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"Internationalization of Research in Basic Education"

manyuskrip

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The Official DepEd NCR Research Journal

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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 its stakeholders.

DepEd Mission

To protect 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; and
- Family, community, and other stakeholders are actively engaged and share responsibility for developing life-long learners

Core Values

Maka-Diyos

Makakalikasan

Maka-tao

Makabansa

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Editorial Policy

This policy describes guidelines in the publication process of our journals in the Department of Education-National Capital Region (DepEd-NCR). Specifically, Academic Journals adopt and strive to adhere to the following standards and requirements based on the DepEd Orders and Memoranda:

Review is an important aspect of the publication process of a scholarly research paper. It helps the editors in making decisions on an article and also enables the author to improve the manuscript. The research journal in DepEd NCR operates a bureaucratic review process.

First, the research proposal is presented to the School Research Committee (SRC). If approved, the SRC will give a recommendation to continue the proposal. When necessary, the SRC may recommend a coach to monitor and assist the researcher/s until the completion of the a research. The SRC may endorse the proposals for funding and submits it to the Division Office Research Committee (DORC) in the Schools Division Office (SDO). For the accomplished researches submitted in the DORC, the author's identity is removed from the manuscript and shielded from the appointed DORC reviewers during the review process. The reviewer is left without any information that may affect the decision. Information removed includes the author(s) name, address/affiliation, country, phone/fax and email. The same process is done prior to sending it to reviewers. The DORC may use the research assessment tools attached in the DO No. 6, S. 2016 and in DepEd Research Journal 2015 Edition or their own evaluation tool provided, that the researchers were informed by the SDO on how the research will be evaluated and what tools will be used.

The DORC returns the paper if there are corrections (Summary of Corrections signed by the head of the committee). Then, the researcher submits the revised paper to the DORC to check if the necessary corrections were applied based on the summary. If the recommendation was complied with, the DORC endorses it to the DepEd-NCR Research, Innovation and Development Committee (RRIDC)- signed by DORC head and Schools Division Superintendent (SDS).

In the Regional Level, the RRIDC subjects the paper to the final review process by the associate editors using the rubrics. If there are no corrections, this will be submitted to the layout artist. After which, the Editorial Board, together with the RRDIC, decides on the article for publication. The first draft of the printed journal will be quality assured by an external partner. Prior to the printing of the second draft, the Memorandum of Agreement (MOA) will be submitted by the authors to ensure that high ethical considerations were observed. Upon submission of MOA, the author will receive a certificate of publication. Finally, the Research journal is published in print and online for dissemination.

Retraction

The *"manyuskrip"* editorial board has the right to remove a published article from the journal due to post publication discovery of fraudulent claims by the research, plagiarism or serious errors of methodology which escaped detection in the quality assurance process. Any complaints that the Regional Office may receive from a third party, on any grounds, validated by the editorial office results to the retraction, but only after the writer is notified and allowed to present his/her side in compliance with the due process.

Conflict of Interest

The Journal will only publish articles after the author (s) have confirmed through Memorandum of Agreement that they have disclosed all potential conflicts of interest.

Guide for Authors

1. Organize the manuscript following these major headings: Endorsement of SRC/DRC, Title, Author/s, e-mail address, Abstract, Introduction, Methods, Results and Discussion, Conclusions & Recommendations and References.
2. Spell out acronyms in the title and the first time such were mentioned in the article.
3. Spell out numbers from one to ten, except when used in tables and lists, and when used in units of measurement, mathematical and statistical units.
4. Manuscript, in MS Word format, must be submitted electronically to pprd-ncr@gmail.com
5. It should be concise and generally not to exceed is 7,000 words, single-space.
6. All pages , including tables and references, should be serially numbered in Roman numerals, except for subsections.
7. Specifications of the research are: Page size: 8.5" X 11" (letter size), Side margins: Top and bottom 1.75" and right 2.00",Abstract work count is 200-250 words and single-space, there must be at least five key words- discipline of the study, concepts of the study, methods, key performance indicator/ key result area, and data analysis.
8. Introduction section of the research must contain the rationale of the study-trends, issues, gaps statement of the problem, scope and limitations, literature review and theoretical/ conceptual framework.
9. For the Methods section, the research design must be clearly described such as the participant/ respondents, population and sampling, locale of the study, instrument used, data gathering procedures, ethical considerations and data analysis.
10. Conclusions should briefly answer the statement of the problem or the objectives of the study. They are not repetitions of the result and discussions but are the decisions made from the findings of the study.
11. Recommendations must contain the actions that future researchers should take as a result of the study. A well-thought-out set of recommendations that are stated in the rationale or significance of the study section, should be aligned to the benefactor's agenda.
12. Appendices shall include the endorsement letter from Schools Division Superintendent, Principal, Sample research instrument/s, Financial statement and statistical matrix (if there is any),
13. For citing references or literature, use the American Psychological Association Manual (APA) latest edition format.

Director's Message

Warm greetings!

The advent of K-12 is the beginning of internationalization of Basic Education in the Philippines. It was heralded as the latest development in making our learners equipped with the competencies and values necessary towards nation building and global competitiveness. In order to make this a continuous process, teachers must be equipped with the necessary competencies that would enable them to improve professionally and personally for the benefit of the learners.

One of the powerful approaches for continuous professional development is research. The momentum with which different innovations in the Department of Education have swept across the country in general, and the National Capital Region in particular, is extraordinary and merits research consideration. Its prevalence and expansion of research at NCR catalyze the contextualization of K to12 curriculum and brought positive results, specifically in the Key Performance Indicators.

This year, a number of teacher researches were validated and published by external international organizations. It is one of the primary indicators that DepEd Teachers can conduct researches that are acceptable by global standards. With this development, I would like to extend my heartfelt thanks to the Schools Division Superintendents, Principals and Teachers who worked collaboratively with the Regional Office in making research a culture of practice towards policy recommendation and systems improvement. Special thanks goes to our external partners who consistently support and assist our organization such as the Australian Aide through the Basic Education Sector Transformation, (BEST), Commission on Higher Education (CHED), University of the Philippines (UP), Philippine Normal University (PNU) and many more.

In the face of various changes and challenges in the current educational system, sustaining research culture in the National Capital Region may be a dream too far afield. However, the opportunity is that educational leaders and teachers are now more aware of the gigantic impact of conducting research, not only in developing their competencies, of making education in the Department aligned with the globalization standards and ASEAN Qualification Reference Framework.

Again, congratulations for job well done!

PONCIANO A. MENGUITO
Director IV

Chairman's Message

My warmest greetings to all!

Global issues increasingly demand global study and intervention in a collaborative manner. Undertaking research and scholarship allows teachers to produce new knowledge and bring it down to the classroom. That for me is the internationalization of research in Basic Education. A research with a global trademark depends greatly on its application after the study. Findings of research papers must be utilized for continuous improvement and policy recommendation.

One of the priority areas of the Department of Education (DepEd) is to increase the number of teachers and administrators engaged in research. In this issue of manyuskrip, DepEd-National Capital Region researchers have presented their papers in conferences locally and globally. Teachers and administrators support each other to produce quality, relevant and timely researchers.

In the monitoring report of Regional Research, Innovation and Development Committee, research teams in the Division and Schools coordinate with experts and partner institutions and organizations to raise the bar of excellence in traning, developing and utilizing researches. Majority of the papers published in this journal had undergone several peer reviews and validation. Thus, making it global and a powerful tool to respond to the changing trends and demands of basic education.

Let the sharing and the inputs derived from this journal motivate and strengthen us in our commitment and mission to make research a culture of practice that would empower ourselves with reflective thinking skills resulting to improved teaching and learning in the classroom.

Finally, I encourage you to read and be inspired by the exemplary papers produced by teachers, as well as and the research activities of DepEd-NCR.

Maraming Salamat po!

Mabuhay ang Punong Rehiyon ng Pilipinas!

WILFREDO E. CABRAL

Schools Division Superintendent
Officer-in-Charge
Office of the Assistant Regional Director
Chairman, Regional Research, Innovation and Development Committee (RRIDC)

Executive Editor's Message

To all Research Enthusiasts,

"*No one undertakes research with the intention of winning a prize. It is the joy of discovering something no one knew before."*
-Stephen Hawking

DepEd-NCR is very grateful that many of our Schools Divisions have adapted the culture of research, working towards improving themselves, their skills which are essential to life, with the end view of improving learner performance by addressing difficulties; not motivated by the prize at stake or the credit for promotion but driven by the desire to change and improve whatever condition there is in the classroom.

Research itself provides an important long-term perspective on the issues that we face on a day-to-day basis. It means to investigate something you do not know or understand. Hence, on the process you obtain more ideas, you begin to create something new, something different, something better. These research outputs we have compiled and published could serve as basis for future decisions, policies that could help prevent or solve perennial issues and improve classroom teaching-learning process. This will be the prize of your hard work, sacrifice, patience, faith, and endurance. The journey may not have been easy but, it is worth the while. Indeed, people become really quite remarkable when they start thinking that they can do things. Kudos to a job well done!

Finally, always remember that one determined person can make a significant difference, but that a small group of determined people can change the course of history. Hence, collaborate with others for the best resource that teachers could have is each other. *"No one has the monopoly of knowledge,"* so they say.

Enjoy the research journey and feel empowered!

Tayo para sa education!

VICTORIA R. MAYO
Chief, Policy Planning &
Research Division (PPRD)

Outstanding Researches

"LEARNING TOGETHER WITH P2P"

EFFECTIVENESS OF PEER TUTORING TO THE ACADEMIC PERFORMANCE OF BEGINNING- DEVELOPING GRADE 7 LEARNERS IN SOCIAL STUDIES

Maria Katherine Tarrobal Estrella
Teacher I, San Antonio National High School
Schools Division Office- Makati City

ABSTRACT

Recent educational researches show that 21st century learners have different learning styles. Some students can cope easily, while others cannot. Thus, it is the prime duty of the teacher to handle all types of learners with diverse needs. Intervention is an important tool to help the learners cope with the teaching-learning process.

This study is focused on the effects of peer tutoring in the academic performance of the beginning to developing Grade 7 learners in Social Studies in the academic year 2014-2015. It aimed to use the peer tutoring approach as an intervention to help those learners improve their academic performance in class. This study employed a participatory action research wherein the subjects are actively involved in the process. There were 27 participants: 18 of them were tutees while 9 were the tutors. The participants are purposively chosen. The data were analyzed through the use of instruments such as individual activities, journal entries, pen and paper test, checklist and teacher's observation. It was found that the P2P Tutoring provides an innovative approach towards learning, most especially for the students who are at risk of dropping out and/or for those students who do not meet the learning standards vis-à-vis achievement. The intervention created ripples of change on the part of the student-tutees considering their performance based on the assessments conducted, and their reflections. However, it must be noted that absenteeism is a factor that affects the performance of the students. Cooperation and initiative among learners is seen important for the success of the intervention.

Keywords: *peer tutoring, academic performance, Beginning—Developing*

I. INTRODUCTION

In the advent of the new instructional scheme/ presentation in Social Studies under the K-12 Enhanced Basic Education Program (K-12 EBEP), as stipulated in DepEd Order No. 14, s. 2014, there is a need as a Social Studies (Araling Panlipunan) 7 teacher to spearhead and lead an innovative approach in teaching Asian Studies.

One of the factors is the lack of preparation or intellectual maturity among the Grade 7 learners of 7-Masinop and 7-Masipag of San Antonio National High School, a regular school located in the first congressional district of Makati City.

The researcher observed that based on their attitude towards learning, as well as their achievement/ performance level, there is a great need to stress the use of intensive or individualized kind of instruction to further strengthen their intellectual/cognitive capabilities. This is affected due to the large size of classes, in which, way far behind from the ideal *teacher: student* ratio. Likewise, it is also important that the school, through the teacher, can elicit help from the performing students to assist the low-performing students to achieve well in their academic standing in Araling Panlipunan.

As a Social Studies teacher for almost three (3) years, the researcher is concerned with the learning styles of the students, most especially when it is about learning absorption, academic achievement, and management of large classrooms.

Under the K-12 curriculum, the Social Studies has given less opportunity to have face-to-face interaction with the students since it is only three times a week. Therefore, it is a challenged to the teacher to give the learners the necessary

learning opportunities to cater their needs on the given period of time.

From the vantage point of the researcher, it has been observed that, generally, there are three kinds of learners inside the classroom: high-performing students (who are very rare to be found in the sections that the researcher is currently handling); average students; and low-performing students.

There are those students who up to Third Quarter of the school year are still at the beginning level. Because of this situation, it is her duty to provide the Grade 7 young learners, an alternative avenue towards effective learning in Social Studies, most especially the low-performing students. In line with this, there are some externalities and other factors that affect their cognitive capabilities and learning capacities inside and outside the classroom setting.

As mandated by the latest issuances of DepEd-National Capital Region and DepEd-Makati, it is a must for all educators to find all the means and seek all the necessary educative interventions to be able to bring the learners to the passing grade/Mean Percentage Score of 75%.

As one of the intervention, the researcher wants to seek the help of those Proficient and advanced learners to help their peers who are at beginning to developing level to increase their learning performance.

Peer tutoring is when the students help each other to learn. According to Keith Topping and Shirley Hill, "peer tutoring can be defined as "people from similar social groupings who not professional teachers are helping each other to learn and learning themselves by teaching".

In this study, the ones who will be tutoring are the students from proficient to advanced level and the tutees will be from beginning to developing learners.

Therefore, the purpose of this study is to describe the effect of peer-to-peer (P2P) tutoring on student achievement in Social Studies. As a Social Studies teacher, it is a fervent hope that the P2P tutoring will open doors to all types of learners and develop their Social Studies skills towards collaborative learning.

Review of Related Literature

Academic performance of the students is the primary concern of the teachers. Every educational organization and knowledge worker aims to contribute to the development of the learners, most especially to their academic performance. Whether big or small, learners' performance should be intensified towards to their total development as a person.

This action research provides a strong theoretical orientation and foundation on the theory or belief regarding collaborative learning, the grouping, and pairing of students for the purpose of achieving an academic goal. Truly, this has been widely researched and advocated throughout the professional education literature.

According to Firestone (2012), collaborative learning is an educational method where two or more students work together to learn something. It is based on the general premise that groups of students can learn more from each other through sharing and social interaction than they would if they learned on their own.

Theoretically, the collaborative learning concept is based on the idea that diversity of knowledge and experience positively impacts learning outcomes. The collaborative learning method is based in part on Jean Piaget's theory that children learn when they're 'cognitively ready,' and on Lev Vygotsky's Zone Proximal Development theory.

As a public school teacher, the researcher has observed that the students perform well when they are exposed to their friends and peers who will help them to increase their learning capacities, retention, and performance. This theory also explains the clear dynamics on the important role of individualized instruction and collaborative learning on student performance.

It was realized that considering the great importance of this theory, it is important to practice and apply it in real-life classroom situation where it will serve as a litmus test in proving the assumptions of this theoretical orientation.

Peer Tutoring: a social constructivist view of learning

According to Clarkson and Luca (2002, p. 2), the concept of learning through peer tutoring is based on a social constructivist view of learning that emphasizes the role of the students to generate learning where students coach peers through social interaction within their zones of proximal development. Rather than applying a stimulus/ response process, users are actively engaged in making meaning through cognitive accommodation and/or assimilation. Vygotsky argued that learning comes about through social negotiation within a cultural context, with language as the primary enabling tool (as cited in Clarkson and Luca 2002, p. 2). This social constructivist philosophy has been expanded on recently, introducing the notion of cognitive apprenticeships (Brown, Collins, & Duguid, 1989) through which students learn in a

manner similar to traditional apprenticeships. The students access expertise through mentors, whose role is to facilitate rather than teach, and the aim of learning is to solve realistic and practical problems in an authentic setting. For a peer tutor, this setting is a very realistic human setting. Just as in traditional apprenticeships, learners engage in activities 'on-the-job' rather than through the didactic teaching of abstract concepts. The argument is that students are better equipped to approach non-familiar problems and produce solutions that are appropriate to a given culture. Peer tutoring is aligned with these aspects of social constructivist theory by enhancing social negotiation with the student tutor and tutee, where knowledge construction is promoted through communication and dialogue, which is helpful for the tutees.

Effectiveness of Peer Tutoring

There are various researchers wherein they also conducted peer tutoring in their respective learning areas and grade level.

In a case study of peer tutoring program in higher education by Chen Ching and Chan Ching (2009, p. 10), peer tutoring program was successfully implemented for university students at National Formosa University in Taiwan during academic years 2007 to 2009. There were 12 tutors providing peer tutoring service, through a Teaching Excellence Project, at the dormitory learning resources center (LRC). For the past 3 years, the project has been successful; tutors now not only work closely with tutees, but they also assist the LRC instructor during training and activity integrated instruction sessions. Peer tutoring with skilled and experienced instructors is one way to promote extracurricular education services for university students. It is also a method for improving educational effectiveness whereby tutors work together to implement strategies through a systematic process. The results clearly demonstrate that the reciprocal peer tutoring program has been successful in regard to tutors and tutees' achievements, motivation and attitudes. Future plans include the LRC providing campus electronic equipment and resource assistance service in reference areas.

Peer tutoring was also used in Edith Cowan University in Australia in the tertiary level to the students undertaking Publishing on Web as a unit course. Based on the case study of Clarkson and Luca (2002, p. 6), they found that both peer tutors and tutees, as other studies predicted, tended to enjoy the peer tutoring process and were largely supportive. It is difficult to determine if tutor support was based on the "rewards" attached to being a peer tutor (i.e. not having to do the weekly tasks), or a case of being intellectually and interpersonally stimulated by the exercise.

In the Philippine context, there was also a study entitled the Effectiveness of reciprocal peer tutoring (RPT) on the academic performance of students in mathematic. This was conducted by Henson et al (2009, p. 8.). It was found in there study that Reciprocal Peer Tutoring (RPT) intervention was more effective in causing significant increase in student's performance and RPT was a more effective strategy than that of the traditional chalk and board to improve student's performance in College Algebra. Based on the findings and conclusions, the researcher recommended considering the use of RPT as an alternative instructional intervention to improve student's performance in College Algebra and in other courses. Furthermore, it was recommended to modify/strengthen the research to determine whether RPT procedures can be redesigned to make them more meaningful for the learning needs of college students.

Based from the researches presented above both in international or local level, it can be determined that peer tutoring was an effective tool for learning and intervention. It can be noted that the studies were facilitated in higher education wherein they used it in different courses or areas.

In secondary level, there are also researchers that used peer tutoring as an intervention or correlates peer tutoring with students' achievement.

