator for Programs and Projects.

Data Gathering Procedure

1. The researcher secured a letter to the office of the Schools Division Superintendent of the Schools Division Office of Imus City to conduct the research to the three Stand-Alone Senior High Schools. The letter was sent to the principal as a formal endorsement of the study. The letter emphasized the purpose of the study, a method of administration of the research instruments, the date of administration and retrieval of the research instruments were indicated and shall not disrupt classes nor interfere with regular activities of the schools. 4. The study adhere highly ethical consideration in the conduct of the study by securing permits and utmost confidentiality. A written approval for the use of adopted questionnaire with copyright.

2. The survey questionnaire distributed to respondents, they were asked to answer the questionnaire in their free time to complete their answer of the survey questionnaire. Data were gathered through administering questionnaire and collecting responses from DepEd curriculum developers, learning materials writers, physical facilities coordinator and programs and projects implementers.

3. After answering the survey questionnaire, the researcher collected the survey questionnaire. The duration of answering the research instrument took 5 days to collect all the data for statistical presentation, interpretation and analysis.

Ethical Consideration

Ethical issues are adhered in the conduct of the study by securing permits and treated the data with utmost confidentiality. A written approval for the use of adopted questionnaire with copyright was send to the primary author of the questionnaire being used.

Statistical Treatment of Data

Frequency Count. It was used to determine the frequency and percentage of respondents' demographic profiles of the respondents under Technical-Vocational Livelihood Track.

Mean. It was used to determine the extent and nature of gender inequity in SHS in the given areas. A 5-point Likert Scale was used with the following verbal interpretation: 1.00 – 1.49 - Very little extent, 1.50 – 2.49 - Little extent, 2.50 – 3.49 - Some extent, 3.50 – 4.49 - Great extent, and 4.50 – 5.00 - Very great extent

T-test. It was used determine the significant differences that exist between areas of gender inequity in the Senior High School when group according to sex and civil status.

Results and Discussion

Demographic Profile

Results of the demographic profile of the respondents were revealed as follows:

Table 1

Respondents Demographic Profile

Age	Frequency	Relative Frequency in Percent
21 – 25	4	14.29%
26 – 30	5	17.86%
31 – 35	8	28.57%
36 – 40	5	17.86%
41 – 45	2	7.14%
46 – 50	2	7.14%
51 – 55	1	3.57%
56 – 60	1	3.57%
TOTAL	**28**	**100.00%**

Gender	Frequency	Relative Frequency in Percent
Male	14	50.00%
Female	14	50.00%
TOTAL	**28**	**100.00%**

Civil Status	Frequency	Relative Frequency in Percent
Single	12	42.86%
Married	14	50.00%
Widow	2	7.14%
TOTAL	**28**	**100.00%**

Length of Service in Year	Frequency	Relative Frequency in Percent
0	2	7.14%
1	14	50.00%
3	1	3.57%
4	1	3.57%
5	1	3.57%
6	1	3.57%
7	1	3.57%
8	2	7.14%
10	1	3.57%
13	2	7.14%
19	1	3.57%
26	1	3.57%
TOTAL	**28**	**100.00%**

Position	Frequency	Relative Frequency in Percent
Teacher I	5	17.86%
Teacher II	10	35.71%
Teacher III	7	25.00%
Master Teacher I	3	10.71%
Principal	3	10.71%
TOTAL	**28**	**100.00%**

Salary Grade	Frequency	Relative Frequency in Percent
SG 11	5	17.86 %
SG 12	10	35.71%
SG 13	7	25.00 %
SG 14	-	-
SG 15	-	-
SG 16	-	-
SG 17	-	-
SG 18	3	10.71 %
SG 19	2	7.15 %
SG 20	-	-
SG 21	-	-
SG 22	1	3.57 %
TOTAL	**28**	**100.00%**

Highest Educational Attainment	Frequency	Relative Frequency in Percent
Baccalaureate	7	25 %
M.A./MS with Units	9	32.14%
M.A/MS Graduate	8	28.57 %
Doctoral with Units	3	10.71%
Doctoral Graduate	1	3.58%
TOTAL	**28**	**100.00%**

Number of Trainings in Gender and Development (in Days)	Frequency	Relative Frequency in Percent
0	3	10.71%
1	14	50.00%
2	5	17.86%
3	1	3.57%
4	2	7.14%
5	1	3.57%
6	1	3.57%
More than 6	1	3.57%
TOTAL	**28**	**100.00%**

Demographic Profile of the Teachers

The demographic profile of the respondents is presented in Table 1. As shown in the table, the respondents of the study were mostly 31–35 years old with 8 or 28.57% of the total 28 respondents. This was followed by 26–30 and 36–40 years old with 5 or 17.86%. The respondents were relatively ranges from 26 to 40 years old. In terms of sex, the respondents of the study were even and both male and female had 14 or 50%. In terms of civil status. The table also revealed that 14 or 50% of the respondents were married, 12 or 42.86% were singled while only 2 or 7.14% were widowed. This infers that most of the teacher-respondents' personal obligation is divided between their ultimate family and the school. The respondents were relatively new in the service. Half of the respondents were only on the first year of their service and only 1 or just 3.57% was more than 25 years in service. The respondents of the study were mostly Teacher II position with 10 or 35.71%. This was followed by Teacher III position with 7 or 25% and majority of the respondents have SG 12 or 35.71% o. Likewise, 9 or 32.14% of the respondents have MA/MS units, 8 or 28.57% have finished MA/MS degree, 25% or 7 earned baccalaureate degrees. 3 or 10.71% have taken units in Doctoral degree while only one has finished a Doctoral Degree. Exactly 50% of the total respondents had one-day training in GAD while 3 or 10.71% of them had no training in GAD. Five or 17.86% had 2 days of training in GAD and 3 of them had at least five days training.

It can be safely deduced from the related studies of technical vocational teachers' demographics across the world in terms of sex is quite lopsided, meaning that all studies are either dominated by female or male. Interestingly, age bracket and work experience both meet the condition of "mid-career professionals", denotes that is someone with more than 10 years to 15 years of professional experience and roughly 35 to 40 years (Kokemuller, 2016). Furthermore, SEAMEO-INNOTECH (2008) asserted that the status of Secondary Technical Vocational High Schools in the Philippines and it also reflects the age bracket from studies around the world which is between 30-40 years old and found to have been teaching for an average of 15 years each. Thus, intervening variables may consider as factors associated with awareness on gender sensitiveness and inclusivity across the nature of gender equity and equality.

Extent and Nature of Gender Inequity in Senior High School (SHS)

Table 2

Extent of Gender Inequity in SHS Curriculum in TVL

Indicator	Weighted Mean	Verbal Interpretation
1	4.00	Great Extent
2	3.96	Great Extent
3	4.18	Great Extent
4	3.75	Great Extent
5	4.32	Great Extent
6	4.14	Great Extent
7	4.07	Great Extent
8	3.71	Great Extent
9	3.75	Great Extent
10	4.04	Great Extent
11	3.96	Great Extent
12	4.11	Great Extent
OVERALL	**4.00**	**Great Extent**

When it comes to the extent of the Gender Inequity in SHS Curriculum in TVL, it was revealed that all indicators have a verbal interpretation of Great Extent with a weighted mean of 4.00. These findings meant that gender inequity when it comes to the SHS TVL curriculum was evident. It implies that curriculum is a vital structure of implementing gender equity in the context of Technical Vocational Livelihood track.

Primarily, curriculum sensitivity is considered as the most important part in implementing educational program of any learning institution. (Wider Opportunities for Women, 2010) however, the provision of training in a curriculum deliberated as one barrier in engaging women in non-traditional work with tools and mechanical operations and being steered away from classes where they would often have limited experience to learn the use and repair of tools and machinery. Traditionally male-dominated artisan

training courses (plumbing, metalwork, carpentry etc.) have predominated in TVET in most countries. Training for women was offered in a narrow range of traditionally female-dominated activities. Training in social and business skills has also been fairly limited, particularly for women (Mayoux 2005 as cited in Hartl 2009)

Table 3

Extent of Gender Inequity in Learning Materials

Indicator	Weighted Mean	Verbal Interpretation
1	3.82	Great Extent
2	3.54	Great Extent
3	3.82	Great Extent
4	3.68	Great Extent
5	3.89	Great Extent
6	3.71	Great Extent
7	3.57	Great Extent
8	3.46	Great Extent
9	3.75	Great Extent
10	3.64	Great Extent
11	3.54	Great Extent
12	3.96	Great Extent
OVERALL	**3.70**	Great Extent

All indicators identified when it comes to the extent of Gender Inequity in Learning Materials have a verbal interpretation of Great Extent and weighted mean of 3.70. Findings showed that gender inequity in the learning materials was also evident. It implies that the learning module and multimedia used by the students and teachers in on all areas of the curriculum is evident and there is a need contextualized to supplement or replace a traditional textbook.