In the study of Novotni (1985) about the intervention effect of the peer tutoring program on the academic achievement and attitude towards math of ninth grade Math I students of Harrisburg High School, the following are major findings of the study: (1) There was a difference in the mean improvement of the peer tutored students versus the non-peer tutored students in the mathematic achievement overall and in one teacher's class, but the mean improvement was non-significant. (2) There was a positive mean improvement in both tutored groups; however, there was a significant difference in the mean improvement of the peer tutored students versus the non-peer tutored students in attitude towards mathematics overall and in one teacher's class.(3) There was a weak, but non-significant, correlation between mathematic achievement and attitude towards mathematics.

Furthermore, there are schools abroad that are already using peer tutoring as part of their program. In the research brief of Nguyen (2013) about peer tutoring as a strategy to promote academic success, she stated that Durham Public Schools (DPS) seeks to improve and expand on an existing peer tutoring program called Caring About The Concepts that Help (CATCH). This brief examines the benefits of peer tutoring based on existing research on peer assisted learning strategies, identifies the best practices for peer tutoring, identifies how CATCH is

currently implementing the best practices of peer tutoring, and provides recommendations based on best practices. Peer tutoring has been extensively researched as an effective strategy to engage students and promote academic success. Caring About The Concepts that Help (CATCH) is a peer tutoring program that currently uses many effective practices found in similar programs. While CATCH already shares common elements with other successful peer tutoring programs, it is essential that any additional schools that plan to implement the CATCH program focus on these key elements. Created in 2010 by middle school language arts teacher and athletic coach Jeff Whitt, CATCH has trained approximately 170 middle school mentors, and matched them with over 114 peers in need of tutoring assistance. Currently, the program is implemented in two Durham middle schools. For the 2012-2013 school year, CATCH has grown to train 75 additional mentors, assisting 54 peers in every subject offered within Carrington and Githens Middle Schools. It has garnered the interest of DPS officials as well as other school systems in North Carolina, and gained local media attention.

On the other hand, St. Elizabeth High School provides a resource for students who need additional help in their fields of study. An active program of Peer Tutoring is in place to supplement education beyond the classroom. Student-to-student peer relationships help overcome learning barriers common in the early high school years.

Both of these schools abroad had find peer tutoring as an approach to help the young ones improve their academic performance.

Research Question

This study aimed to determine the effectiveness of-peer tutoring on academic performance of the beginning to developing Grade 7 learners in Social Studies in academic year 2014-2015. It aimed to answer the question:

1. What is the performance of the students after peer tutoring in the following areas?

2. What is the performance in individual activity recitation/class participation summative assessment/ periodic test?

Scope and Limitations

This study is conducted to the Grade 7 students of San Antonio National High School during the school year 2014-2015. Only two sections were used namely: Grade 7- Masinop and 7-Masipag. The total number of participants is 27. The intervention is piloted from January to March 2015 during the Fourth Quarter of the school year. The study focused on the effects of peer tutoring on the academic performance of the participants.

II. METHODOLOGY

This chapter discusses the methodological tools to be used in the culminating analysis for this study. The remainder of this part includes sampling, data collection, ethical issues and plan for data analysis.

Sampling

The participants in this study include the students of Grade 7- Masinop (10) and Grade 7 Masipag (11). The total number of the students in this two sections are 106. Purposive sampling was employed in this study wherein there are criteria in choosing the participants. The researcher chose the learners that are still at the beginning level (70-74) in the third grading period to help them improve their performance in the fourth grading so that they will be able to pass the subject. From Grade 7- Masipag, there are ten (10) beginning to developing learners. From Grade 7-Masinop, there are eight (8) beginning to developing learners. The total number of participants from both section is 18.

The mentors were also purposively chosen from these two sections–those students who are at Proficient (85-89) to Advanced level (90- above). In section Masipag, there are five (5) mentors. And from Masinop, there are four (4). Each Tutor has two tutees so that it would be easy for them to teach.

Data Collection

During the 4th Quarter of Academic Year 2014-2015, the following instruments were used to analyze the data:

Activity Sheets

Teacher- made individual activities were given to the student tutees to determine their level of understanding after each peer tutoring session. Araling Asyano is the subject of the students. In the fourth quarter, there are four major topics. Five activities were given to each tutee. The types of activities given were usually on the knowledge, process or understanding level. In Activity 1, they were asked to enumerate the countries being colonized and the colonizers. Activity 2 is an enumeration about colonialism while in Activity 3 they were task to write their own reaction about a given topic or issue. And lastly, for activities 4 and 5, they summarize a topic using a matrix. (Please see the appendix for the list of activities)

Journal entries

Journal entries were used for the student mentors and tutees for them to have a reflective response to the process. After each session, both the tutors and tutees write down their reflection and learnings for the day. They were provided with a

notebook. Each students must have a ten entries in their journal since the session is twice a week in five weeks.

Checklist

The teacher provided a checklist for both the tutees and the tutor to get their feedback about the program. For the tutors, they answer a two part checklist. The first part is their assessment to their tutees while the second part is on how the program helped them. While for the tutees, they answer a 10 item question to assess their own learning. And they can also give their own comments and suggestion. (Please refer to the appendix for the checklist)

Paper-and-pen test

Pen and paper test was used to assess the performance of the tutees after they have taught by the student tutor. The teacher provided a summative test after the discussion of each topic in Araling Asyano. There are total of four tests at the end of the grading. The teacher was the one who facilitated the test during class hour. At the end of the grading, the results of the periodical tests of the tutees were also collected for data analysis.

Teacher's observation

Class participation is also a factor in the performance of the students. The teacher observed the tutees during class hours to see their progress. She takes down notes to monitor the students and also make some interviews with them after the class.

Ethical Issues

The parents of the learners were involved in this study since their support is needed to facilitate the learners and guide the progress of their children.

The permission of the parents were ask to allow their children to extend their time during the P2P. Letter of Permission was send to them and fortunately all of them responded positively on the intervention. The proposal was submitted to the school principal and she approved it with some recommendation.

Plan for Data Analysis

The methodology that was utilized here is a qualitative type of study. Generally, the research employed a participatory action research wherein the subjects are actively involved in the process. The data was analyzed through the use of different instruments such as checklist, paper and pen test, journal entries, activity sheets and teacher observation as a supplementary for data validation.

Work plan

The researcher prepared a flexible and a very simple line-up of activities, which will guide the student participants – tutors and tutees for the entire intervention program. Likewise, it is important to note that for every activity, the tutor will initiate immediately the corresponding learning activity which will encourage and test instantly knowledge retention.

The program started in the last week of January 2015 with the orientation of the participants. The teacher explained to them the need to undergo an intervention. The week after this, a letter of permission was send to the parents of the students to seek their approval on the program. Fortunately, all of the parents responded positively on the matter. Some had a one on one meeting with the teacher to clarify some aspects in the intervention. Peer tutoring started on the first week of February. The tutors and the tutees had a session twice a week in the library. The program runs for five weeks with a total of ten meetings. There are two parts of the session. The first part is the lecture on the given topic of the day while the second part is for the answering of the activities. After the whole process, the teacher collected all the data needed including the activities, journal entries and the test papers. On the second week of March, the students answered the checklist. After all the data collected, the data of analysis was started.

Cost of the study

This study cost a little amount since the scope is small in terms of population and the materials needed were printed papers. The researcher photocopied the activity sheets, permission letter and the checklist for the participants. She also provided food in each session of the program. The venue of the peer tutoring is in the school library. Below is the detailed computation of the cost of the study.

Research Activity	Unit	Unit Cost	Total
1.Photocopy of the materials			
a. activity sheets	21 pcs	Php 0.50	Php 10.50
b. Permission Letter	27 pcs	Php 0.50	Php 13.50
c. Checklist	54 pcs	Php 0.50	Php 27.00
2. Food for the participants	27 packs		Php 300.00
			Php 351.00

Action Plan

Data Analysis and Interpretation

This study was conducted for five weeks in two sections of grade 7 using different methods such as activity sheets, students' journal, paper and pen test, checklist, and teacher's observation. Below is the analysis and interpretation of the gathered data.

Activity Sheets

In the 4th quarter, there are four major topics in Araling Asyano. After each lesson, the teacher

gave the students an activity as a reinforcement to see if they really understood the lesson. In this quarter, she gave them five (5) individual activities. The types of activities given were usually on the knowledge and process level. But there is also activity on the understanding level.

In Activity 1, they just enumerate the countries being colonized and the colonizers. In Activity 2 is a recall/enumeration while in Activity 3 they write their own reaction to a certain issue. And for the Activity 4 and 5, they summarize the topic using a matrix.

You can see in Table 1 the summary of scores in the activities of the two sections. The total scores for the activities is 75 points.

In Grade 7 Masinop, 5 out of 8 students were able to complete all the five activities. The reason is that the three remaining students were absent during the time the activity was done.

However, five students got 75 % passing score in the activities since the total score is 75 (75 % of 75 is 37. 5).

On the other hand, it was noticed that the students got low scores in Activity 1 and 5. The reason they got low scores in Activity 1 is that they find it hard to recall the names of the countries.

In Grade 7 Masipag, 6 out of ten students were able to complete all the tasks. Like in the case of Masinop, absenteeism is the problem for some students. The students who got the passing rate of 75% are 4 out of ten while Activities 1, 4 and 5 have lower scores.

To summarize, 9 out of 18 students passed the activities given to them or 50% of the total participants. Comparing the two sections, Masinop has higher passing scores that in Masipag.

Paper and Pen Tests

After the teacher finished discussing the lessons, she gave them tests. The types of tests are multiple choice, matching type, and identification. There are four tests given and the periodic test.

In Grade 7-Masinop, no one got 75 % and above in the tests even in the periodic test. But if the basis is 50 % passing score, five out of eight students did it while in the periodic test, all of them passed.

In Grade 7 Masipag, still no one reached the 75% passing rate both in the quizzes and in the periodic test. But again if I will base it in 50%, four students passed the quizzes and all of them passed the Periodic test.

Students from both section are not that good written tests. Although they passed, they still did not reach the 75% and above passing score. Even if they were reviewed by the tutors, still they did not make it.

Students' Journal

The teacher let the students write their own journal after each session of mentoring. Both the tutees and the tutors did this. In five week of P2P, they have ten (10) meetings. So they should have ten entries in their journal. The purpose of this is for them to reflect their own learnings. Unfortunately, some students were not able to complete their journal entries because they were absent during their meetings.

- *Masaya kanina kasi pinag-aralan naming ang monarkiya* – Requina
- *Masaya ako ngayon dahil tinuruan ako ng classmate ko.* – Chua
- *Nagpapasalamat ako kay ate Ed dahil natuto ako sa araling panlipunan*– Chua
- *I'm so happy to learn this subject* – Dugger
- *Masaya pala pag may nagtuturo sayo at may natutunan ka masaya ako dahil kahit na makulit ako minsan nakiki-*

After their last meeting the teacher collected all their entries. While reading it, most of the students were happy doing the P2P. They were also thankful to their tutors/mentors/peers. Here are some of the entries of the tutees:

- *Masaya rin pala magturo matututo kang magpasensya dahil hindi nila agad nagegets kaya kailangan ko pa ulitin…pero nakikinig naman sila* – Contreras
- *Masaya nung Makita na nag-iimprove si Agullo at si Flora kailangan pagtuunan ng pansin* – Contreras
- *Maayos naman at nakikinig naman sila Alarilla at Martinez* – Lingcallio
- *Masayang masaya ako dahil naturuan ko ang kapwa classmate*

Even the tutors were able to enjoy what they are doing. They feel good every time they teach their classmates especially when they see their improvement in the class.

Some said that they gained additional knowledge from their tutors. There are easy and hard topics for them. Although at first they find it hard to understand the lecture, through repetition, they were able to get it. The tutors also made some remarks to their tutees. Some were happy to see the improvement

- *Marami akong natutunan at pangako hindi na ako aabsent. Salamat sa nagturo sa akin.*- Agullo
- *Noong nagpaliwanag si Ella hindi ko masyadong naintindihan tinanong ako wala ako masagot at sinabi niya ulit at tinanong niya ako ulit at may nasagot na ako.* – Requina
- *Maayos naman ang pagtuturo ni Alexia at naintindihan at naunawaan ko ang sinasabi niya*- Delfin
- *Ang dami kong natutunan kay at Mica kaya ang taas ko sa test*- Ruiz
- *Medyo nahirapan akong makuha yung one party government*- Ruiz

Table No. 1
Summary of Scores Across Five (5) Learning Activities (7-Masinop)

7- Masinop	Act. 1 (10 pts) Unang Yugto ng Kolonyalismo sa Asya	Act. 2 (10 pts) Ikalawang Yugto ng Kolonyalismo sa Asya	Act. 3 (10 pts) Ikalawang Yugto ng Kolonyalismo sa Asya	Act. 4 (20 pts) Pag-usbong ng Nasy-onalismo	Act. 5 (25 pts) Hakbang Tungo sa Paglaya	Total 75 pts
Student A	2		6	18		26
Student B	2	7	6	12	5	32
Student C	3	10	6	10	12	41
Student D	6		7	15	9	37
Student E	4	6	5	15	19	49
Student F	4	10	10	15	17	56
Student G	6	6		3	13	28
Student H	6	8	5	5	12	48

Table No. 2
Summary of Scores Across Five (5) Learning Activities (7-Masipag)

7- Masipag	Act. 1 (10pts) Unang Yugto ng Kolonyalismo sa Asya	Act. 2 (10pts) Ikalawang Yugto ng Kolonyalismo sa Asya	Act. 3 (10pts) Ikalawang Yugto ng Kolonyalismo sa Asya	Act. 4 (20pts) Pag-usbong ng Nasyonalismo	Act. 5(25 pts) Hakbang Tungo sa Paglaya	Total
Student A			7	3	10	20
Student B			5	4		9
Student C	2	4	5	13	10	35
Student D	2	7	7	8	14	38
Student E	1	3	5	7	5	21
Student F	5	3	5	4	17	34
Student G	5	4		14	19	42
Student H	5	6	4	3	10	28
Student I	2	9	10	15	21	57
Student J	8	10		13	19	50

Table No. 3
Summary of Scores Across Four (4) Tests (7-Masinop)

7- Masinop	Test no. 1 (15 pts) Kolonyalismo	Test no. 2 (15 pts) Ikalawang Yugto ng Ko-lonyalismo sa	Test no. 3 (20 pts) Nasyonalismo	Test no. 4 (10 pts) Pag-usbong ng Nasyonalismo	Periodic Test	Total 110 pts
Student A	7	5	15	6	35	68
Student B	10	5	6	4	28	53
Student C	7	6	7	2	35	70
Student D	8	1	9	3	28	49
Student E	6	8	15	6	29	64
Student F	10	6	11	5	30	79
Student G	4	5	6	6	30	51
Student H	7	11	16	5	35	74

Table No. 4
Summary of Scores Across Four (4) Tests (7- Masipag)

7- Masipag	Test no. 1 (15 pts) Kolonyalismo	Test no. 2 (15 pts) Ikalawang Yugto ng Kolonyalismo sa Asya	Test no. 3 (20 pts) Nasyonalismo	Test no. 4 (10 pts) Pag-usbong ng Nasy-onalismo	Periodic Test	Total 110 pts
Student A	9	11	8	5	30	63
Student B	6	7				
Student C	8	3	10	5	30	52
Student D	8	9	10	3	29	
Student E	7	2	11	4	29	56
Student F	10	5	13	7	27	53
Student G						
Student H	8	3	14	4	29	58
Student I	7	7	13	4	30	61
Student J	8	6	10	2	28	54

of their classmate while others believe that their peers are good but only not focused with learning. They also observed that they can easily understand now the lessons and give the right answers to their questions.

- *Napansin ko na si Delfin ay maaaaring makaintindi kung direkta siyang tuturuan. Para kay Camille ang problema ay unfocused at madali siyang madistract.* - Ongpaoco
- *Nasiyahan ako sa pagtuturo ko kay Jenny Trigo. Sa una napansin ko na madali naman siyang maka-catch up pero ang problema ay madali niyang makalimutan. So ang ginagawa ko ay binibigyan ko siya ng mga clue words. Nalaman ko na sadyang tamad lang sila pero konting support sa kanila ay lalabas ang katalinuhan nila*- Garcia
- *Natuto na si Chua at pati si Salidaga, mas madali na nilang maintindihan yung mga lessons*- Samulde
- *Alam na alam na nila ang lesson 23ennsy, hindi ako nahirapan sa pagtuturo* - Banados

All the tutors agreed that their tutees need reinforcement, support and focused.

To summarize, the tutees and the mentors both learned from each other from the process. They learned while having fun. The teacher also noticed that the tutors feel more comfortable when the peers teach them. They can easily express their ideas and they are not shy to answer in front of them.

Checklist

To triangulate the data, a checklist was used for both the tutors and the tutees. For the tutees, the checklist is used to see how the P2P helped them with their performance. And for the tutors, there are two parts of the checklist. The first part is their feedbacks to their tutees while the second if for their own reflection with their performance. And for the tutors, there are two parts of the checklist. The first part is their feedbacks to their tutees while the second if for their own reflection.

Figure 1 shows the evaluation of the tutees to the peer tutoring program. Based on the result of the checklist, peer tutoring helped them to gained confidence in studying, make learning easy and fun, and they were encourage to study more.

On the other hand, based on the assessment of the tutors to their tutees as shown in Figure 2.1, result showed that tutees shows interest in their study, listens to their tutors, do their activities and they also gained confidence.

Even the tutors had learnings after the program. Based on the result shown in Figure 2.2, all of them agreed that they also gained additional knowledge, they were able to guide their classmates and it helped them increase their self-confidence.

Teacher's Observation

The teacher observed the tutees and the tutors during the entire process---during class hour and during their P2P.

Before the P2P, the tutees were not active during recitation. They are just quiet or having conversation with their classmates. But after two meetings with their peers, she can already see the changes in their attitude in class. During class discussion, the teacher always calls the name of the tutees (even if it is only reading of a text or a simple yes or a no question). The purpose is to see if they gained something from their peers and to help them boost their confidence. At first, there is hesitation when they answer a question but after she gave them compliment such as *"wow, sumasagot na ngayon si ganito ah…."* Or '*palakpakan nga natin si….'* You can see the confidence in their faces. Even if the question is easy the teacher makes them feel that they are good. After several weeks, some of are already active in class. In fact sometimes they are advanced in lesson so every time she have a question they are confident that they know the answer. The teacher remembered that when the coordinator observed her during her class in Masipag. She was really impressed one of the tutee and his peers because they keep on answering the questions and it's all correct. The coordinator praised this class for their active involvement.

As their teacher, she can see in the class their improvement not only in recitation but also in doing individual or group activities. She reviewed her class records for the last three grading and noticed that those students (tutees) have always blank space in her record that is why they get low grades. But now, majority of them completed the requirements and they also joined in their group works.