It can be said that educational materials are one of the motivating factors for many studies that influence learners to imitate and learn the topic or content of a lesson (Lee, 2011 as cited in Mustapha 2012). Moreover, USAid (2015) perfectly understands the influence or the power teaching and learning materials in shaping gender sensitive citizenry as they attempt to advance the global efforts toward greater gender equality and inclusiveness in education by providing guidance on how to develop and evaluate materials that are free of bias and that promote equality and inclusiveness of all marginalized, disadvantaged, and underrepresented groups.

Table 4

Extent of Gender Inequity in Physical Facilities

Indicator	Weighted Mean	Verbal Interpretation
1	4.11	Great Extent
2	4.32	Great Extent
3	3.68	Great Extent
4	3.82	Great Extent
5	4.04	Great Extent
6	3.96	Great Extent
7	3.32	Some Extent
8	3.89	Great Extent
9	3.39	Great Extent
10	2.75	Some extent
11	3.61	Great Extent
12	3.32	Some extent
13	3.57	Great Extent
OVERALL	**3.68**	**Great Extent**

The extent of gender inequity in terms of physical facilities had an overall weighted mean of 3.68 with a verbal interpretation of Great extent. Three of the indicators which included the schools provision of sanitary assistance facilities in the event of any specific needs, the schools separated and covered change rooms for girls in the immediate environment and the schools provision of adequate sports facilities to meet the requirement of both genders have a verbal interpretation of Some extent with a weighted mean of 3.32, 2.75 and 3.32 respectively. The findings of the study indicate that the majority of the indicators in terms of gender inequity in physical facilities is evident except for sports and sanitary assistance facilities.

According to UNICEF, 2009; and Lang 2010) only few studies have been conducted in the area of gender and educational facilities even if it argues that social relations are influenced by the physical environment, and that social and physical aspect are often interlinked. INNE (2010) stated that Education Facilities should be designed giving careful thought to who uses the learning space and how. Spaces need to be appropriate to the sex, age, physical ability and cultural considerations and individual needs of all users.

Gender responsive and incorporating gender perspective in educational facilities does not mean facilities that addressed more on female sensibilities than its counterpart. It only goes to show that manifestation of gender equality in school facilities will benefit both sexes in achieving a holistic and better learning environment.

Table 5

Extent of Gender Inequity in Programs and Projects

Indicator	Weighted Mean	Verbal Interpretation
1	3.93	Great Extent
2	4.32	Great Extent
3	3.43	Some extent
4	4.32	Great Extent
5	3.32	Some extent
6	3.96	Great extent
7	3.50	Great extent
8	4.07	Great Extent
9	4.21	Great extent
10	4.04	Great Extent
OVERALL	**3.91**	**Great Extent**

For the extent of gender inequity in the programs and projects in the SHS, an overall verbal interpretation of great extent was revealed with a weighted mean of 3.91. Indicators such as specific bias towards selection of candidates for school programs and events and restrictions to either gender in participating in field trips, excursions and external visits had a verbal interpretation of some extent and a weighted mean of 3.43 and 3.32 respectively. The findings only showed that majority of the indicators had shown gender inequity except for bias in the selection of candidates for a program and event and restrictions to either gender in participating in field trips, excursions and external visits.

Table 6

Results Comparing Sex with Extent of Gender Inequity in SHS Curriculum in Technical-Vocational-Livelihood (TVL), Learning Materials (LM), Physical Facilities (PF) and Programs and Projects (PaPs)

		Leaner's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Cur	Equal variances assumed	2.187	.151	-.387	26	.702	-.0714286	.1843687	-.4504038	.3075466
	Equal variances not assumed			-.387	20.976	.702	-.0714286	.1843687	-.4548712	.3120141
LM	Equal variances assumed	2.355	.137	-.145	26	.886	-.0297619	.2046642	-.4504552	.3909313
	Equal variances not assumed			-.145	24.630	.886	-.0297619	.2046642	-.4515972	.3920734
PF	Equal variances assumed	.144	.707	.291	26	.774	.0659341	.2267594	-.4001766	.5320448
	Equal variances not assumed			.291	26.000	.774	.0659341	.2267594	-.4001766	.5320448
PaPs	Equal variances assumed	3.138	.088	-.647	26	.523	-.0928571	.1434739	-.3877721	.2020578
	Equal variances not assumed			-.647	20.064	.525	-.0928571	.1434739	-.3920777	.2063634

The table presents the significant difference between the extent of gender inequity in SHS curriculum in TVL, learning materials, physical facilities, and programs and projects when the respondents are grouped in terms of sex. —test was used to determine the existence of a statistically significant difference between the variables. The table further shows that the response of male and female respondents are not significantly different in the extent of gender inequity in SHS curriculum in TVL, learning materials, physical facilities, and programs and projects.

Blumberg (2008) argues that Gender Bias in Textbooks (GBIT) is invisible obstacle on the road to gender equality in education which take-for-granted stereotypes about gender roles, Specifically, GBIT is important because textbooks occupy 80% of classroom time and it may contribute to lowering girls' achievements, especially in weak schools in poor countries.

Table 7

Results Comparing Civil Status with Extent of Gender Inequity in SHS Curriculum in TVL (Cur), Learning Materials (LM), Physical Facilities (PF) and Programs and Projects (PaPs)

		Leaner's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Cur	Equal variances assumed	3.112	.089	-.067	26	.947	-.0129630	.1929262	-.4095284	.3836025
	Equal variances not assumed			-.057	11.909	.956	-.0129630	.2282080	-.5106050	.4846791
LM	Equal variances assumed	1.877	.182	.369	26	.715	.0787037	.2130953	-.3593200	.5167274
	Equal variances not assumed			.343	15.118	.736	.0787037	.2295436	-.4102246	.5676320
PF	Equal variances assumed	.271	.607	.159	26	.875	.0376068	.2368927	-.4493331	.5245468
	Equal variances not assumed			.156	17.762	.878	.0376068	.2411819	-.4695838	.5447975
PaPs	Equal variances assumed	.062	.806	-.843	26	.407	-.1255556	.1488937	-.4316109	.1804998
	Equal variances not assumed			-.862	19.953	.399	-.1255556	.1456543	-.4294310	.1783199

The table presents the difference between the extent of gender inequity in SHS curriculum in TVL, learning materials, physical facilities, and programs and projects when the respondents are grouped in terms of civil status. T—test was used to determine the existence of a statistically significant difference between the variables. As stipulated on the table, it shows that the response of single and married respondents are not significantly different in the extent of gender inequity in SHS curriculum in TVL, learning materials, physical facilities, and programs and projects. It suggests that schools should continuously promote gender equity for equal opportunity.

Conclusions

In the light of findings of the study, the following were concluded:

1. Of the 28 respondents, majority were 31-35 years old, on their first year of service, married, in the Teacher II position, SG 12 and with MA/MS Units and had one-day training in Gender and Development. Regardless of the demographic profile, respondents are capable and competent enough to deliver their craft for the students to attain lifelong-learning. Thus, sustainable trainings and seminars about Gender and Development is essential in the attainment of the vision and mission of Department of Education.

2. All areas measured as to the extent of gender inequity in SHS TVL track namely curriculum, learning materials, physical facilities and programs and projects have a great extent. These elements are vital in advocating gender equity and sensitivity in achieving gender inclusiveness in the different specialization under Technical and Vocational Livelihood Track of the K to 12 Curriculum Framework.

3. The socio demographic characteristics of the respondents such as sex and civil status had no significance with the extent of gender inequity in all areas measured in SHS TVL track. Therefore, urgent need to consider and promote gender equity in every program implementation is vital.

Recommendations

The following were the recommendations from the conclusion drawn from the study:

1. There is a need to design a comprehensive Gender Development Program that will be institutionalized in the Schools Division of Imus City. More so, there is a need to include gender equity in the design and review of curriculum, design of learning materials, physical facilities and programs and projects that are gender sensitive especially in the schools. Further, a similar study be conducted in the Academic and Sports and Arts and Design.

2. There is also a need to mandate the Human Resource Office to design and lead the Gender Equity Development Program and include the program as one of the key result areas in the Individual Performance Commitment Result Form (IPCRF) of HR Head and Staff.

3. The Division's Monitoring and Evaluation team should strictly monitor and evaluate Gender Development activities in school and in every teacher for continuous improvement.

4. In addition, future researchers should conduct more studies and include other variables such as researches undertaken by students and teachers related to gender equity and equality which will support all efforts to promote gender sensitivity and inclusiveness

Table 8

Proposed Gender Development Program

Areas of Concern	Objectives	Strategies	Person Involved	Time Table	Budget Allocation	Expected Output
Curricu-lum	To revise curriculum of TVL track that is gender sensitive	Work with the Department of Education in the region and central office to create standardized gender-based curriculum, LMs, physical facilities and programs and projects indicators.	DepEd Officials Director Superintendent Supervisors Principals Teachers	Immediate Implementation of the GAD Program	DepEd Funds Special Education Fund (SEF) School Fund (MOOE and Canteen Fund)	Revised gender sensitive curriculum of TVL track
Learning Materials	To design learning materials or LMs specifically in the TVL track that will reflect an equal opportunity for male and female in the LMs content;	Contextualize and Localized Learning Materials	Superintendent Supervisor Principals Teachers	Immediate crafting of contextualized and localized LMs	SDO MOOE and SEF	Contextualized and localized LMs reflecting equal opportunity for both male and female students

Physical Facilities	To provide physical facilities or spaces in schools that offer equal usage/utilization for both male and female learners and teachers	Promote gender sensitive and women--friendly spaces in schools;	DepEd Officials Director Superintendent Supervisor Principals Teachers	Immediate provision of schools facilities that offer equal usage for both male and female learners	National and Local Funds	Schools Facilities that are gender sensitive
Programs and Projects	To implement programs and projects that will give an equal opportunity to male and female candidates and leaders to head a program or project.	Offer staff-wide gender-sensitivity trainings Promote research studies on gender issues to be conducted by faculty and students. Work with universities such as Cavite State University-Main Campus (2014 and 2015 Awardee for being the Best Implementer in GAD in CALABARZON	DepEd Officials, LGUs, School Heads, Teachers	Immediate implementation of programs and projects that promote gender sensitivity	DepEd Funds and Local Funds	Programs and Projects that promote gender sensitivity

Advocacy -	Advocate for a census of a gender sensitive in basic education including informal sector or local government units for a better representation in policy making and continuous policy improvement.	Advocacy campaign Information dissemination on awareness-raising program Incorporate on the class observation tool for IPCRF.	DepEd Officials and LGUs	Immediate advocacy for a national census of a gender sensitive SHS	DepEd Fund and Local Fund	Policy Guidelines on Gender Sensitivity in SHS for continuous improvement Let's Make Gender Equality a Reality for every DepEd

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PERCEIVED IMPACT OF DEVELOPMENTALLY APPROPRIATE PRACTICES (DAP) IN TEACHING NUMERACY IN GRADE III

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Abstract

The researchers' aims to assess the impact of developmentally appropriate practices (DAP) in teaching numeracy in Grade III in Bukandala Elementary School in the Division of Imus City. This study utilized a non- experimental, descriptive type of research. Instrument utilized was a 2 parts questionnaire. It was structured in a form of checklist type to promote convenience in answering. Part one incudes questions pertaining to the demographic profile of the respondent in terms of gender, age, civil status, highest educational attainment, and years of teaching. Part two of the research instrument is a 22 items checklist for Grade 3 teachers (12 respondents) to determine the impact of DAP in numeracy in the school in terms of vision-mission, faculty training and development, curriculum and instructions, and facilities and learning environment. Grade 3 teachers perceived that the impact of DAP in teaching numeracy 3 is very high efficiency and effectiveness with an overall mean of 3.63 in terms of aligning DepEd's vision and mission, faculty training and development, curriculum and instructions and facilities and learning environment. DAP in numeracy; gives the learners more time to master the required competencies and skills; provides learners time for other learning opportunities beyond the classroom, thus allowing for a more holistic developmental progression; have classrooms that permit arrangement for small group activity and have color schemes, wall painting, posters and décor that provides motivation to learning.

Introduction

In order to move forward and develop as a nation, the Philippines should focus on the real agents of change and progress – its people. Educators share this same concern to effectively and adequately educate Filipinos because only quality education can really empower them to become versatile citizens who are responsible key players in shaping their nation's destiny (Education Act of 1982).

In RA 10533 the State shall create a functional basic education system that will develop productive and responsible citizens equipped with the essential competencies, skills and values for both life-long learning and employment in giving every student an opportunity to receive quality education that is globally competitive based on a pedagogically sound curriculum that is at par with international standards; and making education learner-oriented and responsive to the needs, cognitive and cultural capacity, the circumstances and diversity of learners, schools and communities through the appropriate languages of teaching and learning, including mother tongue as a learning resource. The Department of Education (DepEd) is strengthening its reading program through the implementation of Early Language Literacy and Numeracy (ELLN). Thus, the program will develop in Filipino children literacy and numeracy skills and attitudes which will contribute to a lifelong learning. Thus, it aims to improve reading and numeracy skills of Kinder to Grade 3 pupils, following K to 12 Basic Education Curriculum by establishing a sustainable and cost- effective professional development system for teachers.

The DepEd recognizes that the foundation of learning is in a child's early language, literacy, and numeracy skills. These skills, according to DepEd, do not develop naturally, and thus require careful planning and instruction. There is a need, for children to have access to age-appropriate and culturally-sensitive materials to help them develop the habits of reading, speaking, writing, and counting.

Devlin, K. 2012 found that learning to understand students' mathematical thinking could lead to fundamental changes in teachers' beliefs and practices and that these changes, in turn, reflected in students' learning, to understand and to think through, mathematical facts and connections by certain internal imaginations or externalized representations. The studies provided sites for examining development of students' thinking in situations where their intuitive strategies for problem solving were a focus for teacher reflection and discussion. This led to new perspectives on student thinking and on the instructional contexts that supported the development which led to the revision in the approach to teacher development.

Language, Literacy and Numeracy in today's context are shaped by important social forces which caused by global economic competition, the increasing use of information and communication, the rapid emergence of technologies in the Internet, and the government initiatives worldwide to accelerate efforts in maintaining a high level of literacy and numeracy (Leu et.al, 2000).

To be numerate is to use mathematical ideas effectively to participate in daily life and make sense of the world. It incorporates the use of numerical, spatial, graphical, statistical and algebraic concepts and skills in a variety of contexts and involves the critical evaluation, interpretation, application and communication of mathematical information in a range of practical situations (Numeracy K-12 Policy, Department of Education).

Numeracy involves students recognizing and understanding the role of mathematics in many contexts. It involves choosing the mathematics to use, applying mathematical skills to any numerical information presented in text, tables or charts and

evaluating their use to solve problems in the world around us. Highly numerate students interpret, apply and evaluate mathematical strategies, and communicate mathematical reasoning in real world situations (Dieckmann, 2019).

Bukandala Elementary School believe that numeracy education is every teacher's responsibility. The key to successfully addressing numeracy across the curriculum is for teachers to understand the mathematical demands of the work they set students, the potential difficulties of the numeracy aspects students may experience and knowledge of various strategies to assist students. Therefore, the school implemented the Developmentally Appropriate Practices in Numeracy after series of trainings and School Learning Action Cells. And with that, the researchers would like to determine the perceived impact of the DAP in Numeracy in K to 3 in Bukandala Elementary School.

Literature Review

In DepEd Order No 12, Series of 2015, the Department recognizes that the foundation of learning is in a child's early language, literacy, and numeracy skills. These skills according to DepEd do not develop naturally, and thus require careful planning and instruction. There is thus, a need, for children to have access to age-appropriate and culturally-sensitive materials to help them develop the habits of reading, speaking, writing, and counting.

Under the K to 12 Basic Education Program, DepEd recommends strengthening these skills via the following strategy: first is to establish baseline data on the profile of the teachers and pupils; second is to develop materials; third is to develop classroom-based (formative) assessment protocol for literacy and numeracy skills; and fourth is to develop professionally teachers and school heads.