The problem that the teacher had encountered is the absenteeism of some students. Based from the attendance, they seldom attend the P2P that is why there is a little improvement with them and they were not able to complete all the activities and tests. The teachers always communicate with their parents to remind them but still they cannot not avoid being absent.

The teacher believes that big or small, as long as there is improvement with the class, it is already deemed well.

III. FINDINGS

Based on the data analysis and interpretation, the following are the findings of the study on the effects on Peer Tutoring on the academic performance of beginning to developing Grade 7 learners in Social Studies:

- *The tutees finished and submitted all the learning activities due to individualized instruction and intensive intervention approach done to increase their academic performance. However, only half of the tutees was able to get the passing score in the activities*
- *It has been observed that the tutees exhibited great confidence with regards to their classroom participation during formal classes/instruction.*
- *The tutees were able to pass the summative assessments, if the basis is 50 % as the passing score. However, no one reach the 75 % target score.*
- *Both the tutors and the tutees enjoyed the whole process and gained learnings from peer tutoring.*

IV. CONCLUSION

The P2P Tutoring provides an innovative approach towards learning, most especially for the students who are at risk of dropping out and/or for those students who do not meet the learning standards vis-à-vis achievement. The intervention created ripples of change on the part of the student-tutees considering their performance based on the assessment conducted, and their reflections. However, it must be noted that absenteeism is one factor that affects the performance of the students.

This study was undertaken to assist the beginning learners of Grade 7 to improve their academic performance through the help of their peers.

Peer tutoring will help the students increase their knowledge, improve the performance of their examinations and expand their socialization skills. It is relevant in all learning areas namely: English, Math, Filipino, Science, Araling Panlipunan (AP), Values Education, Technology and Livelihood Education (TLE) and Music, Arts, Physical Education and Heath (MAPEH). Peer tutoring can be used as one of the school program for intervention among the students who needs assistance in their study.

Furthermore, there are other ways that peer tutoring can be conducted, it can be within grade level or across grade level; Higher sections to lower sections or within the same group. The researcher should consider the schedule of both the tutors and the tutees.

Figure No. 1 Evaluation of the Tutees to the Peer Tutoring Program

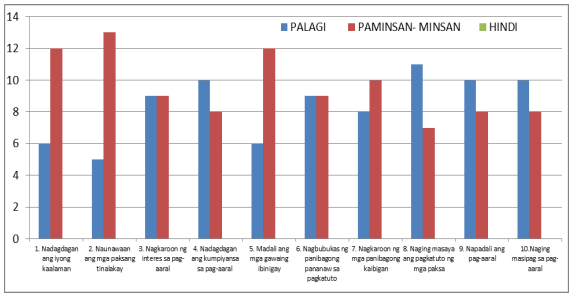
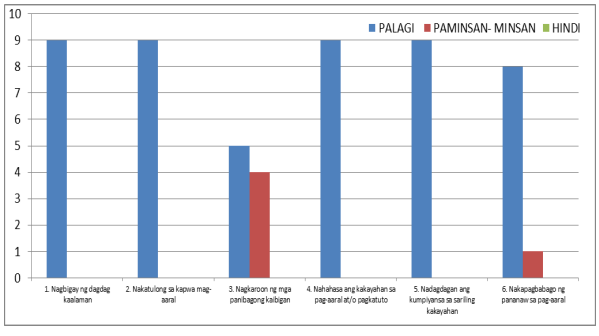


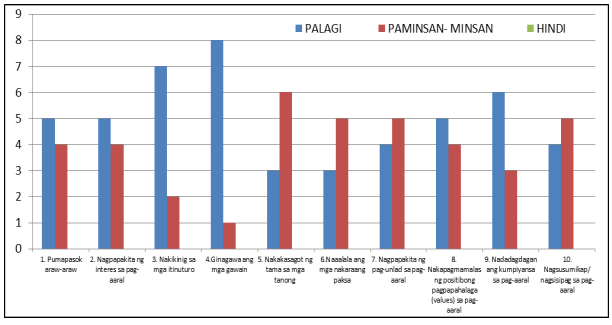
Figure No. 2.2 Evaluation of the Tutors to the Peer Tutoring Program



As a Social Studies teacher, this kind of research should not stop on providing various interventions to make the learning meaningful especially to those who are in need. This study helps to realize that students have different needs and capabilities. P2P is only one of the many interventions

P2P still needs a lot of planning and time to execute it well and to get the desired outcome. This was implemented for one quarter for five weeks. Maybe if it is extended, it would get better results. Furthermore, the cooperation of the learners is really important because they will benefit from this intervention. Even if a teacher provide assistance, if there is lack of initiative to the part of the learner, it would still be difficult to improve the academic performance of these types of learners.

Figure No. 2.1 Evaluation of the Tutors to their Tutees



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TEACHER DEVELOPED INFOTAINMENT (Informative and Entertainment) AND DATABASE QUIZ SOFTWARE

Elisa B. Sta. Maria
Master Teacher I
Tugatog National High School
Schools Division Office– Malabon

ABSTRACT

This study aims to use the teacher developed Infotainment (Informative and Entertainment) Database Quiz software to help in the achievement and critical thinking skills of Grade 9 CHS (Computer Hardware and Servicing) students in TLE. The participants of the study were 50 Grade 9 students, of which 25 students were put in the experimental group and 25 in the control group. The experimental group used the teacher developed Infotainment and Database Quiz Software for two consecutive meetings of 1 hour and 40 minutes. A 30 item quiz on the different types of computers was used to gather data. In the analysis of data, the independent group t-test was used to find out whether the levels of two groups were equal in terms of the achievement test scores. The result of the study reveals that there is a statistically significant increase in the achievement test scores and critical thinking skills of the experimental group that used the teacher developed Infotainment and Database Quiz Software.

Keywords : *drag and drop, database, menu, window*

Introduction

The primary purpose of the teacher developed **Infotainment** (Informative and Entertainment) **and Database Quiz Software** is to provide the students with an

interactive learning environment that promotes interest and learning centered atmosphere where students learn on their own pace through tutorials, drills, exercises, and games provided in the software. It is a standalone application that can be installed and used even without an internet connection.

The Infotainment and Database Quiz Software is a digital and interactive instructional material will provide solution to the existing problems in Tugatog National High School such as:

1. Internet connection is not available
2. Number of instructional materials are not adequate
3. Learner's materials are not provided

Prior to the installation and utilization of the Infotainment and Database Quiz Software, the researcher provided a software evaluation tool for teachers from different departments to evaluate the developed software based on the following criteria; Curriculum Content, Students' Used, Realistic Simulation of Events, Program Operation and Documentation. Out of 25 teacher respondents 13 or 52% found that the software was excellent, 10 or 40% very satisfactory and 2 or 8% satisfactory.

Students' feedback were also gathered in order to determine the effectiveness of the developed software through an assessment form. Out of 25 students who used the software 17 or 68% found it excellent, 5 or 28% very satisfactory and 2 or 4% satisfactory.

Contents of the Program Applied

The study was conducted using the topic, "The Different Types of Computers" with primary objective of making the students familiarize themselves with the appearance and characteristics of the different types of computers and its classification. The infotainment software applied to the experimental group was developed using the Visual Basic 6 programming language for the program coding, Adobe Photoshop for picture editing and MS Access database software for record keeping. The software package contains a tutorial of the above mentioned topic which the students could read and learn from on their own pace. It also contains various activities such as the "Drag and Drop" and a timed "Quiz Game" to test the learning and understanding of the learners.

The "Drag and Drag" activity will reveal pictures of the different types of computer which allows the students to drag each picture on its respective holder. If student dragged the picture in a wrong holder a message box would appear to notify him/her that it was a wrong move and the picture would go back to its original position. It also contains a menu with option to show the correct answer, a short quiz, and an option to end the activity.

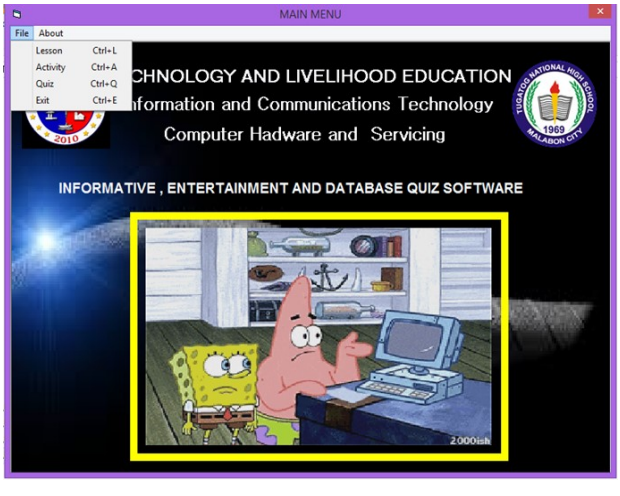
The "Quiz Game" a time bound activity will allow the student to encode the correct answer for each question within 10 seconds. The student is forced to type in an answer on the textbox as a blank text box will not be recognized.

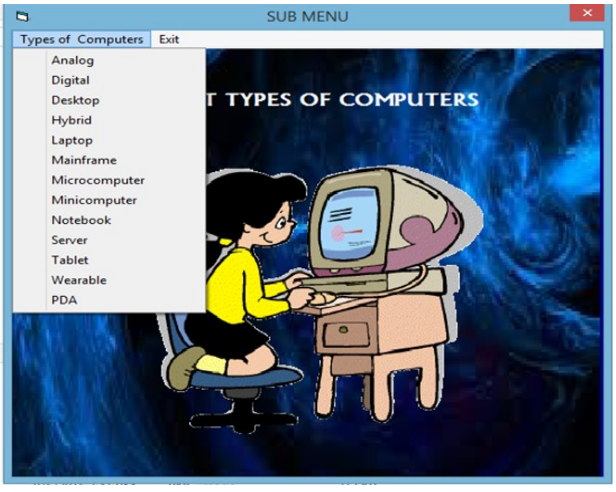
The results of the game, together with student's name, section and score will be recorded and stored in a database named "quiz game". The package contains a 10 item multiple choice quiz in which the students may answer by simply choosing and clicking on the right answer. A message box would appear to notify the student whether he/she got the right or wrong answer for each question. Similarly, student's name, section and total score will be stored and recorded in a database named "students" this time.

Main Screen Window of an Infotainment Software

The main screen window of an Infotainment Software has four menu options namely, **Lesson, Activity, Quiz and Exit**. The **Lesson** option contains the title of the different topics and an option to exit the application and the **About** describes the content of the Infotainment Software.

A window as shown below appears after clicking the lesson option from the main menu. Student can select topic to read and analyze.

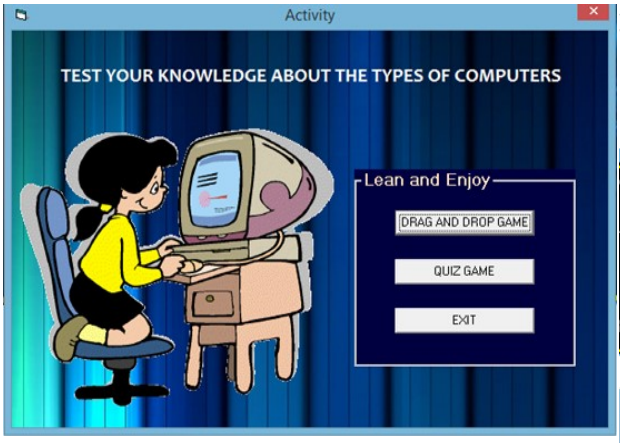


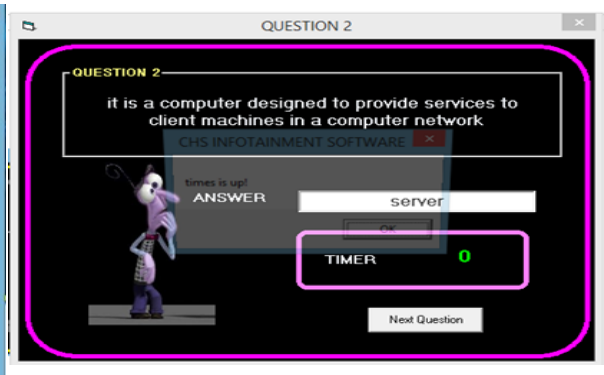


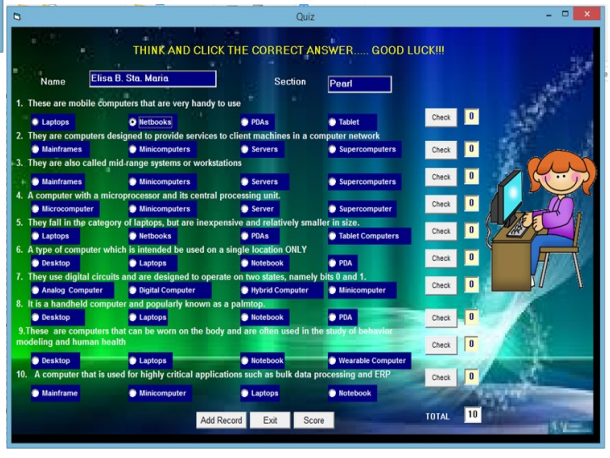
Sample window after clicking the Activity from the menu option of the main window.

Windows with the menu open from the "Drag and Drop" Activity of the Activity option.

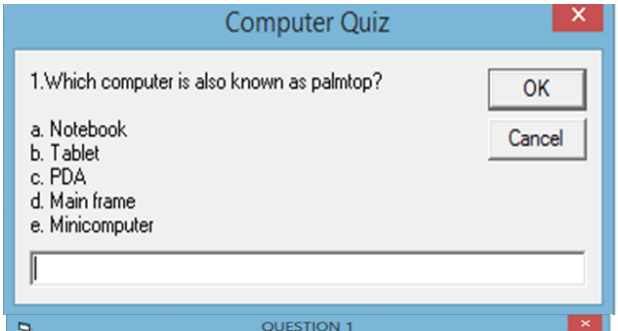
Computer quiz window from the drag and drop activity is shown below. The students are required to enter the correct answer before he/she can proceed on the next question.

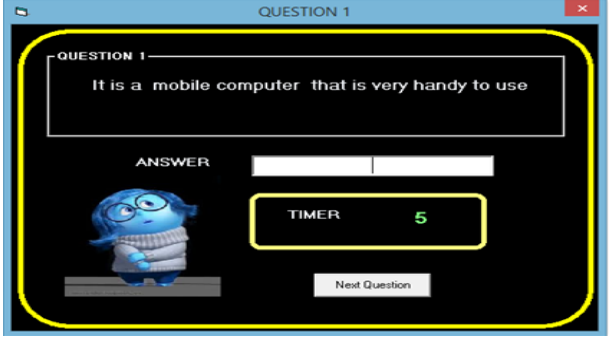






Sample windows from the Timed Quiz Game
The Database Quiz Window





Literature Review

The rapid development of the Information and communication technology and the use of computers in education have become evident. Technology integration in education provides the students with a more suitable learning environment, serves to create interest and a learning-centered atmosphere; and helps increase students' motivation. The use of technology in this way plays an important role in the teaching and learning process (Isman, Baytekin, Balkan, Horzum & Kiyici, 2002).

Owing to the educational technology, the teaching and learning activities become enjoyable. Students learn willingly, by playing and enjoying during these activities (Isman, 2005).

The use of computer technology enables learners to be active in the learning process, to construct knowledge, to develop problem solving skills and to discover alternative solutions (Ozmen, 2008)

Current research has indicated that ICT assists in transforming a teaching environment into a learner-centered one (Castro Sánchez and Alemán 2011).

Computer games play in creating informal knowledge, which creates better traction for school-based knowledge to take hold in memory. Arena, D.A. (2012).

Statement of the Problem

This study primarily aims to examine the effectiveness of the teacher developed Infotainment (Informative and Entertainment) Database Quiz software to help improve the achievement of Grade 9 CHS (Computer Hardware and Servicing) students in TLE. It sought to answer the following questions:

1. What are the pre-test and post-test scores of the students in the control group using the traditional method?
2. What are the pre-test and post- test scores of the students in the experimental group using the Informative Software for teaching?
3. Is there any significant difference between the mean scores of the control group taught using the traditional method and the experimental group taught using the developed Infotainment Software?

Hypothesis

Null Hypothesis

This study tested the following null hypothesis at 0.05 level of significance:

1. There is no significant difference between the mean scores of the control group taught using the traditional method and the experimental group taught using the developed Infotainment Software.

Scope and Delimitations of the Study

This study is limited on specific topic of The Different Types of Computers and Understanding Computer Systems of the TLE ICT CHS subject for Grade 9 students. A compatibility issue between the teacher developed Infotainment Software and the 2010 version of MS Access software was a paramount consideration.

The comparison between the traditional and the experimental method was based on the differences in the pre-test and post-test mean scores of the control group taught through the traditional method and the experimental group taught through the use of Infotainment Software for teaching

The participants of the study were composed of Grade 9 students enrolled at Tugatog National High School in the Schools Division Office, Malabon for school year 2015 – 2016.

Two sections with students who have almost the same rating were selected to compose the control group and experimental group in this study. The control group was taught using the traditional method while the experimental group was taught using the developed Infotainment Software.

Methodology

Research Design

The Quasi-Experimental design was used in the study particularly the pretest-posttest experimental group was used to examine any possible treatment effects on the academic performance of the Grade 9 students after an exposure to the Infotainment Software.

The experimental design used in this study is shown as follows:

where the variables are :

O_1-pre-test given to the control group
O_2 -post-test given to the control group
O_3-pre-test given to the experimental group
O_4-post-test given to the experimental group
X1-treatment used in the control group (conventional/ traditional method)
X2-treatment used in the experimental group (Infotainment Software)
A-control Group
B-experimental Group

	Pre-test	Treatment	Post-test
A	O_1	X1	O_2
B	O_3	X2	O_4

The researcher compared the difference between the academic performance of two groups of students through the pre-test and post-test results as the basis of assessing the effectiveness of the Infotainment Software in teaching Grade 9 CHS (Computer Hardware and Servicing) students in TLE. The gathered data were classified, encoded, and summarized. All data were organized from the perspective of the research questions and hypotheses. Meanwhile data conformity and validity were verified and cross-checked to determine accuracy.

A pre-test in The Different Types of Computers was given to the two groups of students . Then an intervention; the use of Infotainment Software tool, was applied to the experimental group. After which a posttest was administered to experimental group.

Participants

The participants of the study were 50 Grade 9 students in Tugatog National High School. Those 50 students were divided into two

groups; 25 students were subjected in the experimental group and the other 25 students in the control group. The researcher made use of the student's profile in order to control other factors that may have affected the results of the treatments such as age, average grade in Mathematics, Science, English and TLE. Students with almost the same age and average were selected. In addition, 14 male and 11 female students were assigned equally between two groups to avoid the effects of gender variability.