For such strategy, it is easy to see that the children stand to gain the most from the program. By taking into consideration their profile, the existing functional program, and support mechanisms, DepEd is able to better understand and later address their needs. It is important to remember that a child's strong language, literacy, and numeracy skills form the base of his or her being a lifelong learner. It is on these skills that more intermediate ones will depend. When these skills are not developed early on, it is easy for the child to falter with more difficulty tasks, and in turn fail at the one's society needs them to accomplish.

Teachers and school heads, however, also benefit a lot from the strengthening of such program. This is because when the children's needs and addressed, classroom management and teaching becomes easier, not just at the lower levels, but also at the higher ones.

The professional development of the program affords teachers and school heads and allows them to enhance their skills better. This is through the program's contribution of enhanced pedagogical knowledge, skills and attitudes on early literacy and numeracy,

improved ability to assess learner's literacy and numeracy skills, and sustained commitment in mentoring/sharing of teaching experiences to improve instruction and outcomes which all allow them to serve the learners more effectively and efficiently.

Indeed, numeracy is generally accepted as recognizing the importance of schooling that ensures students will learn Mathematics that can be applied in their adult lives (Askew, 2017).

The term "numeracy" has become widely adopted within education, and particularly by policymakers, there is no agreement over the precise meaning of the term or clarity over its relationship to Mathematics. As a verb, numerate as meaning "to count or calculate" dates back at least to the 17th century, but the Crowther Report (Department of Education and Science 1959) turned the term into a noun, with emphasis on high levels of understanding of scientific ideas.

Thus one generally accepted view of numeracy might be summed up as "functional," as a subset of Mathematics, largely about number and appealing to those in favor of "back to basics." Girling 1997 argues that the increasing availability of calculators changed the nature of what number sense might be, with less emphasis on performing actual calculations: this debate is still to be resolved, particularly in relation to adults' needs (Neill 2001 and Kaye 2003).

The United States was a late adopter of the term "numeracy," with US writers preferring the term "qualitative literacy," seen as distinct from being a subset of Mathematics. So whereas Mathematics might be characterized as dealing with the abstract and general, qualitative literacy requires the development of critical engagement with particular instances of Mathematics in use (Steen 2001 and Mayes, et al. 2013).

The growth in attention that international testing has garnered, in particular the Organization for Economic Cooperation and Development's Programme for International Student Assessment (PISA: Programme for International Student Assessment) and its definition of mathematical literacy has to an extent brought more global unity to the definition of numeracy, particularly as more nations join this program of assessment.

There is a strong consensus with the term "numeracy" means that all young people need to become competent and confident users of the Mathematics they have been taught.

The Victorian Department of Education and Early Childhood Development (2008) defined numeracy is best described as a key outcome of how Mathematics is taught and learned it bridges the gap between Mathematics learned at school and the variety of contexts where it needs to be used in everyday life.

Progress in the research on mathematical education involves understanding how different factors interact to lead to mathematical achievement. In this longitudinal study, executive functioning, motivation, and early mathematical skills are assessed to explain

later mathematical performance. Structural equations analysis showed a direct effect of executive functioning and early numeracy skills on later mathematical performance. Initial motivation did not have a significant direct effect on mathematical performance. Motivation had an indirect effect through executive functioning, early numeracy skills, and their combination. Educators should promote motivation from early stages of education, given its importance in later success in learning (De la Fuente, J., 2018).

The construction of number comprehension is one pillar of the higher order principles of mathematical learning that predict later mathematical outcomes beyond IQ variables. Numeracy, the core of formal mathematical thinking, requires a broad range of abilities that influence mathematical cognition development. Within these "early numeracy skills," three abilities can be stated as early and important components logical operations, counting, and magnitude comparison abilities (Desoete, A., 2019).

According to Cotton (2010), everyone can think mathematically; mathematical thinking can be improved by reflection; mathematical thinking evokes contradiction, tension, and excitement; mathematical thinking is supported by the atmosphere of questioning, difficulties and reflection; mathematical thinking helps us understand ourselves and the world. Physical, mental, and emotional connections are seen as requirements that provide mathematical thinking (Hudson, Henderson & Hudson, 2016). In mathematical thinking, there is an effort to reach a product by moving from Journal of Education and Training Studies Vol. 5, No. 9; September 2017 134 our perceptions, as in every thinking. Mathematical thinking involves all important skills such as logical and analytic thinking as well as quantitative reasoning (Devlin, 2012).

Statement of the Problem

This study determines the developmentally appropriate practices in teaching numeracy in Grade 3 at Bukandala Elementary School. Specifically, it aims to answer the following questions:

1. What is the profile of the respondent in terms of:
   1.1 gender,
   1.2 age,
   1.3 civil status,
   1.4 highest educational attainment, and
   1.5 years in teaching

2. What is the impact of Developmentally Appropriate Practices (DAP) in teaching numeracy in Grade 3?
3. What is the significance of DAP in teaching numeracy in Grade 3?
4. What are the problems met by the teachers in developing the numeracy skills of the learners?
5. What is the possible proposed intervention to sustain the efficiency and effectiveness of DAP in teaching numeracy?

Methodology

This study utilized a non-experimental, descriptive type of research. A descriptive research aimed to observe, describe, and document aspects of a situation as it naturally occurs and sometimes to serve as a starting point for hypothesis generation or theory development (Polit and Beck, 2008). In this study, descriptive design was used to describe the existing implementation and management of best practices of DAP in numeracy in Grade 3 at Bukandala Elementary School.

Survey type of research was employed where participants answer questions administered through interviews or questionnaires. After the participants answer the questions, the researchers describe the responses given. In order for the survey to be both reliable and valid it is important that the questions are constructed properly.

Twelve Grade 3 teachers were the respondents of the study. To gather pertinent data and information needed in the study, a 2-part questionnaire was employed by the researcher. It was structured in a form of checklist type to promote convenience in answering.

The questionnaire was modified from the Results Performance Management System Instructional Supervision Form 1C by the Department of Education. The statistical tools used for the analysis and interpretation of the data are as follows:

Frequency distribution. This is a systematic arrangement of values from lowest to highest together with a count of the number of times each value was obtained. (Polit and Beck, 2008). In this study, this was specifically answered the first problem of the study in the determination of the profile of the respondent according to gender, age, civil status, educational attainment, and years in teaching.

Mean. It is referred to as (M or x) as arithmetic mean or average. It is computed by summing all the observation in the group and dividing by the number of observation (Polit and Beck, 2008). In this study, the mean answered the second problem of the study, specifically, what is the impact of DAP in numeracy in Grade 3 at Bukandala Elementary School in terms of vision-mission, faculty training and development, curriculum and instructions, and facilities and learning environment and in the implementation of the DAP in numeracy in terms of promotion of goals and objectives of the DepEd, assistance of faculty training and development, monitoring and evaluation curriculum and instruction, and enhancing facilities and learning environment.

Results and Discussion

This chapter presented the presentation, analysis and interpretation of the findings based on the statement of the problem. The main concern of this study is critically describe the management of DAP in ELLN in K to 3 at Bukandala Elementary School. This chapter presented the answers to the following problems:

Problem 1: What is the demographic profile of the respondent in terms of: gender, age, civil status, educational attainment, years in teaching, training exposure to ELLN, and knowledge or research?

Demographic Profile of Respondents

The characteristics or demographic profile of the teacher-respondents are presented in

Table 1

Percent Distribution of the Respondents in terms of Gender (n = 12)

Gender	Frequency	Percent
Male	1	8
Female	11	92
Total	**12**	**100**

In terms of gender, majority (92%) of the respondents were females while one (8%) were males. Having more educational opportunities female also tend to take teaching as a profession and is being tied generally to female.

Table 2

Percent Distribution of the Respondents in terms of Age (n = 12)

Age	Frequency	Percent
21 – 30	1	8
31 – 40	8	67
41 – 50	3	25
51 – 60	0	0
60-above	0	0
Total	**12**	**100**

Based on the result, eight respondents (67%) were 31-40 years old, three (25%) were between 41-50 years old, one (8%) were between 21-30 years of age, and none of the respondents ages from 51-above. Most of the respondents were between 31-40 years of age considered as middle aged teachers.

Table 3

Percent Distribution of the Respondents in terms of Civil Status (n = 12)

Civil Status	Frequency	Percent
Single	1	8
Married	11	92
Total	**12**	**100**

The table shows that majority of the respondents, eleven (92%) were married and one (8%) was single. Married teachers have more experiences and are exercising parental authority.