Data Collection Instrument

A 30 item pretest and posttest was designed and used as a data collection instrument. The questions were derived from the learning module designed for the CHS Grade 9 students within the same topic

Statistical Tests

1. **Level of Academic Performance of the Two Groups of Students in TLE on their Pre-test Scores**

   The graph of the pretest scores and the t-test results of the pre-test related to the achievement of the experimental and control groups are given below. The researcher tested the null hypothesis (H_0) mean of pre -test scores of the experimental group equals mean of the pre-test scores of the control group. Since the t value 0.172 is less than the critical value 2.011 the null hypothesis is accepted. There is no significant difference between the means of the pre-test scores of the two groups before the experiment took place. It can be assumed that the levels of achievement and critical thinking skills of the control and experimental groups were equal before the experiment began.

2. **Level of Academic Performance of the Two Groups of Students in TLE on their Post-test Scores**

   The graph of the post-test results and the t-test results of the post-test mean scores related to the achievement of the control and experimental groups are given below. The researcher tested the null hypothesis(H_0) mean of the post test scores of the experimental group equals mean of the post test scores of the control group. Since the t value of 4.21 is greater than the critical value of 2.011 the null hypothesis is rejected. There is a significant difference between the mean of the post-test scores of the experimental and control groups after the experiment took place.

3. **Significance of Difference in Pre-Test Scores and Post-Test Scores of Students in TLE**

   The graph of the pre-test and post-test results as well as the table for the t - test results of the pre-test and post-test related to the achievements and critical thinking skills of the experimental group are given below. The researcher tested the null hypothesis (H_0) mean of the pre-test scores equals mean of the post-test scores of the experimental group.

   Since the t value 6.51 is greater than the critical value 2.011 the null hypothesis is rejected. There is a significant difference between the mean of the pre-test scores and the mean of the post- test scores of the experimental group after the experiment took place.

Discussion

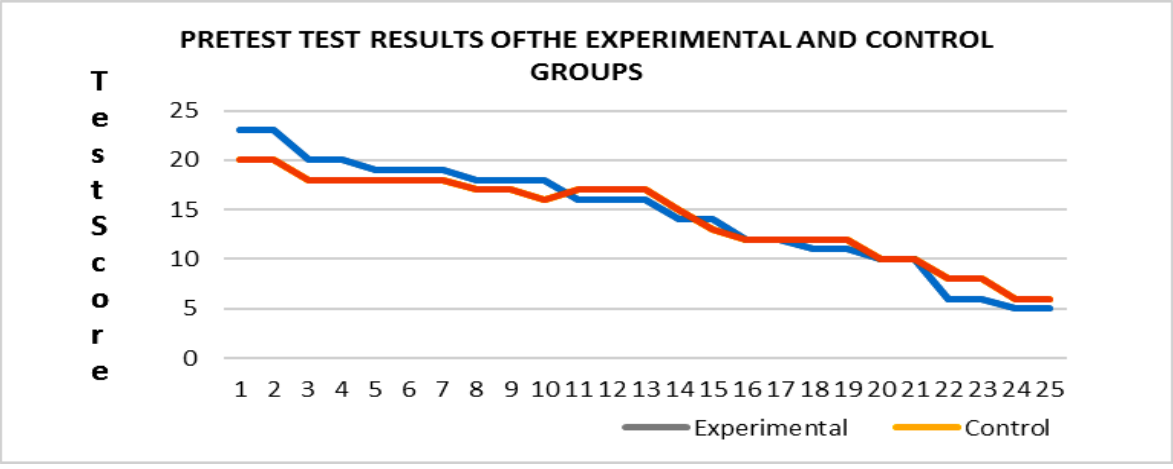
The fundamental aim of this study was to use the teacher developed standalone infotainment and Database Quiz software that would help to increase the learning capability of the Grade 9 CHS Students in TLE. To this end, the scores obtained from the achievement test given to the experimental and control groups were compared.

It was found out that the use of Infotainment software greatly increased the

Measurement	Groups	N	ẋ	df	t value	Critical value
Quiz	Experimental	25	14.44	48	0.172	2.011
	Control	25	14.20			

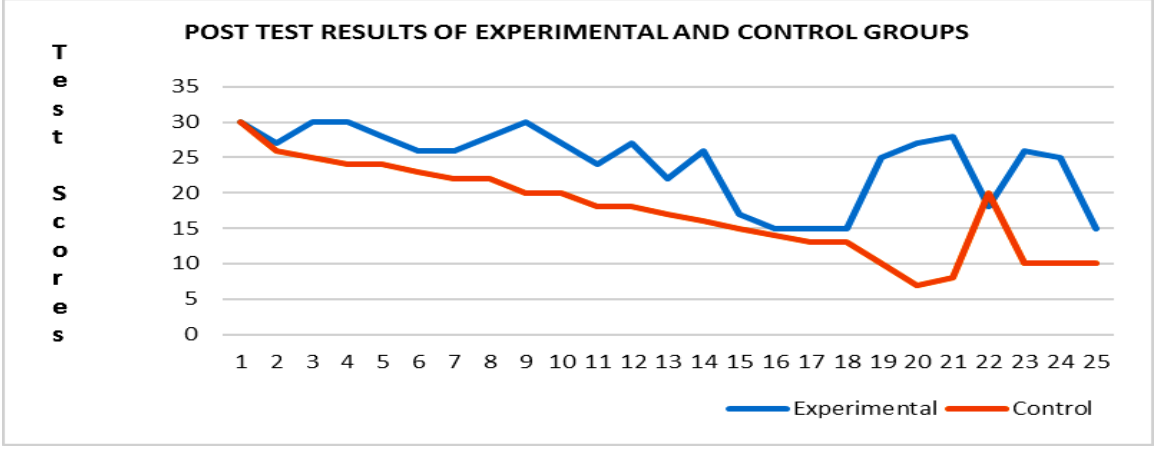
The t-test results of the pre-test scores of the control and the experimental groups before the experiment

Graph of the Average Grade of the Pre-test Test Results of the Experimental and Control Groups



The t-test Results of the Post-Test mean scores of the Control and Experimental groups

Measurement	Groups	N	ẋ	df	t value	Critical value
Quiz	Experimental	25	24.28	48	4,21	2.011
	Control	25	17.40			



learning capability of the grade 9 CHS students in TLE. The presentation of topics by means of rich visual materials and interactive activities increased the achievement test scores of the students.

Conclusion

Based on the significant findings of the study, the following conclusions were reached:

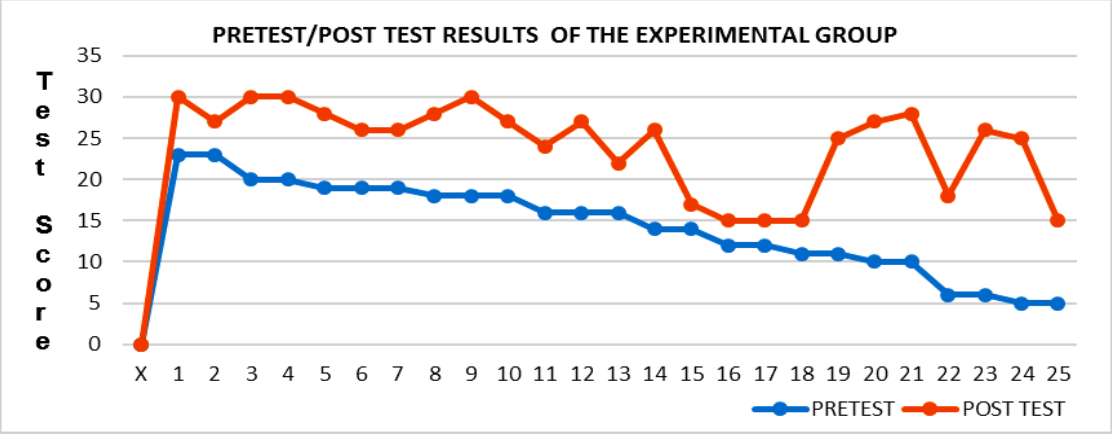
1. The academic performances of the experimental and control groups in the pre-test are average. It can be assumed that the levels of achievement of the control and experimental groups were equivalent before the experiment began.

2. After the use of the teacher developed infotainment and Database Quiz software the experimental group appears to be more highly motivated to learn TLE than before the use of the new approach as resulted to high academic performance of the students based on their post-test scores.

3. The results of the research indicates that the use of the teacher developed infotainment software as a learning

The t-test Results of the Pre-test and Post-test Mean Scores of the Experimental Group

Measurements	Mean (ẋ)		df	t value	Critical Value
Quiz	Pre-test	14.44	48	6.51	2.011
	Post test	24.28			



package assist the students in increasing their achievement test scores.

Recommendation

In the light of the significant findings and conclusions of this study, the following recommendations are hereby offered:

1. The teacher developed infotainment software used in the study can also be used as a learning package in other areas. The teachers will have to go through short training on basic programming and simple photo editing to change the contents of the software suited to their subjects.

2. Prior to the use of infotainment and Database Quiz software, the experimental and control groups exhibit high levels of academic performance. After the treatments of the new approach, the experimental group appear to be more highly motivated to learn and with better performance than the students on the control group.

3. The finding implies that infotainment software is an effective learning package in significantly enhancing the academic performance of students on the experimental group. On the other hand, the traditional approach has no significant effect on the level of academic performance of students.

4. The Department of Education should allocate appropriate budget for the acquisition of state-of-the-art multimedia facilities and technologies to improve classroom teaching. Schools can also solicit the help of private organizations for funding the acquisition of new technology facilities and equipment.

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EFFECTIVENESS OF REMEDIAL READING CLASSES USING SPECIAL METHODS TO NON-READERS IN FILIPINO OF GRADE ONE PUPILS OF GENERAL MAXIMINO HIZON ELEMENTARY SCHOOL

Lea B. Galvez
Catherine A. Sevilla
Fortunata V. Murcillo
Jonna A. Quillopas
Jenalyn L. Ocasla
School Research Committee
General Maximino Hizon Elementary School
Schools Division Office– Manila

ABSTRACT

Reading is one of the vital facets of learning. It is indeed true that a vast portion of our everyday life is dedicated to reading, formally and informally. The Department of Education through its memorandum 244 Series of 2012 has declared November as National Reading Month of every year and November 25 as the "Nationwide Araw ng Pagbasa." This is in support of the Ten-Point Basic Agenda of the Aquino administration and institutionalization of the "Every Child a Reader" program (ECARP) of the Department of Education (DepEd). The memorandum has initiated the Pull-out Remedial Class/Reading Assistance Program/ Remediation Classes that intensifies reading to children in the frustration level. This is done with their respective class advisers.

General Maximino Hizon Elementary School has been committed to make every pupil a reader in Filipino by the end of their first grade. The class programs since then have devoted specific time for remedial reading for the grade 1 classes. Along with the strategic introduction of Mother Tongue, Filipino and English subjects in each grading period has reinforced the reading literacy. The study aimed to analyze how the use of special methods in remedial reading have contributed in making our pupils readers before the end of their first grade in zeroing non-readers in grade one.

Keywords: phonemic awareness, special methods in remedial reading, non-readers, mother-tongue, reading literacy.

I. INTRODUCTION

The ability to read is vital to functioning effectively in a literate society. Many children come to school with sense of importance of reading in their lives. Learning to read takes effort, and children who fail to see their value of reading in their personal activities will be less likely to exert effort than those who do see the benefits (Roe & Smith, 2012).

Rationale of the Study

Among the important skills man can acquire is his ability to read. It would be difficult in our everyday life if we are unable to read. Whether at home, in school, at work and even in leisure activities, reading is essential. In almost all situations, reading is indeed necessary avenue to communication.

The Department of Education's drive to its literacy program alongside with the commencement of the K-12 Curriculum has reinforced reading through various programs. The Remedial Reading Classes which were also included in the class program has strategically been consumed to initiate reading intervention to non-readers. A diagnostic reading test was conducted in June to identify the non-readers for each sections/classes. Once identified, they consolidate the report and submit it to their Master

Teachers of the grade level and to the Master Teacher in Filipino. Each classroom teacher then would design and implement their own intervention and strategies used in their respective remedial classes. Grade one classroom teachers may benefit in the findings of this study knowing that the reading difficulties of children in the first grade is common among public school pupils. They will be able to design and implement a remedial reading readiness program anchored by the special methods in remedial reading as their strategies and activities to improve the pupils' reading proficiency.

Issues

The grade one class program comprises of 270-minutes classroom hours. Filipino subject is being introduced on the second grading period and English is introduced on the third grading. This allows the teacher-in-charge for a 70-minute period devoted for remedial reading classes in first grading and 40 minutes in second grading.

Grade one pupils are not likely to read at the start of the school year. Since the kick-off of the K-12 curriculum in 2011, and kindergarten has been compulsory for all 5-year old children by October, the Kindergarten curriculum is devoted for the readiness of the pupils to the grade one level which is assessed through SREYA (School Readiness Year Assessment tool) that is conducted in February. The Kinder pupils are expected to be well-versed in vocabulary by the end of their Kindergarten. This according to the study will make them more equipped in reading readiness. Some kindergarten pupils were able to identify phonics and alphabet and are able to syllabicate at this level. To those who have not, or may have had difficulty, these will then be assessed in the grade one level in June. It is only then that the teachers will design an appropriate remedial reading program for their pupils.

Scope and Limitations

1. The study focused on the grade one pupils of General Maximino Hizon Elementary School for the school year 2015-2016. All the pupils in grade one have gone through remedial reading regardless of their assessment within their class hours every day with their classroom teacher (CT) as follows: first grading period, 70 minutes; second grading period, 40 minutes; third and fourth grading period, 10 minutes.
2. Reading in the context of the grade one teachers in assessment is a child who is able to recognize phonics and associate it with the letter, is able to read words, phrases and sentences. Comprehension is not a component in reading in grade one.
3. The reading assessment pre-test was conducted in June and a post-test in March. In between, there was an assessment conducted to check on pupils' improvements in reading.
4. The classroom teachers are all self-contained. The remedial classes are within the class program implemented as follows: 70 minutes in first grading, 40 minutes in second grading and 10 minutes in third and fourth grading.

Literature Review

One task that teacher face is to help students see the importance of acquiring reading abilities for performing everyday tasks. Teachers have long made reading instruction a priority in the curriculum most especially in the primary grades.

To accomplish this task effectively, teachers need to know something about the reading act. Some useful principles of reading instruction, and some of the theories on which instructional practices in reading are based (Roe & Smith, 2012).

In a study for a Master's Thesis in De La Salle University, a sound remedial reading program is focused on the reading difficulties of the target clientele. Aware of this basic principle in remedial instruction, the reading difficulties of the non-readers of grade one pupils in Padre Burgos Elementary School. The study focused on diagnosis and utilization of owned constructed informal reading inventory. This is a two-part program namely recognizing vowels and consonants in the upper and lower case, blends and three-letter words and reading and comprehension test which included noting details, getting the main idea, and predicting outcomes. The study revealed that the pupils' strengths lie in their ability to identify vowels in the upper case while their weakness were identifying letters in the lower case, recognizing blends, three-letter words, as well as comprehension of what is read. A reading program was proposed to address such weaknesses in facilitating the implementation of their remedial program (Sung, Pi-Chun, 2005).

The National Reading Panel (2000) recommends systematic, explicit instruction for children at risk and struggling. Two early intervention programs that are based on the premise of intervention and explicit instruction are Reading Recovery and Success for All. Reading Recovery, was developed in New Zealand by Marie Clay, is a temporary intervention program intended for first graders who are at risk of early reading failure (Clay, 1979). A specialist works daily with each child for thirty minutes usually for a period of twelve to twenty weeks, until the child has developed effective strategies for independent reading. Research evidence indicates that Reading Recovery has been successful as an early intervention program.

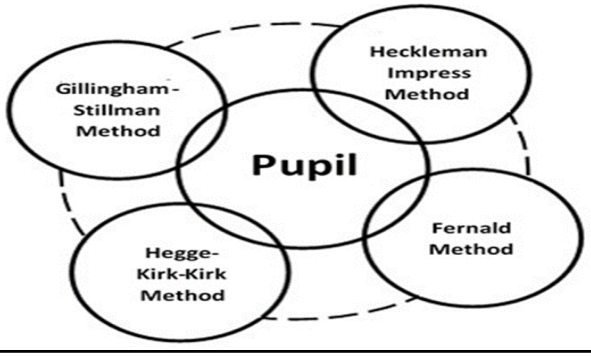
Teacher Education and Reading Instruction

The analysis of reading and reading instruction involves four interacting factors: students, tasks, materials and teachers. It has often been a case that research has not focused on teachers, emphasizing only students, materials and tasks. A problem that needs to be addressed in teacher education research is the precise nature of the interventions. In the literature, the NRP analyzed, there is a mix of techniques, methods, theories and materials that are often confounded with each other in the instructional contexts. Some of the instructional methods focus on teacher attitudes while other focus on the use of specific materials. The many theoretical formulations, empirical findings and practical concerns suggest how important teacher education is in teaching reading (National Reading Panel (NRP), 2000).

Statement of the Problem

Over the years, educators have disagreed about how beginning reading should be taught. Some have advocated starting with systematic phonics approach while others have argued for a whole word approach or a whole language approach. How reading is taught and are there specific method that works best in helping non-readers to cope up in reading literacy. Based on the review of related literature, the researchers sought to answer the following questions:

1. Is remedial reading beneficial to the pupils who are non-readers?
2. What are the methods used and implemented by the classroom teachers in their remedial reading?
3. Is there a significant difference in the result of the pre-test and post-test after the remedial reading classes were implemented?
4. What are the recommended methods that can be beneficial in effective reading instruction in remedial reading classes?



Theoretical and Conceptual Framework

Special Methods of Remedial Reading

Bader (1990) cited special methods formulated for students experiencing great difficulties in reading. These according to him have been effective for pupils who have failed in other techniques.