Table 4

Percent Distribution of the Respondents in terms of Educational Attainment (n = 12)

Educational Attainment	Frequency	Percent
Baccalaureate	4	33
Baccalaureate+ MA Units	7	58
MA Graduate	1	9
Units in Ph.D./Ed. D	0	0
Ph.D./Ed.D Graduate	0	0
Total	**12**	**100**

The table shows that most of the respondents were Baccalaureate+ MA Units (58%), secondly, four (33%) were Baccalaureate degree holders, one of them was an MA Graduate, and no one of them inclined to doctorate degree.

Table 5

Percent Distribution of the Respondents in terms of Length of Service (n = 12)

Length of Service	Frequency	Percent
0 – 10	8	67
11-20	4	33
21 & above	0	0
Total	**12**	**100**

In terms of teaching experiences, majority of the respondents (67%) has 0-10 years of teaching experience and four (33%) have 11-20 years of teaching experience.

Problem 2: What is the impact of Developmentally Appropriate Practices in teaching Numeracy in Grade 3 at Bukandala School in terms of vision-mission, faculty training and development, curriculum and instructions, and facilities and learning environment?

Table 6

Impact of Developmentally Appropriate Practices in Teaching Numeracy in Grade 3

Perceived Impact of Developmentally Appropriate Practices in Teaching Numeracy in Grade 3	Mean	Verbal Interpretation
Alignment of DepEd's Vision-Mission **Our school …**		
gives learner an opportunity to receive quality education based on K to 12 Basic education curriculum and the guidelines of DAP in Numeracy	3.83	Very high efficiency and effectiveness
assures that every learner acquires basic early numeracy skills	3.83	Very high efficiency and effectiveness
inculcates in every learner respect for human rights and core values such as *Maka-Diyos, Maka-tao, Maka-Kalikasan, and Makabansa*	3.83	Very high efficiency and effectiveness
enables the learner to achieve mastery of core competencies and skills in numeracy	3.08	Very high efficiency and effectiveness
Total Mean	**3.64**	**Very high efficiency and effectiveness**
Faculty Training and Development **Our school…**	Mean	Verbal Interpretation
assesses teachers' preparation and readiness to adapt the school culture and system	3.58	Very high efficiency and effectiveness
designates teachers according to their specialization and expertise in teaching DAP in Numeracy	3.58	Very high efficiency and effectiveness
produce a pool of highly and adequately trained teachers of DAP in numeracy	3.50	Very high efficiency and effectiveness
conducts Needs Assessment for Faculty Development	3.50	Very high efficiency and effectiveness
Total Mean	**3.54**	**Very high efficiency and effectiveness**

Curriculum and Instruction **Our school…**	Mean	Verbal Interpretation
provides learners with high academic standards to ensure sufficient mastery of numeracy	3.50	Very high efficiency and effectiveness
provides learners the required learning materials in numeracy	3.33	Very high efficiency and effectiveness
uses research-based practices, uses quality materials and textbooks	3.50	Very high efficiency and effectiveness
gives the learners more time to master the required competencies and skills	3.75	Very high efficiency and effectiveness
provides learners time for other learning opportunities beyond the classroom, thus allowing for a more holistic development	3.75	Very high efficiency and effectiveness
Teaches numbers and operations using a developmental progression	3.75	Very high efficiency and effectiveness
Teaches geometry, patterns, measurement, and data analysis using a developmental progression	3.50	Very high efficiency and effectiveness
Uses progress monitoring to ensure that math instruction builds on what each child knows	3.50	Very high efficiency and effectiveness
Teaches children to view and describe their world mathematically	3.58	Very high efficiency and effectiveness
Dedicates time each day to teaching math, and integrate math instruction throughout the school day	3.67	Very high efficiency and effectiveness
Total Mean	**3.23**	**Very high efficiency and effectiveness**
Facilities and Learning Environment **Our school…**	Mean	Verbal Interpretation
have enough space for functional library, Math room, and Numeracy spaces	3.50	Very high efficiency and effectiveness

have classrooms that permit arrangement for small group activity and have color schemes, wall painting, posters and décor that provides a motivation to learning	3.58	Very high efficiency and effectiveness
have functional library that provides adequate number and up to date general and supplemental reference books including dictionary, almanac, globe, and other references	3.58	Very high efficiency and effectiveness
provides the learner with adequate and functional reading corner/ library classroom needed in Numeracy	3.42	Very high efficiency and effectiveness
Total Mean	**3.52**	**Very high efficiency and effectiveness**
Overall Mean	**3.63**	**Very high efficiency and effectiveness**

Legend:

Scale Equivalent	**Descriptive Interpretation**
4.00 - 3.26	Very High Efficiency and Effectiveness
3.25 -2.51	High Efficiency and Effectiveness
2.50 -1.76	Low Efficiency and Effectiveness
1.75 - 1.00	Very Low Efficiency and Effectiveness

Table 6: shows the impact of DAP in teaching Numeracy as perceived by the Grade 3 teachers in terms of vision and mission, faculty training and development, curriculum and instructions, learning environment and facilities. Using a four-point response, the alignment of impact of DAP in teaching Numeracy to the DepEd's vision and mission has a very high efficiency and effectiveness (3.64). These teachers agreed in substance to all the reasons laid down by the administrator concerning children receiving quality education that is internationally recognized and comparable (K + 12 Discussion Paper, 2010). It also shows that there is an assurance that every child is being formed to the spirit of learning through life and acquisition of the required 21st century skills and technology inclusive of the values proper of a Filipino, Maka-Diyos, Makatao, Maka-kalikasan at Makabansa (Education Act 1982) as well as assures that every Grade 3 learner acquire basic early numeracy skills (DO No. 12 s. 2015). Faculty training and development got a total mean of 3.54 of very high efficiency and effectiveness. This means that teachers are designated according to their specialization and expertise in teaching DAP in numeracy in order to make a relevant faculty development program in accordance to their school culture and system (Diamond, 2008 and Kelly, 2010 and Bilbao et.al, 2008).

The curriculum and instructions are perceived by the teachers got a total mean of 3.23 or very high efficiency and effectiveness. These Grade 3 teachers said that they provide learners time for other learning opportunities beyond classroom, this allowing for a more holistic development that is globally competitive based on a pedagogically sound curriculum that is at par with international standards (RA 10533, Section 2 (a).

The learning environment and facilities got a total mean of 3.52 or very high efficiency and effectiveness. While they claim that there are adequate and functional reading corners/library classrooms needed in the implementation of ELLN and accountable for the efficient and effective attainment of specified learning objectives in pursuance of national development goals within the limits of available school resources (Education Act 1982). In general, the impact of DAP in teaching numeracy 3 from the perspective of the grade 3 teachers got an over-all mean of 3.63 or very high efficiency and effectiveness.

Problem 3: What are the significance of DAP in teaching numeracy in grade 3?

Table 7

The significance of DAP in teaching numeracy 3 as perceived by the respondents.

The significance of DAP in teaching Numeracy should….	Mean	Descriptive Interpretation
give learner an opportunity to receive quality education.	3.06	Very Satisfactory
assure that every learner acquires basic early numeracy skills.	3.83	Excellent
assess teacher's preparation and readiness to adapt the school culture and system.	3.20	Very Satisfactory
give the learners more time to master the required competencies and skills	3.53	Excellent
inculcate in every learner respect for human rights and core values such as Maka-Diyos, Maka-tao, Maka-Kalikasan, and Makabansa.	3.67	Excellent
provide learners time for other learning opportunities beyond the classroom, thus allowing for a more holistic development.	2.49	Very Satisfactory
teach numbers and operations using a developmental progression	3.25	Very Satisfactory
gradually internalize social interactions until the task can be performed independently.	2.68	Very Satisfactory
develop specific word meanings, phrases, usages and dialects from the social interactions within their culture.	3.22	Very Satisfactory
establishes a foundation for children's future communication with other adults and peers.	3.20	Very Satisfactory
Total Mean	**3.21**	**Very Satisfactory**

Legend:

Scale Equivalent	Descriptive Interpretation
4.00 - 3.26	Excellent
3.25 -2.51	Very Satisfactory
2.50 - 1.76	Satisfactory
1.75 - 1.00	Good

Table 7: shows that the respondents perceived DAP in teaching Numeracy has "Excellent" significance in giving assurance that every learner acquires basic early numeracy skills, inculcate in every learner respect for human rights and core values such as *Maka-Diyos, Maka-tao, Maka-Kalikasan*, and *Makabansa*, and gives the learners more time to master the required competencies and skills. While the *indicator give learner an opportunity to receive quality education* got the lowest mean *of* 3.06 "Very Satisfactory" which is anchored to the K to 12 program to provide sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment, and entrepreneurship.