Fernald Method

This method emphasizes tracing and language experience sequences. Visual, auditory, kinesthetic, and tactile (VAKT) senses are employed in the learning process. This is termed as analytical method in that whole words are studied from the beginning of instruction in contrast to synthetic method that begins with letter sounds and word parts. Sound-symbol associations are acquired inductively. Words are pronounced by syllables rather than letter-by-letter. This method consists of four stages such as the following:

Stage 1. In stage 1, the student selects the word he wishes to learn. The words are written for the student by the teacher with a crayon on large script or manuscript. As the student watches and listens, the teacher pronounces the word as she writes it. The word is pronounced slowly, by syllables without distortion. Next, the teacher demonstrates tracing, with one or two fingers and pronunciation by syllables. This is done, so that the voice and finger begin each syllable concurrently. Now the student traces the word, using the technique of the teacher. He does this several times. When the student indicates he is ready, he writes the word without the copy, pronouncing the word allowed to himself while writing. If the student can do it correctly, he writes

the word in context, that is, a sentence or a paragraph. This is typed for him within twenty-four hours and he reads his story in print. After his story is finished, the student files his words alphabetically. These words are reviewed periodically and the student refers to them to check his work from time to time

Stage 2. The stage 2 is the same stage as stage 1 except that tracing is no longer required to learn a word. The student looks at the word he has requested his teacher to write for him and says it over to himself while looking at it. When the student feels ready, he writes the word without copying, saying each part as he writes. The student continues to do a great deal of writing with his production quickly typed so that he can read in print.

Stage 3. In stage 3, the student learns new words directly from the printed word without having the word written for him. He begins to read books in addition to his own writing. Words he does not know are pronounced for him on request and underlined. The student studies the words by saying and writing them as in stage 2. These words are added to his file and reviewed periodically.

Stage 4. In stage 4, the student begins to generalize new words from the words he knows. He is encouraged to read as much fiction and non-fiction as he wishes on subjects of his own choosing. To help him read more easily, the student is encouraged to look over materials to find words he doesn't know. The student is helped with the pronunciation and/or meaning of these before reading. Retention of new words is aided by the students' repetition of the word as he/she looks at it and writing the word on a scratch paper.

Gillingham-Stillman Method

This is a highly structured approach to phonetic associations that use visual, auditory, and kinesthetic (V-A-K) techniques. This method has been described as synthetic in that they begin with sounds and build them into words rather than beginning with words and analyzing than analyzing their sounds as in analytic approach. The visual forms and sounds that are most regular are introduced first. Care is taken, too that potentially confusing elements such as *b* and *d* are not introduced together. The method emphasizes language regularity. The sequence of V-A-K associations has been carefully planned as the content. The associations are presented from the letter name

COMPARISON OF PRE-TEST AND POST TEST Hindi Nakakabasa (non-readers)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROLMENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	0	0	0	0
ZAMORA	45	10	22.22	0	0
RIZAL	38	23	60.53	0	0
MABINI	45	5	11.11	0	0
JACINTO	46	42	91.30	0	0
PLARIDEL	47	4	8.51	0	0
BURGOS	43	3	6.98	0	0
AQUINO	45	5	11.11	0	0

COMPARISON OF PRE-TEST AND POST TEST Tunog (phonics)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROLMENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	2	4.08	0	0
ZAMORA	45	0	0	0	0
RIZAL	38	0	0	0	0
MABINI	45	15	33.33	2	4.44
JACINTO	46	4	8.70	0	0
PLARIDEL	47	4	8.51	0	0
BURGOS	43	0	0	0	0
AQUINO	45	6	13.33	0	0

COMPARISON OF PRE-TEST AND POST TEST Alphabetic (letra)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROLMENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	0	0	0	0
ZAMORA	45	0	0	0	0
RIZAL	38	0	0	0	0
MABINI	45	0	0	0	0
JACINTO	46	0	0	0	0
PLARIDEL	47	1	2.13	0	0
BURGOS	43	6	13.95	0	0
AQUINO	45	3	6.66	0	0

COMPARISON OF PRE-TEST AND POST TEST Syllable (nakakapantig)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROL-MENT	NO. OF PUPILS	%	# OF PUPILS	%
HIZON	49	9	18.37	0	0
ZAMORA	45	12	22.67	0	0
RIZAL	38	15	39.47	4	10.53
MABINI	45	4	8.89	7	15.56
JACINTO	46	0	0	1	2.17
PLARIDEL	47	29	61.70	6	12.77
BURGOS	43	12	27.91	1	2.33
AQUINO	45	17	37.78	0	0

COMPARISON OF PRE-TEST AND POST TEST Word (salita)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROL-MENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	21	42.86	0	0
ZAMORA	45	5	11.11	0	0
RIZAL	38	0	0	4	10.53
MABINI	45	3	6.67	0	0
JACINTO	46	0	0	12	26.09
PLARIDEL	47	6	12.77	10	21.28
BURGOS	43	12	27.91	1	2.33
AQUINO	45	6	13.33	0	0

COMPARISON OF PRE-TEST AND POST TEST Phrase (parirala)

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROL-MENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	17	37.78	0	0
ZAMORA	45	15	33.33	7	15.56
RIZAL	38	0	0	6	15.79
MABINI	45	6	13.33	6	13.33
JACINTO	46	0	0	7	15.22
PLARIDEL	47	3	6.38	6	12.77
BURGOS	43	10	23.25	8	18.60
AQUINO	45	8	17.78	6	13.33

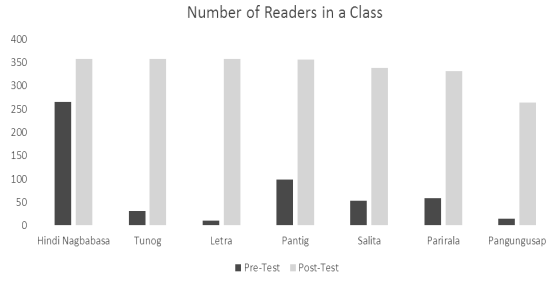
COMPARISON OF PRE-TEST AND POST TEST Sentence

	Pre-Test June 2015		Post-Test March 2016	
SECTION	ENROL-MENT	NO. OF PUPILS	%	NO. OF PUPILS	%
HIZON	49	0	0	49	100
ZAMORA	45	3	6.67	38	84.44
RIZAL	38	0	0	24	63.16
MABINI	45	12	26.67	30	6.67
JACINTO	46	0	0	26	56.52
PLARIDEL	47	0	0	25	53.19
BURGOS	43	0	0	33	76.74
AQUINO	45	0	0	39	86.67

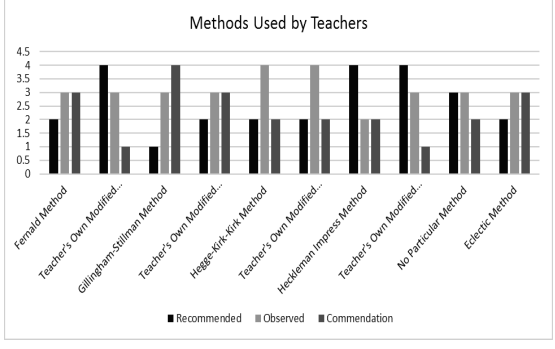
	Pre-Test	Post-Test	% Increase
Hindi Nagbaba-sa	266	358	34.59
Tunog	31	358	1054.84
Letra	10	358	3480.00
Pantig	98	356	263.27
Salita	53	339	539.62
Parirala	59	331	461.02
Pangungusap	15	264	1660.00

to its symbol and from the symbol to its sound following the V-A-K association.

1. Is remedial reading beneficial to the pupils who are



2. What are the methods used and implemented by the classroom teachers in their remedial read-



3. Is there a significant difference in the result of the pre-test and post-test after the remedial read-

Hegge-Kirk-Kirk Method

The Hegge-Kirk-Kirk method is described as remedial reading drills. This method too maybe described as a synthetic approach because instruction begins with drills or isolated letter symbols. However, in later instruction words are pronounced for the student who analyzes the sounds in order to write the words he or she hears. The method requires the student to sound each word letter-by-letter, blend sounds together, say the word, then write the word, pronouncing each as he/she writes. Letter names are not emphasized. This method has four parts:

Part I. The first drill consists of the three-letter words containing a drill *o* as in hot, pot and fog.

Part II. Drills in the second part may contain combinations of sounds.
as _ink, -_and, _-ill, _-est

Part III. Drills contain advanced sounds such as
-_aw, -_ow, -_ly, _gee, -ought, and _tion

Part IV. Drills contain exceptions to previously taught configurations such as
kn_, gn_, ph_, and _ould

This is then followed by sentence reading and story reading.

Heckleman Impress Method

This neurological impress technique is a system of unison reading. It differs from other remedial approaches in that emphasis is on hearing and pronouncing words in context rather than attending to letter-sound correspondences to words in isolation. The method consists of selecting the material that is a little below the student's instructional reading level to start, but rapidly increasing the level of difficulty as session progresses, briefly explaining to the student that his/her eyes across the lines at the same time the words are being spoken by the student and teacher together sitting the student slightly in front of the teacher so that the teacher's voice is close to the student's ear, and reading in unison with the student. Heckleman suggests that the daily sessions should be about fifteen minutes in length and instructional time should total about eight to twelve hours.

This, of course, is a guide and adjustment may be made to allow for student differences. If the student does not respond to the neurological impress technique within four hours of instruction. The method works effectively with a student whose listening comprehension is higher than his/her present level of word recognition skills.

II.METHODOLOGY

This chapter presents the research design, the respondents, locale of the study, instruments used, data gathering procedures, ethical considerations and data analysis.

Research Design

This study made use of descriptive method of research since it involved the current statuses of children who are non-readers in grade one.

Children identified as non-readers or at risk for reading failure were those tested in June and have shown to have poor reading skills. These children need to undertake remedial reading. Among the grade one enrolment of 358 for school year 2015-2016, the following were reported in their *"Pangklaseng Ulat sa Pag-unlad sa Pagbasa."* In March, a post-test is given and results show the outcome of the remedial reading classes.

The teachers were given a survey on how they conduct their remedial reading classes, the methods and strategies they develop and practice in their remedial reading classes.

Participants/respondents

Participants in the study are the grade one pupils of General Maximino Hizon Elementary School for the school year 2015-2016. A total enrolment of 358 pupils were given reading assessment in June and in March for pre-test and post-test respectively to identify who are non-readers (hindi nakakabasa); can recognize phonics (tunog); can identify letters (letra); can syllabicate (pantig); can read word/s (salita); can read phrase/s (parirala); and readers (nakakabasa).

The *eight* (8) grade one teachers were also participants of the study being the classroom teachers who have implemented their remedial reading indicated in their class programs.

Research Locale

The study was conducted in General Maximino Hizon Elementary School (GMHES) a public school located at Jose Abad Santos Avenue, Tondo. GMHES is under District 2 of Division of Manila.

Data Gathering Procedure

Results of the study were gathered from the following data: Teacher's *Pangklaseng Ulat sa Pag-unlad sa Pagbasa* held in June 2015 as pre-test and in March 2016 as post-test. Throughout the year, the teachers also had reading assessment to monitor the improvement among those reported non-readers.

Ethical Considerations

The study was conducted as School's 2015-2016 Action Research. The participants of the study were informed accordingly and proper correspondence were addressed to the school head, master teachers concerned and the classroom teachers/advisers of the grade one pupils. The teachers and respondents' privacy and anonymity is of paramount importance, hence, the data obtained from the reading assessment and teacher's demographic survey were treated with utmost confidentiality and were only handled by the researchers of this study. Objectivity in the study is maintained at the highest level in discussions and analyses throughout research. The authors of the books and related studies were properly cited according to APA standards.

Presentation of Data, Analysis and Interpretation

Pupils were given a pre-test reading

assessment by their class advisers in June to identify their reading difficulties. A post-test was administered in March to the same number of pupils. The following were the result per cluster.

As indicated in the graph above, the post test result showed a great increase in the number of readers for Grade one students. Where in most students cannot recognize phonetic sounds and the alphabet at the start of the school year, the post test results indicate that all of the respondents now do. From the 98 students who could only syllabicate from the pre-test, now there are only two of the who couldn't.

With the 53 students who were able to read only words at the beginning, 186 were added to them at the end of the term. The number of pupils who could read phrases now reached 331 from the original 59. There were only fifteen students who could read sentences then. Now, there are 296 respondents who can.

One of the key characteristics of effective early intervention is increased close and explicit instruction (Allington & Baker, 2007). This is accomplished through small group instruction, which is "a critical literacy component for struggling readers" (Ganske, Monroe, & Strickland, 2003, p. 122). Small-group instruction allows teachers to provide instruction and materials that are at students' correct level of difficulty. Small-group instruction also allows teachers to monitor students' progress more easily and to provide personal and individualized feedback to students.

As the graph implies, the grade one teachers observed several methods with the Hegge-Kirk-Kirk Method as the most dominant, along with their own modified style. These teachers along with other methods were applied to the students as they see fit which would match the student's learning styles.

study utilized the T-test for Dependent Samples, with 8.34 as the computed value. Under 0.05 level of significance, the tabular value stands at 1.943. Since the computed value is greater than the tabular value, the null hypothesis is rejected. Th*us*, there is a significant difference on the results of Pre-Test and Post-Test after the remedial reading classes.

4. What are the recommended methods that can be beneficial in effective reading instruction in remedial reading classes?

Most teachers had used various methods stated in graph number two. Still, they find it necessary to modify them. These teachers apply these reading instructions to their students, one at a time or make modifications depending on the need of the individual pupils.

IV. CONCLUSION

The results in the "Pangklaseng Ulat sa Pag-unlad sa Pagbasa" significantly shows that the remedial reading classes have been effective in zeroing the non-readers before the end of this school year. The factors that have been presented: the methods and the time allotted were key elements in achieving the objective of making these pupils prepared for reading and comprehension in the next grade level. Although the researchers were unable to identify a method that outperformed all others, they concluded that remedial reading methods had an early emphasis on phonics were more effective than those that did not.

The Special Methods in Remedial Reading presented in this study have significantly increased the readers in the grade one pupils for this school year. As discussed in the results, the grade one teachers observed several methods with the Hegge-Kirk-Kirk Method as the most dominant, along with their own modified style. These teachers along with other methods were applied to the students as they see fit which would match the student's learning styles.

RECOMMENDATION

The Philippines have long adopted the Reading Inventory in US and have made our own Philippine Informal Reading Inventory (Phil-IRI) as initiated by the Department of Education. For teachers, the terms assessment does not represent a new concept. Such assessment strategies as informal reading inventories are relevant in evaluating pupils who are in need of remedial reading classes. Indeed, the teacher's interaction with their pupils in classroom is an important avenue for assessing pupils' learning process, behavior, abilities, and accomplishments. Based on the results, the following are commended for future studies and as point of reference for readers of this study:

1.Research strongly and consistently supports the importance of phonics to reading success and underscores that phonics instruction is most effective when it is started early and taught systematically and if need arises, should be taught in the pupils' actual pacing with considerations

in modifying the remedial reading program based on the pupils' needs. Remedial Reading Classes is recommended and must be strengthened in the next school years.

2.***Intervention Activities for Striving Readers.*** Even children whose first language is English often have difficulty mastering phonics skills. In a classic study, Juel (1988) found that children who are experiencing reading difficulties at the end of first grade are at high risk of having reading difficulties at the end of fourth grade. More optimistically, however, recent research has shown that appropriate, early intervention with striving readers can significantly reduce the problems that these readers face (Torgesen, 2000). Since the teachers have been modifying the methods for the remedial reading classes, they can develop materials and tools and have it validated by Master Teachers in Filipino to be used as a remedial reading program.

3.***Adapting ALPABASA as a tool for remedial reading in Filipino.*** Phonics ability plays a central and foundational role in the reading process since it is the mechanism through which children match the letters and sounds of words. Without strong phonics skills, children often struggle to identify words and consequently are unable to comprehend the text they are reading. ***ALPABASA*** is a system developed to teach kids read and to be a "Reading Filipino" in just 18 days. ***ALPABASA's*** idea is to make kids fluent readers in Filipino by means of game-based system using carefully designed flash cards and books to break down reading as skills. It recently won 1 Million grant in the Pharmaton's Life Changer Challenge, a competition of innovative ideas seeking to improve areas, such as education, environment, health, business, and public safety.

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ENHANCING READING SKILLS OF GRADE 10 SECTION 3 STUDENTS OF PEDRO E. DIAZ HIGH SCHOOL-LAKEVIEW ANNEX THROUGH ONLINE INSTRUCTION

Jay Boy E. Evano
Schools Division Office– Muntinlupa

ABSTRACT

Reading ability impacts academic achievement. This is one of the fundamental reasons why schools focus on closing reading gaps. This action research sought to investigate the effectiveness of certain reading instruction methods. Specifically, it aimed to determine whether the use of online instruction would result in more effective reading instruction than printed materials. Twenty (20) students from Grade 10 Section 3 at Pedro E Diaz High School Lakeview Annex, S.Y. 2015-2016 whose reading skills were at the frustration level took part in the study. Ten students were randomly assigned to the experimental group, which had online reading instruction using edmodo.com and the remaining ten to the control group, which was given reading remediation activities through printed materials. Reading activities were held after each lesson and a 50-item summative test was administered at the end of the 7-week remediation period. Analysis of the weekly mean scores of both groups in reading activities showed a significant difference, t (12) = 2.2673, p<.05. The mean score of the experimental group 52, 6.39 points higher than the mean score of the control group of 48.39. The groups' performance in the 50-item final assessment also revealed a significant difference, t (18) =2.6622, p<.05. The mean scores of the experimental and control groups are 48.4 and 43.5, respectively. This study confirmed that online instruction better enhances reading skills of high school students as compared to printed materials. Hence, it is recommended that its use in secondary schools be strengthened to improve learning outcomes.

Keywords: *Reading skills, Reading instruction, online instruction*

I.INTRODUCTION

Teachers encounter problems in the classroom. Examples of these are absenteeism, language difficulties and low level of motivation. An effective teacher is aware of their impact on learning outcomes; hence, he/she seeks solutions to them.

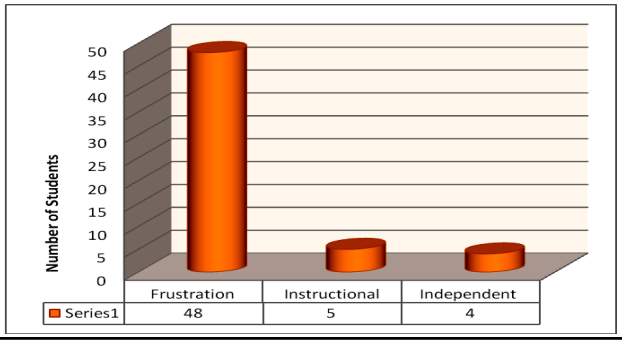
Guided by this, the researcher continuously looks for ways to address conditions affecting learning in the classroom. Among the things he is currently working on is the low achievement in English exhibited by Grade Ten Section Three students of Pedro E. Diaz High School- Lakeview Annex (PEDHSLA).

This is evident in the class' assessment results. The class mean in the 1st Quarterly Test is 44, 31 points lower than 75 (the lower limit of the range equivalent to "Within Mastery Level").

Moreover, 95 % of the students in the class garnered first quarter ratings that ranged from 75 to 79 or Fairly Satisfactory based on DepEd Order No. 8, series 2015 otherwise known as Classroom Assessment in K to 12.