Problem 4: What are the problems met by the teachers in developing the numeracy skills of the learners?

Thirty-three and three tenths percent (33.3%) of the respondents have answered that the common problems met by the teachers are as follows: (1) learners' ability, (2) readiness of the learners, (3) level of understanding of the learners, (4) availability of instructional materials. While 66.7% of the respondents have answered: (1) lack of interest, (2) behavioral problem, (3) comprehension.

Problem 5: What is the possible proposed intervention to sustain the efficiency and effectiveness of DAP in teaching numeracy?

These were the common answers of the respondents:

1. Differentiated activities
2. Seminar about DAP
3. Counseling for both learner and parents

Conclusions

Based on the findings, the following conclusions were drawn.

1. Most of the respondents were female ages 31-40 years old with units in Master's Degree and with 0-10 years' experience in teaching.

2. The impact of Developmentally Appropriate Practices in teaching numeracy in Grade 3 got an over-all mean of 3.21 or very satisfactory.

3. The significance of DAP in teaching Numeracy in Grade III as perceived by the respondents has great impact in the development of values and competencies of the learners.

4. Some problems encountered by the respondents in developing the numeracy skills of the learners has something related to the behavioral and level of understanding of the learners in numeracy.

5. Activities like differentiated activities, seminar about DAP, and counselling to both parents and learners were proposed to sustain the efficiency and effectiveness of DAP in Numeracy.

Recommendations

1. **The members of the education community**. Further studies should be made to make all the members of the education community to be more informed and dynamically involved in the impact of DAP in numeracy. Considering the results of the study, a more extensive and intensive survey and testing must be made in order to effectively individuate strategies relevant to DAP in numeracy in Grade 3.

2. **The school**. DAP in Numeracy is properly interpreted/implemented and recommend a further inquiry into the impact of it to curriculum.

3. **The researcher.** Further studies on the impact of DAP in numeracy in a large scale for more reliable and valid result.

   Considering the time spent and the subjects surveyed, the researchers also recommend the reduplication of the survey possibly using better instruments and bigger number of subject-respondents to better established the reliability and the scientific credibility of result

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Appendices

POINTS OF VIEW OF SDO IMUS CITY LEVEL 1 NON-TEACHING PERSONNEL ON FINANCIAL LITERACY: BASIS FOR PROGRAM FLOWS (FINANCIAL LITERACY OPPORTUNITIES FOR WORKERS OF SDO IMUS CITY)

Appendix A

Transcription of FGD

INTERVIEWER:	Sabagay magkakilala naman tayo. Lisa po ako siya po si Jen. Kami po yung may research title na Point of view of SDO personnel regarding financial literacy. Ang amin ay qualitative research nag - gather po kami ng information na nag fofocus sa discussion, kayo ang aming informants lahat ng mga ADA ADAS ang aming magiging informants. May apat na questions lang po tayo, kaya naka record po tayo para sa reference naming yun. Di namin mababalikan kung nakasulat so okay lang po? Apat na questions lang to sasagutin ninyo at ine-encourage po namin na lahat ay masagot, makasagot sa lahat ng questions. Bale paganto ang ikot natin. Siya yung one, two, three, four, five, six, seven. Yun po. Tungkol ito sa financial literacy. So, pwede na natin umpisahan ang unang tanong. 1. Para sa inyo ano ang kahulugan ng savings? What is your definition of savings? Umpisahan natin kay key informant 1.
Informant:	Para sa akin po yung savings, ay nagtatabi ka para sa future na pangagailangan po. Ayun kung pwede mo kunin or hindi, ayun ung pinaka na input ko.
INTERVIEWER:	Ano yun naghuhulog ganun?
Informant:	Hindi naka one time na nahulog, tapos mag ma-matured siya after five years nasasayo na kung gusto mo kunin or itutuloy mo dadagdagan mo siya or irerenew mo siya

INTERVIEWER:	Ayos din pala no?
Informant:	Oo kasi every year siya tumataas ang dibidendo sa pagbili, kung gaano katas ang kinita. Pero kung talagang aanuhin mo wala talaga, kasi ako ay meron dalawang high school at college. Na ikaw ang lahat nag papaaral. So mabigat pala talaga ang pananagutan ninyo kaya walang savings.
INTERVIEWER:	Ngayon sa tanong, sa pangatlo. How can you save? Ngayong alam naming na ang laki ng pananagutan ninyo bilang padre de pamilya, panganay na anak, single parents at isa lang ang may savings. Pero paano tayo makakapag-input. Sa tingin ninyo ano yung mga ways para makapag input tayo ng kahit kaunti.
Informant:	Ako po, tinatry ko pa na hindi iwithdraw lahat ng pera, kasi diba po yung alkansya. May baboy po kasi ako.
INTERVIEWER:	So nagtitira ka sa ATM, hindi na tinatanong ni mother kung… Ah okay, hanggat maari hindi mawithdraw, atleast may pera ka pa na matitira
Informant:	Yes, po.
INTERVIEWER:	Si Ma'am?
Informant:	Sakin naman po ang ginagawA ko nag bubudget po talaga ako, hundred a day, yun lang po talaga, bawal kang lalagpas dun, or kung lumampas man hindi every day. Tapos bago withdraw yung pera. Yung 10% po talaga iniiwan ko nap o talaga para po hindi ko na magastos Naka budget nap o.
INTERVIEWER:	Bukod sa one hundred a day, may 10% ka pa?
Informant:	Hindi po ung savings na 10% sa sweldo ko hindi ko nap o wini-withdraw.
INTERVIEWER:	Tinitira mo na talaga. Tapos everyday may 100 pesos ka pa na sine-save?
Informant:	100 pesos lang po yung budget ko per day
INTERVIEWER:	Ah so ang expenses mo lang per day is 100 lang dapat hindi na lalagpas?
	Yes, po.

Informant:	
INTERVIEWER:	Nagagawa mo yun?
Informant:	Most of the time po, sobrang busy sa work po wala naming pon time na gumastos pa
INTERVIEWER:	Ang husay na kokontrol ang sarili sa pagastos. 100. Sir kayo po paano po kayo makakapagsave?
Informant:	Dati kasi madalas ako maginom, pero ngayon di na ko nagiinom. Good boy na. Pala date naman.
INTERVIEWER:	Sa tingin mo pano ka makakapagsave?
Informant:	Ayun na nga yung sa pagiinom malaki na ang matitipid. Kung iinom man di na magaamabag.
INTERVIEWER:	Paano sabi mo malimit ka naming magdate
Informant:	Ayun sisimba na lang kami, kahit mga weekdays. Atleast busog ang pananampalataya.
INTERVIEWER:	Nakatulong naman sayo? Nakakasave ka kahit kunti?
Informant:	Oo, medyo nakakasave naman.
INTERVIEWER:	Okay. Medyo naging ano pala no, nabawasan yung dating ginagawa. Nakatulong sayo. Ikaw naman po sir?
Informant:	Yang tanong nayan Ma'am mahirap talagang sagutin. Dahil sa present nga na status ng family. Pero, in one way and another, pwede naman na katulad ng higpit ng sinturon. Halimbawa na, pagka yung nakaraan may bonus pag December, that's the only time kaming lumalabas kasama family niya, nagchowchowking ganun. Pero, yung normally na nagagawa ng ibang pamilya na weekly may bonding, hindi Namin ginagawa to save. Kumbaga hangga't maari, kung ano lang yung luluto sa bahay yung pagkain, we make things meet ba isip basa amin pong expenses sa family and pag may pagkakataon po katulad nung nagaaral pa po ung panganay ko before. Nagsi-seek kami ng financial assistance minsan kay Mayor o kaya kay Congressman. Kahit papano nabibigyan kami ng ano lang, maliit lang, pero kailangan pa rin naming magcash out. So it helps naman kaysa samin lahat, nabuburden ako kung san ako mangungutang pang tustos. Tsaka most of the time higpit sintron lang.