The researcher was well aware that the impact of this situation transcends language instruction. Several researchers, including that of Kola, Ogundele and Olinapekun (2013), found a correlation between students' language proficiency and their academic performance in other learning areas such as Science and Technical Education. When students perform poorly in English, performance in other subject areas also suffer.

Figure 1 Distribution of Students across Reading Levels



Hence, he maintains very strong resolve to address it.

The researcher's initial step was to get to the root of the problem. Of the several factors affecting students' performance, he chose to investigate the reading profile of the class. His experiences in the field suggest that low achievement among students is influenced primarily by a range of reading difficulties.

A number of researchers also served as bases for this move. A study conducted by Akinyi (2014) revealed a significant correlation between reading comprehension and student academic performance. Cimiyotti (2014) said that this relationship exists because success in the performance of learning tasks in any subject area depends largely on the ability of a student to process and understand textual content obtained through books and other related materials.

To determine the reading level of Grade 10 Section 3 students, The Jennings Informal Reading Assessment was used. The results confirmed the researcher's assumption. Forty-eight (48) of the fifty-seven (57) students in the class showed reading skills that were at the Frustration Level.

This established the need for a remedial reading program for the students whose reading level is Frustration.

Before implementing an intervention, the researcher sought to identify an instructional method that would better support the development of the following reading skills: noting details, getting the main idea of a text, predicting outcome, using context clues, reading to follow precise directions, making inferences and comprehension.

This action research aimed to achieve that goal. Specifically, it sought to answer the questions: "Does the use of online instruction result in more effective reading instruction than printed materials?"

It was conducted at Pedro E. Diaz High School-Lakeview Annex. The sample consisted of twenty (20) Frustration readers from Grade 10 Section 3.

II. METHODOLOGY

The research comprised three phases: pre-implementation, implementation and post-implementation.

In the pre-implementation phase, the researcher determined the reading profile of the class using the Jennings Informal Reading Assessment. From among 48 students whose reading skills were found to be at the Frustration Level, 20 students were randomly chosen to take part in the study. The fishbowl technique was used to assign ten of them to the experimental group and the remaining ten to the control group.

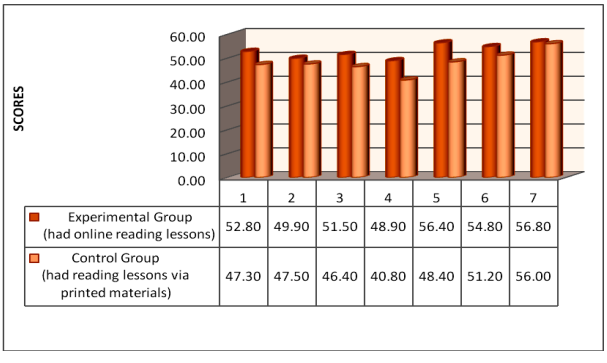
The implementation phase ran for seven (7) weeks. Two remedial reading sessions were held every week. The experimental group had online reading instruction using edmodo.com while the control group was given reading remediation lessons through printed materials.

The groups were given similar activities after each lesson. They were taken from the book, "Developing Reading Power for Specific Skills (Grade 6)" by Logue, Ferrer, Condez and Capili. The focus of the weekly lessons were as follows:

Week	Focus
1	Noting Details
2	Getting the Main Idea of a Text
3	Predicting Outcomes
4	Using Context Clues
5	Reading to Follow Precise Directions
6	Making Inferences
7	Comprehension

To provide the experimental group and the control group equal access to the materials, the researcher taught them at the same time. Each session lasted for one hour and was held from 2:00 PM to 3:00 PM.

Figure 2 Weekly Mean Scores of the Experimental and Control Groups in the Reading activities



A 50-item summative assessment developed by the researcher was also administered to both groups in the

Figure 3: Means Scores of the Control and Experimental Groups in the 50-item Summative Assessment

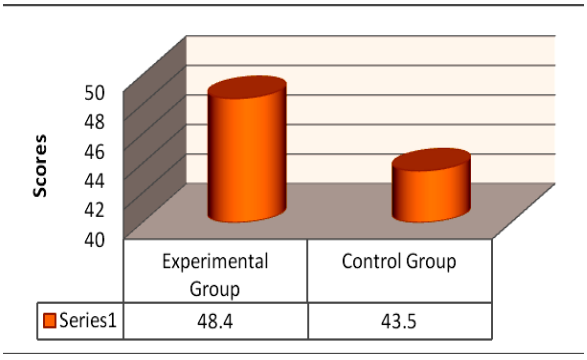


Table 4 Results of t- Test for the Scores of the Experimental and Control Groups in the 50-item Summative Assessment

Criterion	t-test	p-value	Decision	Conclusion
Final Assess-ment	2.6622	0.0159	Reject null hy-pothesis	There is a significant difference

post-implementation phase. The said assessment covered the seven skills mentioned above.

A panel of experts composed of four (4) English teachers at PEDHSLA reviewed the test items. To further strengthen the test's validity, the researcher had it reviewed by three (3) teachers at other schools.

Fifteen (15) students were asked to look over the assessment for words they could not understand and other difficulties.

After the test was revised based on the feedback obtained, pilot testing was carried out. It was administered to twenty (20) frustration readers who were not part of the sample of the study.

The mean scores of the control and experimental groups in the daily activities and the summative test were compared and subjected to t-test.

III. RESULTS AND DISCUSSION

Weekly Mean Scores in Reading Activities

The experimental group scored higher in the reading activities than the control group. The average mean scores of the experimental and control groups are 52 and 48.39, respectively. The difference in said mean scores is 6.39.

Applying the t-test of independent variables, the researcher rejected the null hypothesis. The p-value is 0.0183 and, therefore, the difference is considered to be statistically significant from zero at 5% level of significance. There is an estimated change of 3.811% (SE = 1.4405%). There is a sufficient evidence (p = 0.0426) to suggest that online instruction enabled students to get higher weekly test results.

Scores in the 50-item Summative Assessment

The experimental group did better than the control group in the 50-item final assessment. Its mean score is 48.4, 4.9 points higher than the control group's mean score of 43.5.

Applying the t-test of independent variables, the researcher rejected the null hypothesis. The p-value is 0.159 and, therefore, the difference is considered to be statistically significant from zero at 5% level of significance. There is an estimated change of 3.811% (SE = 1.4405%). There is a sufficient evidence (p = 0.159) to suggest that online instruction enabled students to get higher weekly test results.

IV. CONCLUSIONS

The study confirmed that online instruction results in more effective reading instruction than printed materials. The results of the t-test of independent variables performed on the groups' scores in the reading activities given after each lesson and the summative test showed this. The computed t-test values were lower than the t-test critical values at 0. 05 level of significance. Hence, the null hypothesis was rejected.

RECOMMENDATIONS

This study finds relevance in the process of ensuring the success of reading instruction and initiatives in schools. Specifically, it:

1. provides guidance to reading teachers in making sound instructional decisions. It strongly justifies efforts to strengthen the use of online instruction in their respective classrooms.

2. provides school administrators bases for prioritizing reading development programs in the creation of the School Improvement Plan (SIP) and the Annual Improvement Plan (AIP). The focus would enable them to effectively plan programs and projects that are geared towards developing students' reading skills.

3. leads school administrators to a condition of efficient allocation of school funds and resources as it establishes the need to invest in ICT vis-a-vis upgrading quality of learning.

4. presents insights on the effectiveness of instructional practices. These could give other researchers impetus to conduct studies on the various aspects of teaching and learning or guide them in the conduct of similar studies.

While this study has allowed the researcher to carry out an objective examination of the effectiveness of certain reading instruction methods, its weak points must be noted:

1. The sample was comprised of a relatively small number of students (20).

2. The program duration was short. Extending it would translate to more data, which could further strengthen the research's accuracy.

3. Not all students have internet access and connection is weak on certain days. These concerns affected access to the reading materials since the learning platform used, Edmodo. com was internet-based. The use of an offline learning platform would allow the program to go on even in the absence of internet connection.

4. Influence of other factors (e.g. learners' preferred learning styles and interests, economic situation among others) on the results of the research was not considered.

Hence, the researcher recommends the conduct of similar research in other settings for the purpose of validating its findings and to fill in the gaps of knowledge.

FURTHER ACTIONS DONE

In the light of the findings of the research, the enclosed plan was developed to ensure the continuance of the computer-based reading instruction. However, the researcher made the following modifications to accommodate the inputs obtained through the study:

1. Instead of an online learning platform (Edmodo.com), an offline learning resource will be used (Offline Moodle).

2. The duration of program implementation is expanded to give students more time to master reading skills. Instead of undergoing it for only two months, they will be made to attend reading lessons for six (6) months.

3. To maximize its benefits, the program will be implemented in all grade levels at PEDHSLA.

4. The reading instruction will be contextualized. Contextualization is an instructional approach that seeks to ensure meaningful learning by making direct reference to real-life situations in teaching specific skills (Johnson, 2012). Reading materials that are founded on students' real -life experiences will be developed for the program.

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PEDRO E. DIAZ HIGH SCHOOL LAKEVIEW ANNEX
Marigold St., Putatan, Muntinlupa City

PROJECT STAR (STUDENT TRAINING FOR THE ADVANCEMENT OF READING):
A COMPUTER-BASED REMEDIAL READING PROGRAM

ACTION PLAN
S.Y. 2016-2017

Activity	Objective (s)	Time Frame	Persons Involved	Outputs	Funding Requirement
1. Planning Activity for the Year-Round Remedial Reading Program	- Set targets - Create a timetable - Identify resources needed	May 2016	Principal English Teachers	- Action Plan	None
2. Development of contextualized reading materials	- Develop reading materials that are founded on the learners' real-life experiences - Subject the materials developed to readability test	May-July, 2016	Principal English Teachers	- Reading Materials	None
3. Conduct of Reading inventory using McCall-Crabbs	- Identify the reading level of students - Provide a basis for the determination of students to be placed into the Reading Remedial Program	July, 2016	English Teachers	- Reading Inventory Report	None
4. Determination of students to be placed into the Reading Remedial Class	- Ensure that the students who need help in reading are included in the program	July, 2016	English Teachers	- List of Students who will undergo the Remedial Reading Program	None
5. Confirmation of Students' Placement into the Remedial Class through the Jennings Informal Reading Assessment	- Confirm the need to subject identified students to remedial reading program	July 2016	English Teachers	- Results of the Jennings informal Reading Test - Final List of Students Who Will undergo the Program	None
6. Administration of Pre-Test	- Obtain baseline data on students reading performance	August 2016	English Teachers	- Pre-Test Results	MOOE Fund/Canteen Fund

7. Conduct Computer-Based Reading Remedial Classes	- Conduct reading lessons that will address reading gaps among the students covered by the program	September-February 2016	English Teachers	- Students' Scores in Daily Reading Activities - Attendance Sheets	MOOE Fund
8. Administration of Post Test	- Determine the actual progress of the students after undergoing the remedial program	February 2016	English Teachers	- Post Test Results	MOOE Fund/Canteen Fund
9. Conduct of Program Evaluation	- Identify the strengths of the program - Identify areas for improvement - Determine ways to improve the conduct of the program	February 2016	English Teachers	- Program Evaluation Tools	None
10. Submission of Completion Report	-inform concerned offices of the results of the program -Create a basis that will serve as guide for benchmarking	March, 2016	English Teachers	- Accomplishment Report	MOOE Fund/Canteen Fund

IMPROVING ACADEMIC PERFORMANCE IN MATHEMATICS THROUGH TEAM TEACHING TECHNIQUES (T3)

Alberto J. Tiangco
Schools Division Office– Navotas

ABSTRACT

The K to 12 Program covers Kindergarten and 12 years of basic education (six years of primary education, four years of Junior High School, and two years of Senior High School (SHS) to provide sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, as a result, the implementation of K to 12 Basic Education Curriculum comprised a great change, differing greatly from the existing teaching culture in both primary and secondary schools.

Collaboration is increasingly identified as a key aspect in teachers' professional growth. Educational reformers have recommended placing more attention on the collegial relations of teachers for the purposes of professional growth. Effective professional growth must be collaborative, involving the sharing of knowledge among teacher communities of practice rather than concerning individual teachers.

Researchers report that regular opportunities for interaction with colleagues are essential in creating professional school cultures. A community of peers is important not only in terms of support, but also as a crucial source of generating ideas and criticism.

***Keywords**: Team Teaching, Collaboration, Teaching Innovation*

I. INTRODUCTION

Learning is fun. This is a line of the learners if they find a certain subject striking, motivating, and realistic. Educators continuously aim to make classroom learning enjoyable and interesting to learners with mastery level of learning in their learning – process. Varied strategies have been taught and are being introduced like activity games, cooperative learning, collaborative teaching, peer – coaching, group dynamic, songs, and e – learning. These are some ways by which the teaching and learning process can be made enjoyable and interesting.

The implementation of the K to 12 Basic Education curriculums in the primary and secondary schools create a great change to the nature of school teaching. This was mainly due to the fact that the new scheme for the curriculum required teachers to collaborate with one another, when they had been teaching students independently for most of their teaching career.

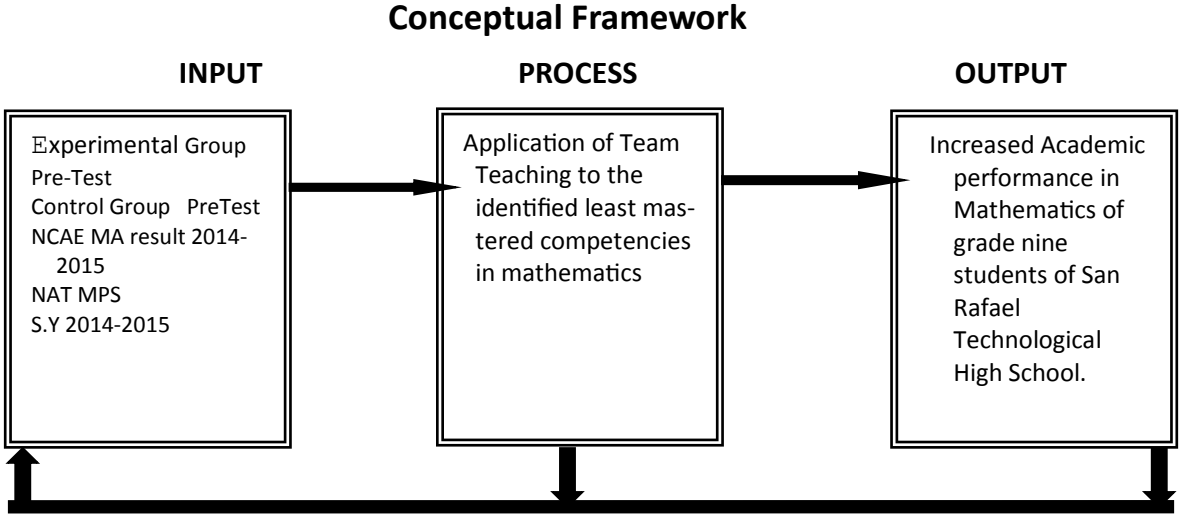
Purpose

The purpose of this research was to introduce Team Teaching Techniques: as a strategy to improve Academic Performance of grade nine students in the field of mathematics.

Programme description

Team teaching involves two or more teachers whose primary concern is the sharing of teaching experiences, knowledge, skills and strategies in the classroom, and co-generative dialoguing with each other. They take collective responsibility for maximizing learning to teach, or becoming better at teaching, while providing enhanced opportunities for their students to learn.

Little (1990) examined prominent forms of collegial relations—assistance, sharing and joint work. Joint work is a strong version of collegiality that shifts teaching from the individualistic to the collective, breaking down the barriers of privacy and leading towards new kinds of teaching. Professional development activities must provide regular and frequent opportunities for both individual and collegial reflection on classroom and institutional practice. However, it needs to be asked why collaboration has been largely ignored in schools? First, in many schools, opportunities for collaboration among teachers are limited and communication tends to be informal and in



frequent, even though teachers believe their teaching could be improved by working with colleagues. Second, the dominant school structure continues to emphasize teacher autonomy rather than collaboration; for many years, schools have expected teachers to teach students independently without assistance from others. The practice of this pattern has hindered attempts to create collaborative environments where teachers regularly talk with each other, and observe one another. Third, collaboration is not necessarily easy in the form of team teaching: it takes time and energy for teachers to work together in planning, teaching and evaluating.

A related approach to increased collaboration among teachers exists in team teaching. Team teaching is, in fact, a typical element of primary school level, but has less frequently been implemented at the secondary school level. Perhaps this is due to traditional departmental barriers that have often made collaborative teaching difficult, or even impossible.

Snyder (1992) stated that collaboration is, indeed, a problematic relationship, which is also about collegiality and professional sharing; similarly, Lytleand Fecho (1991) observed that collaborative cultures take time to develop, require trust and mutual understanding, and are derived from day-to-day interaction as well as long-term relationships of participants.

In school restructuring, teacher isolation has been identified as the most powerful impediment to implementing reform and little change will indeed occur in schools unless teachers constantly observe, help and interact with one another.

The paradigm as shown in Figures 1 depicts the conceptual model of this study. Figure 1 shows the research paradigm of using Team Teaching Techniques strategy to show its effectiveness in the Academic Performance of grade nine students in Mathematics of San Rafael Technological High School.

Figure 1. Research paradigm in The Team Teaching Techniques: Strategy to improve Academic performance of Grade Nine Students in Mathematics of San Rafael Technological High School.

Research Question

The main concern of the research is to introduce Team Techniques: as a Strategy to improve Academic Performance in Mathematics of grade nine students of San Rafael Technological High School.

Specifically, it seeks to answer the following questions:

1. What is a Team Teaching technique?
2. What is the Academic performance of Grade nine students in Mathematics?
3. What is the performance level of experimental and control group in the pre-test and post-test?
4. Is there a significant difference in the performance level of experimental and control group in the pre-test and post-test?

5.Is there a significant difference in the Academic Performance of grade nine students before and after Team Teaching?

Hypothesis

This research hypothesizes that:

1. There is no significant difference in the performance level of experimental and control group in the pre-test and post-test?

2. There is no significant difference in the Academic Performance of grade nine students before and after Team Teaching?

Scope and Limitations

The research covers Grade 9 students of San Rafael Technological High School for School Year 2015-2016. The identified weaknesses of the students will serve as guiding path in the achievement of goals.

The research will use the result of the Pre-Test and Post – Test and Scholastic Achievement in Mathematics in S.Y 2014-2015 as the baseline data. The implementer will also use the provided learning Materials, activity sheet, small group discussion, worksheets, etc. as curriculum innovations of San Rafael Technological High School.

Significance of the Study

It is believe that this proposed research will be a great help to the following:

Students. This may serve as an enrichment opportunities and access to a variety of instructional strategies supported by two highly qualified teachers.

Teachers. Teachers shared responsibility, which lightens the work load and increased collaboration in lesson development and delivery of instruction. Less teacher isolation, greater teacher efficacy and shared responsibility for outcomes.

School. Establishment of school – based culture collaboration, supportive system for all educators.

II.METHODOLOGY

Research Design

This design is considered as one of the most widely used designs in educational research. Consisting of two groups, the design gives pretest

This study used quasi-experimental, particularly the Non-Equivalent Control Group design

$$\begin{array}{ccc} E_1 & X & E_2 \\ \hline C_1 & & C_2 \end{array}$$

E_1 is the experimental group pre-test
E_2 is the experimental group post-test
X is for the treatment
C1 is the control group pre-test
C2 is the control group post-test

Table 1. The Student's performance level and z-value of experimental and control group

Group	Pre-Test			Post-Test			
	Mean	ML	SD	Mean	ML	SD	z
E1	13.84	34.61	3.61	30.67	76.68	2.89	33.66*
E2	12.02	30.06	4.23	29.59	73.98	3.65	30.82*
C1	11.22	28.05	3.38	15.41	38.53	4.71	5.6
C2	11.74	29.34	4.96	14.94	37.35	4.63	3.85

Figure 1. Graphical presentation of Student performance level in Mathematics

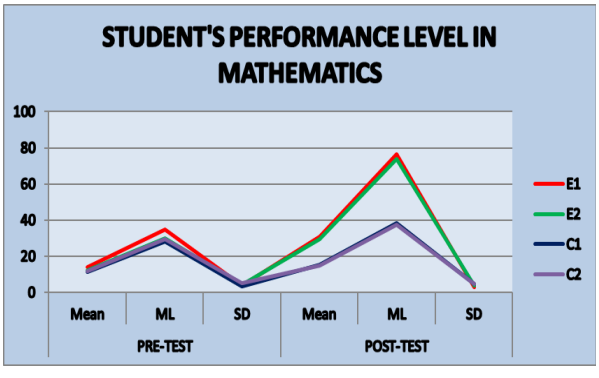


Table 2. Students' Academic Performance in Mathematics (NCAE MA) S.Y 2015-2016

GSA-MA		f	x_m	$f.x_m$	cf	$f.x_m^2$
100	99+	2	99.5	199	2	19800.5
99	98	11	98.5	1083.5	13	106725
97	86	26	91.5	2379	39	217679
85	51	59	68	4012	98	272816
50	15	68	32.5	2210	166	71825
14	3	8	8.5	68	174	578
2	1	1	1.5	1.5	175	2.25
		175		9953		689425

Mean - 56.87

Table 3. Students' Academic Performance in Mathematics (NCAE MA) S.Y 2014-2015

GSA-MA		f	x_m	$f.x_m$	cf	$f.x_m^2$
100	99+	5	99.5	497.5	5	49501.3
99	98	9	98.5	886.5	14	87320.3
97	86	15	91.5	1372.5	29	125584
85	51	69	68	4692	98	319056
50	15	64	32.5	2080	162	67600
14	3	8	8.5	68	170	578
2	1	0	1.5	0	170	0
		170		9596.5		649639

Mean- 56.45

Table 4. ACADEMIC PERFORMANCE (NAT MPS)

S. Y 2015-2016	BEFORE	AFTER
NAT MPS	47.76	54.72

and posttest to each group but only one gets the treatment. The broken line between the two groups suggests that there has been no randomization done. This way we study some variables by controlling some variables affecting the previous one. Thus, in an experiment we observe and measure the effect of treatment given to few variables by controlling other variables affecting our observations. The term "treatment" refers to a particular experimental condition. The material to which the treatment is applied and on which the variable under study is measured, is known as experimental unit.

Participants

The subjects of this experiment are the grade nine (9) students of a San Rafael Technological High School. Four classes/sector were created, two classes for the experimental group (E1, E2) and the other two classes are the controlled group (C1, C2).

Teacher was required to find another teacher with whom he could also communicate effectively in order to be a team partner. Two certified math teachers, both taught two of the Experimental classes (E1, E2), while the controlled group still doing the traditional teaching method (one teacher only).

Procedures of Implementation

The researcher used quasi experimental design assigning the four (4) sampled classes to be the experimental group (E1 and E2) and the other to be the control group (C1 and C2).The experimental group is divided into two groups the higher achieving students and the low achieving students both received the treatment, while the control group received the traditional teaching method. Before the research, the four classes received a pre-test in their vigorous instruction; the post-test was based on the final vigorous exam results. Both teachers would work together in the planning of the learning plan, preparation and the carrying out of teaching, and participate in the after-class discussion

Data Collection

1. Tests: The Test Booklet used by the 9th-graders was the Vigorous Instructional Material provided by San Rafael Technological High School aligned under k-12 BEC Curriculum. The pre-test and the post-test were school-wide. Uniform math tests given to the students. The test was written by the school's math teachers. The final math exam consisted of three parts: multiple choice; filling in blanks; and problems requiring students to write down the solving steps. The researcher and the two collaborative math teachers evaluated the exam questions and found that they had satisfactory content validity and generally met the requirement of the teaching objectives.
2. Scholastic Achievement in Mathematics for S.Y 2014-2015 (NCAE Result in Mathematical Ability) and (NAT MPS in Mathematics)

III. RESULTS, CONCLUSION AND RECOMMENDATION

The results were divided in four parts: first the researcher seek to determine the scholastic achievement in mathematics for S.Y 2014-2015, second the performance level of control and experimental group in their pre-test and post-test examination, third the significant difference in the performance level between pre-test and post-test and fourth the significant difference in the scholastic achievement in mathematics related to team teaching

Students' performance level after experiment

The average final exam scores of students receiving team teaching were higher than those of students receiving traditional teaching. Table 1 presents the math mean scores, Mastery level and standard deviation of both the pre-test and post-tests for the four classes. Both experimental groups'—E1 and E2—post-test mean scores were higher than the pre-test scores; while post-test mean scores were lower than the pre- experiment scores for both control groups—C1 and C2. In order to determine whether teaching methods were significantly related to the scores of the experimental group and the control group, a z-test was carried out to compare pre-test and post-test scores of E1 and E2. Both results showed significant difference (E1: z = 33.66, α = 0.01; E2: z= 30.82, α = 0.05).

However, a z-test comparing pre-test and post-test scores for C1 and C2 showed no

significant difference (C1: z= 5.6, α = 0.05; C2: z = 13.85, α = 0.05).

It was observed that team teaching had a positive impact on the final exam scores of the experimental groups.

α = 0.05

Table 2 and 3 shows comparison between the Academic performances in Mathematics after Team Teaching was conducted.

Table shows the difference in NAT MPS after Team Teaching was conducted for S.Y 2015-2016.

IV.CONCLUSION

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

1. The Team Teaching is an effective Strategy to improve Schools Achievement level

2. There is a significant effect of Team teaching in Pre-test and Post test of Experimental Group

3. There is a significant effect of team teaching in Scholastic Achievement of Students in Mathematics particularly in NAT MPS

RECOMMENDATION

Based on the findings and conclusions presented, the following recommendations are suggested:

1. Administrator should support the implementation of team teaching in every subject area.

2. Teacher should careful in the implementation of Team teaching.

3. Collegial interaction must always be present

4. Team Teachers were required to make some self adjustment and class management approaches.

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EXPLORING THE CORE BEHAVIORAL COMPETENCIES OF PUBLIC HIGH SCHOOL HEADS THROUGH CONVERGENT PARALLEL APPROACH

Margarito B. Materum
OIC-Asst. Schools Division Superintendent
Schools Division Office- Paranaque City

ABSTRACT

This research sought to explore the core behavioral competencies of the public high school heads of the Schools Division of Paranaque City.

Using the convergent parallel approach, the research reveals that: 1.) the school heads considered themselves role models of self-management. However, the teachers rated them as consistently demonstrating the said competency. The teachers gave similar statement that refers to the indicator "(The school head) displays emotional maturity and enthusiasm." Some of them disclosed that their school heads easily get irritated, others said that their school head is impatient and upset when problems arise in school, and others also said that their school head easily changes his mood and cannot control his emotion that tends to affect his decisions. Relative to the same indicator, majority of the teachers considered their school heads as having a burning desire to achieve quality and eager to accomplish and submit reports on time; the school heads claimed that they are role models of professionalism and ethics. But to the teachers, they consistently demonstrate the said competency. However, the teachers agreed that the school heads are role models on account of the indicators "(The school head) observes regularity of attendance and punctuality" and "Acts with sense of urgency and responsibility to meet the organization's goal, respectively. A group of teachers supported their observation to their school head on the indicator "(The school head) has good communication." They disclosed that their school head lacks communication skills. Coincidentally, the school head mentioned communication skills as his weakness; the school heads and teachers had the same perceptions that the school head themselves consistently demonstrate result focus. Both groups of participants were also consistent in claiming that the school heads are role models in so far as the indicator "Expressing a desire to do better" is concerned. As to the indicator "(The school head) makes it clear to teachers the results expected of their school", the teachers praised their school head for being great, goal-oriented and result -focused that would set a clear direction of their school towards excellence; according to the school heads, they are role models of teamwork. As observed by the teachers, they consistently demonstrate the said competency. As regards the indicators "(The school head) promotes collaboration and removes barriers to teamwork" and "drives consensus and team ownership of decisions", the teachers noted that their school head always involves them in planning and holding school programs, projects, and activities. Despite this positive observation, there were teachers who wish that their school heads would learn to talk to them as a team on matters that improve their work; of the six indicators of service-orientation, the school heads rated themselves lowest for the indicator "(The school head) explains and articulates organizational directions, issues and problems".

Whereas, the teachers rated the school heads lowest for the indicator "(The school head) initiates activities that promote advocacy for men and women empowerment; the school heads claimed that they are role models of service orientation but the teachers rated them as consistently demonstrating the said competency; and the school heads believed that they are role models of innovation but to the teachers, they consistently demonstrate the said competency. A point given by a teacher that has to do with the indicator "(The school head) promotes creative climate" is that her school head does not recognize and appreciate innovation done by teachers. Majority of the teachers recognized the efforts of their school heads in improving their schools specifically on physical environment. The resourcefulness of the school heads could be accounted for such improvements;

professionalism and ethics, teamwork, and service orientation are the most observed behavioral competencies of school heads; 2.) The ratings of school heads and teachers on result focus received a very strong positive correlation; their ratings on professionalism and ethics, teamwork and service orientation competencies got a positive correlation but not significant at 05 level of significance; and their on self-management received a weak negative correlation but not significant at .05 level of significance; 3.) There was no significant difference in the perceptions of school heads themselves and teachers on the core behavioral competencies of school heads; and 4.) The findings of the research imply that it is vital for school heads to understand, value and implement behavioral competencies for school effectiveness. The evidences obtained are useful for the conduct of a performance review program for school heads, which is a salient component of the performance management system.

Keywords: Core Behavioral Competencies: Self-management; Professionalism and Ethics; Result Focus; Teamwork; Service Orientation; Innovation

I. INTRODUCTION

Every educational reform being undertaken by the Department of Education is anchored on improving primarily the public school system.

The Philippine public schools are only as good as the school heads. The quality of the country's basic education system is reflected in the performance of school heads. Simply, where the school head goes, so goes the school.

With the implementation of Republic Act 9155, public schools are empowered to take active role in the development and improvement of appropriate reform initiatives; they are asked to raise their own standards based on the particular needs of and resources within their respective localities.

Consistent with the law, national educational policies, plans and standards, the school heads have the authority, accountability and responsibility for the following: 1) creating an environment within the school that is conducive to teaching and learning; 2). implementing, monitoring and assessing the school curriculum and being accountable for higher learning outcomes; 3) developing the school education program and school improvement plan; 4) offering educational programs, projects, and services which provide equitable opportunities for all learners in the community; 5) introducing new and innovative modes of instruction to achieve higher learning outcomes; 6) administering and managing all personnel, physical, and fiscal resources of the school; 7) recommending the staffing complement of the school based on its needs; 8) encouraging staff development; 9) establishing school and community networks and encouraging the active participation of teacher organizations, non – academic personnel of public schools, and parents – teachers associations; 10) accepting donations, gifts, bequests and grants in accordance with existing laws and policy of the Department of Education for the purpose of upgrading teachers / learning facilitators' competencies, improving and expanding school facilities and providing instructional materials and equipment; such donations or grants must be reported to the division superintendents; and 11) performing such other functions as may be assigned by the Secretary, Regional Director and Schools Division Superintendents where they belong (R.A. 9155).

Admittedly, the capacity of schools to improve teaching and learning is strongly mediated by the quality of leadership provided by the school heads.

School leadership involves functions that have become common denominators of the school head's job. The school head does the planning as s/ he identifies specific objectives and devices means of achieving such objectives established for students, teachers, involvement of parents and community at large. His organizing function is seen as s/he assigns tasks developed during the planning stage to teachers as well as to non –teaching personnel so that plans can be implemented. This means that s/he coordinates and integrates human and material resources and creates mechanisms to put plans into action. In leading, the school head must have the ability to influence, direct, activate or motivate in order to get particularly the teachers to perform in ways that facilitate the achievement of school goals. Likewise, the school head does the controlling function as s/he monitors activities to ensure that objectives are accomplished as planned. More than these management functions, the school head must have the ability to use tools, procedures and techniques in a specialized field. S he must

have the ability to decide in relation to the allocation of resources and identify opportunities for change and gaining insights into the managerial role itself. Likewise, s / he must have good interpersonal relationships with his / her subordinates.

Apart from the roles and functions are the competencies that school heads have to demonstrate which reflect the quality of their performance. To determine how public high school heads in the Schools Division of Paranaque demonstrate core behavioral competencies while performing their roles and functions, the researcher is motivated to conduct a research focusing on the core behavioral competencies of the school heads.

It is not the school heads themselves but also the researchers who need to know the school heads' strengths which they use to do their best and their weaknesses and developmental experiences which they need at work to become successful school leaders.

The researcher deems it important to have research results that may be useful for him in helping school heads improve their competencies, considering that he is responsible for reviewing, coaching and rating the school heads' office performance.

Statement of the Problem

Purposely, this research aimed to determine the core behavioral competencies of the public high school heads in the School Division of Parañaque City.

Specifically, it sought answers to the following questions.

1. How do the school heads demonstrate the core behavioral competencies as perceived by themselves and by the teachers in terms of:
    1.1 Self-management;
    1.2 professionalism and ethics;
    1.3 result focus;
    1.4 teamwork
    1.5 service orientation; and
    1.6 innovation?
2. Is there a significant correlation in the ratings of school heads themselves and teachers on the core behavioral competencies of school heads?
3. Is there a significant difference in the perceptions of school heads and teachers on how school heads themselves demonstrate the core behavioral competencies?
4. What is the implication of the findings of the study on the results-based performance management among the public schools in the Schools Division of Parañaque City?
5. Is there a significant correlation in the ratings of school heads and teachers on the core behavioral competencies of school heads?
6. Is there a significant difference between the perceptions of school heads and teachers on how the school heads themselves demonstrate the core behavioral competencies.?

Significance of the Study

1. There is a need to find out how the school heads demonstrate the core behavioral competencies necessary in their management of schools.
2. The school heads as the key persons in schools have the greatest influence in the performance their teachers and students.
3. This study will challenge them to think and act as competent professionals in concretizing school aims.
4. Hopefully, the results of this study will help the school heads gain a clearer and deeper understanding of the importance of modeling core behavioral competencies for school improvement.

Definition of Terms

The following terms are defined to facilitate a thorough understanding of the study.

Behavioral Competencies. This refers to the way the school heads define and live their schools' values. This includes self-management, professionalism and ethics, result focus, teamwork, service orientation, and innovation competencies.

Ethics. This is a core behavioral competency that involves the definition and achievement of the public school heads of what is good or bad, right or wrong in relation to their moral duty and obligation. It includes the need for them to act in accordance with the principles of right and wrong governing the conduct of a particular group.

Innovation. This is a core behavioral competency that refers to introduction of school heads of an idea or taking an existing idea and making it work better for their schools. "The term

tends to refer to the process of introducing something new. This process starts from the origination of an idea and goes on to the transformation and implementation of that idea, taking into account the system on which the process unfolds.

Self-Management. This is a core behavioral competency which refers to the public school heads' taking for their responsibility for their own behavior and well-being.

Service Orientation. It is a core behavioral competency which manifests the desire of public school heads to anticipate, recognize, and meet other's needs. It focuses on providing satisfaction and making themselves available to others.

Professionalism. It is a core behavioral competency which means strict adherence of the public school heads to courtesy, honesty and responsibility when dealing with teachers, students, parents and other stakeholders.

Teamwork. This is a core behavioral competency that refers to the cooperative effort by a team composed of the public school heads and their teachers to achieve school goals.

Conceptual Literature

Republic Act 9155 (2001) elaborates on the new roles and functions of the school heads as well as the competencies which they need as leaders in the change process of decentralization at the school level. They have the roles as visionary, principal motivator, advocate planner, and builder of networks and support systems reflected in their functions as leading in setting the vision, mission and goals of their schools, organizing and expanding school, community and local government networks and groups who will actively participate in school improvement plan, and leading in developing and maintaining the school management information system. In doing such functions, the school heads need a set of competencies on change and future orientation, networking, organizing, social mobilization and advocacy, development of teamwork, building consensus and skills in negotiation and conflict resolution, participatory planning and administrative management , and generation and use of data and information as the basis for planning and management. Their roles as curriculum developer and instructional leader are reflected in doing the functions as creating a physical and psychological climate conducive to teaching and learning, localizing and implementing school curriculum, and encouraging development and use of innovative instructional methods focused on improvement of learning outcomes, increasing access to basic education, improving the holding power of schools, and addressing specific local problems. These functions require the competencies such as development and designing of the curriculum to address both national goals and local needs and aspirations, creation of an open learning system based on several resources and materials rather than on single textbooks, and participatory and performance – based instructional supervision.

As personnel managers, the school heads perform the functions like recommending personnel appointments to the Division Superintendent and planning and implementing a continuing staff development program based on on-going needs analysis. The competencies required of these functions include proper staffing, identifying and improving personnel capabilities through a capacity building program for staff, and leadership by example. And as fiscal resource manager, the school heads do the functions as administering and managing all personnel, physical and fiscal resources of the school and encouraging and accepting donations, gifts, requests and grants for educational purposes and reporting all such donations to appropriate offices. And in doing such functions, the school heads need to have competencies in fund management and in serving as model for transparency and accountability especially in financial management.