INTERVIEWER:	Nakakagastos lang kayo pag may nakukuha kayong iba bukod sa sweldo?
Informant:	Oo, kasi kung present ano lang, wala.
INTERVIEWER:	Kung sa sweldo lang di na tayo nakakagastos ng, katulad ng sinabi mo panglabas kayo kumakain. Kapag may natatanggap lang na extra
Informant:	Opo
INTERVIEWER:	Ma'am kayo po?
Informant:	Nagaalkansya ako
INTERVIEWER:	Ah. Nagaalkansya si ma'am
Informant:	Nagaalkansya kami. Tapos nagiisip nga ako ng pwedeng pagkakitaan extra income. Kasi hindi pwedeng yung sweldo lang talaga. Pag sweldo lang talaga, waley. Kaya nagiisip pa ng pwedeng racket. Yun katulad ng dati yung magluluto tapos ibebenta, kaso nga lang pagising.
INTERVIEWER:	May alkansya, at nagiisip ng extra income. Kayo Ma'am?
Informant:	Ako po siguro ma'am disiplina at control sa sarili, kasi minsan may matitira naman talaga, kasi minsan magbubukas ka na lang magugulat ka. Oy may pang milk tea. Ganyan, ganyan ang buhay ko lagi. Hindi ba obvious? Yun po disiplina.
	Disiplina at control.
	Tsaka diet
INTERVIEWER:	Mostly ba na spend ang money sa food?
Informant:	Kasi po palibhasa kaunti na lang ang natitira, kasi karamihan sa family napupunta. Yung natitira sakin pagkain na lang yung nabibili niyan eh. Kaya kung ano yung gusto kong kainin talagang yun na yung pinaka-comfort ko sa sarili. Pagkain talaga. Skyflakes na lang po siguro.
INTERVIEWER:	Control at discipline. Kayo po Ma'am?
Informant:	Ako meron ding piggybank, yung malaki ang hirap punuin. Kasi pag may dumarating na pera. Pero everyday yun hinulugan ko ng 10

	pesos, 5 pesos. Basta kung ano yung matitira, basta pag may barya ako hinuhulog ko dun any amount. Pero di everyday nahuhulugan, pero usually nahuhulugan. Di ko lang alam kung magkano na kasi ang laki. Yun yung pinaka savings ko, tuwing may barya ako, hinuhulog ko lagi dun. And then sa situation ko ngayon ang hirap, four kasi yung anak ko. Dati dalawa yung college, pero ngayon umalis na yung isa. So yung tatlo, yung college ko puro graduating ngayon, so ang hirap mag save kasi ang daming gastos pag graduating yung anak mo. Saka ayun nga medyo aktibo, ang daming gastusin na biglaan. Mga thesis, projects, costumes nila, hindi mo masasabi kahit na may save ka. Kasi mahuhugot at mahuhugot mo pa rin. Pero meron kaming mga extra income ng aking mga anak. May nagsusupport samin, kasi may rentan kami may housing. Tapos may kapatid din akong nagsusupport samin. Kaya nakaka-survive naman kahit papaano, tsaka ayun nga loan.
INTERVIEWER:	Makaka survive si Ma'am pagkatapos ng mga anak na graduating, ang laking tulong. Okay Ma'am salamat po. Sa pagiging tapat ninyo na pagsagot. Ang huling tanong po natin binanggit dito kasi, do you think that financial literacy seminar, mandated by Sec. Briones. Familiar kayo dun sa mga financial literacy seminar na ginagawa ngayon sa DepEd. Yun po ay binababa sa lahat ng empleyado ng teaching and teaching personnel. Sa tingin ninyo itong seminar na ito ay makakatulong para ma manage niyo po ng mabuti ang inyong finances. Malaking tulong kaya iyon? Sino na yung naka-attend ng mga seminars na financial? Ah si Ma'am pa lang. May ibaba kasi ngayong March na aatendan naming at ibaba yun sa mga SDO at mga schools. Pero kung kayo po ang tatanungin, makakatulong po ba ito para mamanage niyo ang inyong finances. Ma'am?
Informant:	Sana hopefully, makatulong oo lalo na mga kabataan pa, kaya pa i manage. Ikaw Ma'am although alam naming na magaling ka na magsave. Makakatulong ba sayo ito kung ikaw may maseseminar? Siyempre oo naman po, kasi lahat ng additional knowledge magiging beneficial po siya kung gagamitin mo
INTERVIEWER:	Kung maapply, okay tama po. Sir?
Informant:	Makakatulong naman po, pero ang tulong kasi nagsisimula sa sarili natin.
INTERVIEWER:	Ayan tama ano. Kahit di umattend o umattend kung di naman tutulungan ang sarili, balewala din ang seminar.

Informant:	Ganun din po Ma'am, kasi it helps us to educate how to save our expenses. Pero mas maganda nga po yung capacity sa sarili nating tsaka opportunity na mapromote tayo or opportunity na maka-find ng winner pasture. Ayun ay isang malaking bagay yun. Dapat may action.
INTERVIEWER:	Ma'am?
Informant:	Makakatulong siya, in terms sa kahulugan niya. Pero may pero kasi, kung ganito nga lang yung sweldo mo kahit na gusto mo gawin yun medyo mahirap. Kaya dapat talaga may iba kang paghuhugutan para maattain mo yung financial details mo.
INTERVIEWER:	Ma'am yes ma'am?
Informant:	Makakatulong kasi pwede siyang maging guide, and pwede mo rin siyang gamitin as additional knowledge na magagamit mo. Ay hindi, hindi talaga siya makakatulong kasi yung sweldo eh.
INTERVIEWER:	Ma'am?
Informant:	Sakin po nakatulong naman siya kasi naka-attend na ako ng tatlong beses.
INTERVIEWER:	Oo naka-attend si Ma'am. Maari mo bang ibahagi yung pinaka natutunan niyo.
Informant:	Nung una nga naming sa Baguio nga yung sa financial literacy. Medyo mahirap siya kasi more on ano siya eh shares of stocks kaya mahirap i-control. Pero kino-control ko na, kasi nga nakapagpa-graduate na ako ng isa kaya medyo na-lessen na natanggalan na ko ng isang tuition, baon. Nabawasan na. Yun yung ano ko ngayon, start na ng bayad ng mga utang sa gilid.
INTERVIEWER:	Pwede pala yun maibahagi samin yung makapag-save through PAG-IBIG?
Informant:	Actually, meron na tayong mga principal na nag-increase ng membership nila starting this March magsisimula yun. Di ko lang alam kasi na-explain ko na sa principal yun, di ko lang alam kung may nag save nung ginawa sa MPL2 na ginawa ko. Pero alam ko si Ma'am Ben gusto niya, di ko lang alam di ko natatanong sa kanya kung tinuloy niya na mag save.
INTERVIEWER:	Pwede ba kami mag-avail nun Ma'am?

	Pwede po ma'am bigyan ko kayo ng form, si Sir Talon gusto niya yun. Nung last year kasi hindi natuloy yung kay Sir Talon, siya kasi yung unang nag-okay dun sa increase nung membership. Bigyan ko na lang kayo ng form para makasimula kayo. Kasi may interest din kasi yun and yung 500 niyo, pag 600 kasi yung membership share niyo sa isang buwan may isang raffle ticket ka to win 1 million
Informant:	Matagal na ang programang ito?
	Matagal na to, dati na-introduce na to dati, kaso wala masyadong nag-uupdate.
	Yun isa na pala yun sa nabahagi, pwede tayo mag-avail, ito ang isang way para maka-save at may raffle pa siya.
	Saka yung maglo-loan kayo sa PAG-IBIG, yung short term loan, yung MPL. Kapag na-loan mo is worth 16 000 pesos, yung total na net worth mo na malo-loan. Pwede ka ring manalo ng grand prize is 50 000, may 20, may consolation. Umutang ka na sa PAG-IBIG nanalo ka pa. Kung masuwerte ka sa raffle
INTERVIEWER:	Maka-loan na nga.
Informant:	Sige Ma'am, hintayin naming ung application form. May gusto pa ba kayong itanong tungkol sa financial literacy. Yung ating pag-uusap. Meron pa kayong gustong ishare.
	Dati kasi nag-engage ako kaso hindi naging successful. Mag-invest ka sa ganyan buti kung may surplus money ka. Tapos mga ilang years pa, hindi mo control ung market value. Pwede kang maluge, pwede kang mag-profit. Win or lose yun. So mas tingin ko. Mas feasible mas okay, tapos mag-ano tayo sa PAG-IBIG kasi yun naman ang lagi nating ano, sakin lang naman suggestion ko lang naman. Dine-deductan tayo niyan, para sa atin din. Parang GSIS and SSS yan. Kailangan din i-increase yung salary.
INTERVIEWER:	Pwede mong simulan, hindi naman siguro mabigat yung 100 pesos a month.
Informant:	Pero Ma'am yun po yung regular nila per month na inaano sa atin.
INTERVIEWER:	100, edi sir pwede mong dagdagan kahit 100, gawin mong 200. Kasi sa employee share di yun mababago. Yung atin yung personal share lang yun lang yung ide-deduct.
Informant:	So walang ano yung 50% yung company

Informant:	Wala kasi yung 100 yun lang share nung company, yun yung mandatory na 100. So, kung magi-increase ka ng 100 hindi tataas yung employee share. Yun lang yung kaltas sayo, yung sa personal share. Pero mas maganda nga yun mag-start ka sa 100 kung hindi nga kaya ng sweldo mo. Kung ako sa inyo, 100. Hindi na siguro mabigat yung 100 na ipon magkano lang yun sa isang buwan, kung ididi-divide. Yun parang cents, barya lang araw-araw kaysa sa walang puntahan. Atleast yung 100 mo makikita mo malaki na siya at yung isang additional share mong yun, pwede mo yung ma-loan. Kasi diba sa PAG-IBIG pag nag-loan ka 80% nung share mo pwede mo ma-loan. Nagdadagdag yun, kung uutang kayo sure niyo na may pupuntahan.
INTERVIEWER:	Magkano po yung pinaka malaking pwedeng ma-loan?
Informant:	Actually ang pinaka malaki ngayon sa March, depende kasi. Diba meron din tayong dapat di baba sa 5000 yung monthly mo na iuuwi na salary. So, depende sayo pwedeng 1000, merong nag share kasi 5000, dinagdag niya sa kanya kasi malaki naman yung sweldo. Kaya ako nagpa-increse ako ng 500. Yung taas ng sweldo ko yun na yung ikakaltas. Parang di mo rin ramdam, atleast meron kang na-save.
INTERVIEWER:	Regular yan? Kunyari on top or addition sa 100 na dine-deduct nila, ginawa mo 600, may extra 500 ka. Pag biglang may financial inconsistency ka.
Informant:	Pwede mong i-stop yun Or liitan Pwede naman
INTERVIEWER:	Hindi ibig sabihin na consistent dapat, kasi dapat 500 kada buwan hindi required?
Informant:	Pero ang hirap kasi nun every month nagbabago ka. Kasi siyempre gagawa kami ng report nun tapos may mga deadline yun
INTERVIEWER:	So napansin naming na halos lahat kayo di maka-ipon kasi nga mga bread winner, maraming expenses. Pero sa tingin niyo, gaano ba talaga ka-importante na magkaroon tayo ng savings despite the fact na marami tayong expenses?
Informant:	

	Para sa akin importante siya. Ang tawag ko nga po dun is emergency savings. Kasi, kapag for example po, sabihin na natin wala kang savings tapos nagkasakit ka, maglo-loan ka. Pag nag-loan ka may babayaran ka, mababawas pa dun sa sakto lang na ginagastos mo buwan-buwan. Unlike, pag may savings ka, walang loan, wala pang bawas dun sa sakto mong sweldo buwan-buwan tapos makakatuloy ka ulit dun sa savings mo. Tapos kapag medyo malaki na yung savings mo, may time ka na para gumala, magagawa mo na yung additional activity. Kasi kung sisimulan mo siya ng maliit, di mo na mapapansin. Kumbaga parang, isang skip ng meryenda yun na yung savings mo. Yun po
INTERVIEWER:	Sir?
Informant:	Sakin, importante siya kasi you also help your loved ones, kasi you'll never know what will happen in the future, baka may sudden sickness, or yung mga darating pa nagastusin or unexpected na gastusin. Dapat meron tayong madudukot o magagamit. Kasi sa panahon ngayon napakahirap mangutang, kung papautangin ka din agad. Tapos kadalasan may patong pa sa bumbay. Kaya kailangan talagang may savings ka sarili.
INTERVIEWER:	Sige ma'am
Informant:	Sa akin po, sobrang importante talaga, katulad ngayon hindi ka na bumabata, hindi maiwasang hindi magkasakit. Lalo na may nanay akong malapit na sa age na kailangan na talagang makaipon. Hindi naman sa pinaghahanadaan mong magkasakit sila, pero alam mong may mabubunot sa ganung mga pagkakataon. Opo ma'am importante, kasi kung wala kang savings wala kang mapagkukunan. Kayalang yun nga po since sakto lang yung kinikita wala ding maipon. Pero ako kino-consider ko na din na savings yung binibigay ko sa family ko kasi kapag yung pera ko pinapaaral ko naman po sa kapatid ko. Kaya yung sinabi ni Sir Andrew na kung ano yung inilabas ko ngayong pera, alam ko in the future babalik din yun.
INTERVIEWER:	So yun na yung pinaka savings mo, yung pagtulong
Informant:	Sa akin importante, kasi yun na nga apat yung anak. Biglang na emergency yung anak ko, wala akong savings. So kung ano lang yung cash ko on-hand, napunta sa ospital. So kailangan mong humanap ng mapupuno mo sa every day, yung panggamot. Kung wala kang savings talaga ang hirap. Kaya mapipilitan ka talagang umutang kasi napunta lahat sa ospital. Kaya kailangan mo talagang

	mag-save kasi wala naman tayong mga health card. Yung mga savings ng anak ko nung time nay un naglabasan, sila kasi yung nakakasave. Kasi yung mga baon na binibigay ko sa kanila naitatabi nila. Nagbutas sila ng mga alkansya nila para mairaos lang yung isang buwan.
INTERVIEWER:	Sige po. May gusto lang po akong idagdag para sa mga informants. Kasi napuna ko lang na yung mga savings na titukoy ninyo ay yung savings na maidudukot natin in case of emergency po? Pare-pareho po tayo na ng tinutukoy nating funds ay yung pera na dududkutin natin in case of emergency. Sagutin niyo po lahat.
Informant:	Opo
INTERVIEWER:	Or yung may iba pang sagot.
Informant:	Sa akin po hindi lang para sa emergency, pang travel mo din for future Pero ang priority is for emergency
INTERVIEWER:	Kunyari kapag gusto mong mag-down ng kotse or leisure. O kaya pang-travel, pambili ng cellphone.
Informant:	Yes, sir.
INTERVIEWER:	Sa akin maam kailangan ko din magsave other than emergency purpose, gusto ko rin i-pursue yung studies ko po.
Informant:	May tanong ka pa? So wala na po. Nagpapasalamat po kami kasi lahat naman po ay nasagot ninyo base sa inyong mga naging karanasan. So ito na po, ang lahat naman po ng inyong sagot ay confidential. Kami lang po ang nakakaalam at ang buong SDF. Sige po salamat. Mabuhay po tayong lahat.

Appendix B

Plan of Action

Program	Objectives	Strategies & Activities	Person/s Involved	Time Frame	Resources
Financial Literacy Awareness	• Identify factors affecting manage-ment of finances • Discuss the importance of financial literacy • Share personal experiences / practices on managing finances.	• Orientation • Kamustahan • FGD • Workshop	SDO Non-teaching Personnel	April 2019	Projector Computer Training materials Snacks
Financial Literacy Opportunities for Workers of SDO Imus City (FLOWS)	• Identify the gap between the perception on financial literacy and how it is being practiced. • Formulate a policy seeking to limit lending • Provide opportunities leading to investment and additional income generation.	-Formulation of Policy seeking to limit lending -Partnership/ Linkages	SDO Non-teaching personnel	May 2019	Projector Computer Training materials Snacks

Appendix C

Dissemination/Utilization of Results Plan

Dissemination Activities	**Month 1**	**Month 2**	**Month 3**	**Month 4**	**Month 5**	**Month 6**
1. Presentation of the result to all the non-teaching personnel during flag raising ceremony	June 2019					
2. Submission and presentation of paper to Division, Regional and International Levels		July 2019	September 2019			
3. Publication of the paper to I DREAM Research Journal				October 2019		

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