These new roles and functions requiring new sets of competencies of school heads are expected to be put into action as the school heads perform their major functions which are administrative management and instructional leadership (Hidalgo, 2006).

Speaking of competency, Subang (cited in Ocampo, 2005) defines it as a basic drive for effectiveness, which causes a primary motivation to individuals. Accordingly, the desire for competence promotes the need to be active to explore, and to deal effectively with the environment. The competence is equally described as an inner experience that helps a manager gain total control of the school, especially when his managerial skills are exhibited at an optimum level. As the administrator relates and integrates the various subsystems of the school, his managerial control as professed by his managerial skills must be continuously made visible. According to Woodruffe (in Ocampo, 2005), competency is a set of behavior patterns that the incumbent needs to bring to a position in order to perform its tasks and functions with competence.

Corollary, the Department of Education finds it essential to create a culture of performance excellence that produces desired results and builds necessary competencies through the Results-Based Performance Management System. The Results-Based Performance Management System includes four phases. The performance planning and commitment phase is the starting point of the performance management which has four important components like discussing unit's objectives, identifying individual key result areas, objectives, and performance indicators, discussing competencies required and additional competencies needed, and reaching agreement. The performance monitoring and coaching phase includes two important components such as performance tracking and coaching and feedback. The performance review and evaluation phase requires review of performance and discussion of strengths and improvement needs as the two important steps that must be accomplished. And the performance rewarding and development planning phase emphasizes rewards and development planning as the two important points.

The Department views performance management as an organization-wide process to ensure that all employees focus work efforts towards achieving DepEd's vision, mission and values. Performance management system seeks to align individual roles and targets with DepEd's direction, track accomplishments against objectives to determine corrective measures, if needed, provide feedback on employees' work progress and accomplishments based on clearly defined goals and objectives, and serve itself as a tool for people development. Moreover, performance management includes two components: the "what" component which refers to the results and objectives of a position and the "how" component which refers to the leadership and core behavioral competencies. The leadership competencies include leading people, people performance management, and people development and the core behavioral competencies include self-management professionalism and ethics, result focus, teamwork, service orientation, and innovation.

In providing understanding of behavioral competencies, Megginson and Whitaker (2007) define them as the underlying characteristics that lead to superior performance in an individual. They include qualities, attributes, skills and traits that help people to be successful. They are capable of being developed in people rather than being fixed. According to The Employment Studies Institute, behavioral competencies are observable and measurable behaviors, knowledge, skills, abilities, and other characteristics that contribute to individual success in the organization (e.g., teamwork and cooperation, communication). Behavioral competencies can apply to all (or most) jobs in an organization or be specific a job family, position or career level. They describe what is required to be successful in an organization outside of a specific job. As such they are specific to a person rather than to a job. Further, behavioral competencies are necessary to achieve the objective of an organization. They can be used for all terms of assessment, including performance appraisals, training needs analysis, and course selection.

Behavioral competencies can be classified as: 1) individual competencies which refer to personal attributes like flexibility, decisiveness, tenacity, independence, risk taking, and personal integrity; 2) managerial competencies which refer to taking charge of other people like leadership, empowerment, strategic planning, corporate sensitivity, project management, and management control; 3) analytical competencies which refer to the elements of decision making, innovation, analytical skills, numerical problem solving, practical learning, and derail consumers; 4) interpersonal competencies which relate to dealing with other people, communication, impact persuasiveness, personnel awareness, teamwork, and openness; and 5) motivational competencies which refer to the things that drive an individual such as resilience, energy, motivation, achievement orientation, initiative, and quality focus (The Employment Studies Institute).

As cited above, the Results-based Performance Management System for DepEd includes these six core behavioral competencies: 1. Self-management competency which means "developing oneself and taking responsibility, integrity and ethical conduct, personal drive and resilience, balancing work and life issues, self-awareness and personal development activities"(Yashikaa, 2012); 2. Professionalism and ethics competency which has to do with "demonstrating personal commitment to abide by professional and ethical standards to maintain the integrity of a profession. The notion of integrity and trustworthiness is at the heart of this competency " (cited in Cunningham, 2001); 3. Teamwork competency which is demonstrated when one works within the dynamics of a group, shows commitment to the team's purpose and goals, accepts and provides feedback in a constructive and considerate way, shares information and encourages others to do the same, supports and motivates the group to perform at its best, recognizes the role of conflict when appropriate, builds professional relationships,

shows accountability to the team and follows through on his commitments, works effectively with different personalities across a variety of social and professional situations, considers diverse, cross-cultural perspectives and working styles (University of Victoria, 2016); 4. Result focus which means that "an individual or organization focuses on outcome rather than the process used to produce a product or deliver a service. As such, a number of process are used where the most effective and economical process is identified" ; 5. Service b orientation which means the "willingness to treat co-workers and clients with courtesy, consideration, and tact combined with the ability to perceive a customer's needs, and communicate effectively "(cited in 2016); and 6. Innovation which "tends to refer to the process of introducing something new. This process starts from the organization of an idea and goes on to the transformation of that idea, taking into account the system on the process unfolds"(Chan, 2011).

The foregoing discussion supports the view that the success of the school programs depends on the quality of the school heads. The behavioral competencies of the school heads are the primary reason for reflecting the effectiveness of the school programs. It is then vital that school heads strive to understand, value, and implement competencies necessary for achieving school success.

Research Literature

These are several researches conducted that have bearing on the present research. The investigation conducted by Farmer (2010) approached excellence in leadership by examining 13 core competencies that school leaders must possess to remain successful in 21st century schools. The 13 core competencies that inform the behavior of school leaders were visionary leadership, curriculum and instruction, assessment, reflection, unity of purpose, diversity, inquiry, collaboration, professional development, professionalism, instructional leadership, organizational management, and learning community.

The purpose of the study was to investigate: a) the extent to which school heads perceived that they valued and exhibited behaviors informed by the aforementioned core competencies; b) the extent to which teachers perceived that school heads valued and exhibited behaviors informed by the core competencies; and c) the relationship, if any, between teacher perceptions and teacher motivation.

Data found that teachers were more likely to have higher self-efficacy, collective efficacy, and intrinsic motivation when they perceived that school heads valued and implemented behaviors informed the 13 core competencies.

In a survey conducted by Zenger (cited in Lieberman, 2013), he examined two characteristics of a great leader. These were results focus and social skills. It was found that if a leader is seen as being strong on results focus, the chance of that leader being great is only 14%; if a leader is strong on social skills, s/he is seen as a great leader even less of the time- a partly 12%. However, for leaders who were strong both in results focus and social skills, the likelihood of being seen as a great leader skyrocketed to 72%.

Rock (cited in Lieberman, 2013) conducted a survey to find out the answer as to how leaders are rated high on both results focus and social skills. The results of the survey revealed that less than 1% of leaders were rated high on both goal (result) focus and social skills.

Taneo (2013) conducted a study aimed at determining the management competencies of the public elementary school principals in the Schools Division of Valenzuela. The research yielded these findings:

The principals rated themselves highest on professional and interpersonal skills as component of administrative management (χ = 3.86) and on evaluation as component of instructional leadership (χ = 3.85), both interpreted as "very evident." The principals rated themselves lowest on school planning and implementation as component of administrative management (χ = 3.69) and supervisory plan and strategies as component of instructional leadership (χ = 3.76), both interpreted "very evident"; on the other hand, the teachers rated the principals' level of management competencies "evident" (χ = 3.16); There was a significant difference between the perceptions of principals and teachers on the level of management competencies of principals.

Quilbio's study (2012) on the management competencies of secondary school principals revealed findings such as: The principals rated the level of their management competencies in terms of administrative management and instructional leadership as very evident; The teachers rated the competencies of the principals in terms of administrative management and in terms of instructional leadership as " evident"; and there was a significant difference between the principals' and teachers' perceptions on the level of

management competencies of the principals.

The present research is similar to the previous studies conducted. Zenger and Rock included results focus as a variable in their studies and this was also one of the variables of the present study. There is also a shade of similarity between Farmer's study and the present study since included professionalism as one of the variables in their studies. Likewise, the present study and those of Taneo (2013) and Quilbio (2012) are similar in that they all aimed at determining the management competencies of school heads. However, the present study differs from the two previous studies since the competencies of school heads in the present study refers to the core behavioral competencies such as self-management, professionalism and ethics, result focus, teamwork, service orientation and innovation; whereas the previous studies used the management competencies in terms of administrative management and instructional leadership. The present study is also different from the two previous studies in terms of research design they employed. The present study used the convergent parallel design while the previous studies used the descriptive research methods.

Conceptual Framework

The Department of Education finds it essential to create a culture of performance excellence that produces desired results and builds necessary competencies through the Results-Based Performance Management System. The Results-Based Performance Management System includes four phases. The performance planning and commitment phase is the starting point of the performance management which has four important components like discussing unit's objectives, identifying individual key result areas, objectives, and performance indicators, discussing competencies required and additional competencies needed, and reaching agreement.

The performance monitoring and coaching phase includes two important components such as performance tracking and coaching and feedback. The performance review and evaluation phase requires review of performance and discussion of strengths and improvement needs as the two important steps that must be accomplished. And the performance rewarding and development planning phase emphasizes rewards and development planning as the two important points.

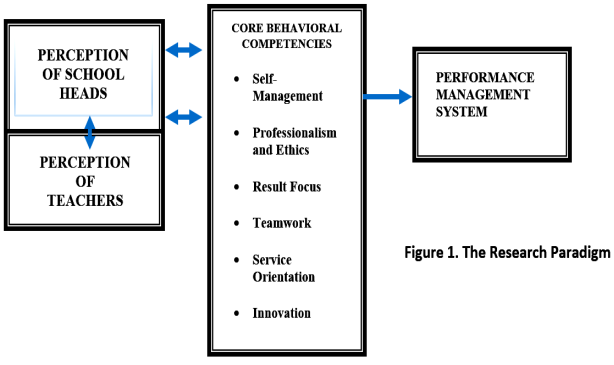
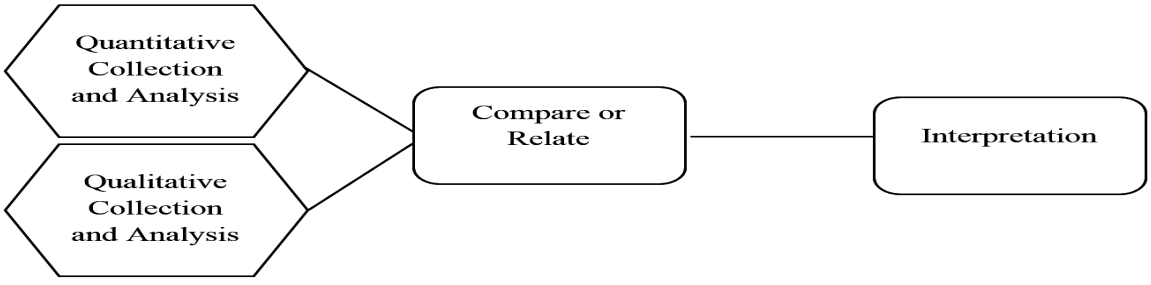


Figure 1. The Research Paradigm

The Department views performance management as an organization-wide process to ensure that all employees focus work efforts towards achieving DepEd's vision, mission and values. Performance management system seeks to align individual roles and targets with DepEd's direction, track accomplishments against objectives to determine corrective measures, if needed, provide feedback on employees' work progress and accomplishments based on clearly defined goals and objectives, and serve itself as a tool for people development. Moreover, performance management includes two components: the "what" component which refers to the results and objectives of a position and the "how" component which refers to the leadership and core behavioral competencies. The leadership competencies include leading people, people performance management, and people development and the core behavioral competencies include self-management, professionalism and ethics, result focus, teamwork, service orientation, and innovation.

In providing understanding of behavioral competencies, Megginson and Whitaker (2007) define them as the underlying characteristics that lead to superior performance in an individual. They include qualities, attributes, skills and traits that help people to be successful. They are capable of being developed in people rather than being fixed. According to The Employment Studies Institute, behavioral competencies are observable and measurable behaviors, knowledge, skills, abilities, and other characteristics that contribute to individual success in the organization (e.g., teamwork and cooperation, communication). Behavioral competencies can apply to all (or most) jobs in an organization or be specific a job family, position or career level. They describe what is required to be successful in an organization outside of a specific job. As such they are specific to a person rather than to a job. Further, behavioral competencies are necessary to achieve the



objective of an organization. They can be used for all terms of assessment, including performance appraisals, training needs analysis, and course selection.

Behavioral competencies can be classified as: 1) individual competencies which refer to personal attributes like flexibility, decisiveness, tenacity, independence, risk taking, and personal integrity; 2) managerial competencies which refer to taking charge of other people like leadership, empowerment, strategic planning, corporate sensitivity, project management, and management control; 3) analytical competencies which refer to the elements of decision making, innovation, analytical skills, numerical problem solving, practical learning, and derail consumers; 4) interpersonal competencies which relate to dealing with other people, communication, impact persuasiveness, personnel awareness, teamwork, and openness; and 5) motivational competencies which refer to the things that drive an individual such as resilience, energy, motivation, achievement orientation, initiative, and quality focus (The Employment Studies Institute).

As cited above, the Results-based Performance Management System for DepEd includes these six core behavioral competencies: 1. Self-management competency which means "developing oneself and taking responsibility, integrity and ethical conduct, personal drive and resilience, balancing work and life issues, self-awareness and personal development activities" (Yashikaa, 2012); 2. Professionalism and ethics competency which has to do with "demonstrating personal commitment to abide by professional and ethical standards to maintain the integrity of a profession. The notion of integrity and trustworthiness is at the heart of this competency" (cited in Cunningham, 2001); 3. Teamwork competency which is demonstrated when one works within the dynamics of a group, shows commitment to the team's purpose and goals, accepts and provides feedback in a constructive and considerate way, shares information and encourages others to do the same, supports and motivates the group to perform at its best, recognizes the role of conflict when appropriate, builds professional relationships, shows accountability to the team and follows through on his commitments, works effectively with different personalities across a variety of social and professional situations, considers diverse, cross-cultural perspectives and working styles (University of Victoria, 2016); 4. Result focus which means that "an individual or organization focuses on outcome rather than the process used to produce a product or deliver a service. As such, a number of process are used where the most effective and economical process is identified" (www.ask.com/education, 2016); result focus combines strong analytical skills with an intense motivation to move forward and solve problems (Lieberman, 2013); 5. Service orientation which means the "willingness to treat co-workers and clients with courtesy, consideration, and tact combined with the ability to perceive a customer's needs, and communicate effectively" (cited in 2016); and 6. Innovation which "tends to refer to the process of introducing something new. This process starts from the organization of an idea and goes on to the transformation of that idea, taking into account the system on the process unfolds"(Chan, 2011).

The foregoing discussion supports the view that the success of the school programs depends on the quality of school heads. The behavioral competencies of school heads are the primary reason for reflecting the effectiveness of the school programs. It is then vital that school heads strive to understand, value, and implement competencies necessary for achieving school success.

The Research Paradigm

The paradigm illustrates the perceptions of schools heads and teachers on the core behavioral competencies of school heads as to self-management, professionalism and ethics, teamwork, result focus, service orientation, and innovation; the significant correlation in the ratings of school heads and teachers on the core behavioral competencies of school heads; the

Table 1. Weighted Means Obtained By Participants In Terms Self- Management

Indicators	School Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Sets personal goals and direction, needs and development	4.33	Consistently Demonstrate	4.42	Consistently Demonstrate
2. Undertakes personal actions and behaviors that are clear and purposive	4.53	Role Model	4.28	Consistently Demonstrate
3. Takes into account personal goals and values congruent to that of the organization	4.47	Consistently Demonstrate	4.35	Consistently Demonstrate
4. Displays emotional maturity and enthusiasm for and is challenged by higher goals	4.53	Role Model	4.42	Consistently Demonstrate
5. Prioritizes work tasks and schedules (through gantt charts, checklists, etc.) to achieve goals	4.60	Role Model	4.36	Consistently Demonstrate
6. Sets high quality, challenging, realistic goals for self and others	4.60	Role Model	4.41	Consistently Demonstrate
Grand Weighted Mean	4.51	Role Model	4.37	Consistently Demonstrate

significant difference in perceptions of school heads and teachers; and the implication of the findings of the study on the performance management system among public schools.

II. Research Methodology

Research Design

The parallel convergent design was employed in this investigation to describe the core behavioral competencies of public high school heads. Both quantitative and qualitative data were used simultaneously and independently, then results were analyzed.

In the analysis of data, the researcher gave equal weight to the quantitative and qualitative data, looked to compare and contrast the results to determine patterns or contradictions.

According to Sauro (2015), if one takes a quantitative or a qualitative approach, s/he considers a third option: use both, and take advantage of the opportunities afforded by mixing the two methods. Thus, the convergent parallel design.

The correlation of the ratings of the teachers and school heads themselves on the core behavioral competencies of school heads was examined using correlational analysis; hence, this research may be referred to also as a correlational research.

Population and Sample

The Schools Division of Paranaque had sixteen public high school heads and one thousand one hundred thirty one high school teachers.

The investigation involved the sixteen high school heads as participants. The data of the school heads were weighted by five (5), appropriate for statistical analysis. It also included one hundred fourteen teachers coming from the sixteen high schools. The number of teacher-participants was obtained by getting the ten percent of the total population of teachers.

The school head-participants were purposively selected while the teacher-participants were randomly selected using the simple random technique.

Instrumentation

The data-gathering instrument of this study was a questionnaire.

Part I of the questionnaire for both the teacher- and school head-participants contained

Table 2. Weighted Means Obtained By Participants In Terms of Professionalism and Ethics

Indicators	School Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Practices ethical and professional behavior and conduct taking into account the impact of his/her actions and decisions	4.80	Role Model	4.30	Consistently Demonstrate
2. Observes regularity of attendance and punctuality	4.73	Role Model	4.54	Role Model
3. Has good communication and grooming	4.53	Role Model	4.46	Consistently Demonstrate
4. Acts with a sense of urgency and responsibility to meet the organization's needs	4.60	Role Model	4.51	Role Model
5. Helps others improve their effectiveness	4.60	Role Model	4.33	Consistently Demonstrate
6. Adopts his/her behavior easily according to situations	4.40	Consistently Demonstrate	4.29	Consistently Demonstrate
7. Shows honesty in undertaking- personal and professional	4.87	Role Model	4.45	Consistently Demonstrate
8. Treats teacher with dignity and respect	4.87	Role Model	4.54	Role Model
9. Makes personal sacrifices to meet organization's needs	4.60	Role Model	4.38	Consistently Demonstrate
Grand Weighted Mean	4.67	Role Model	4.42	Consistently Demonstrate

items such as name, number of years as teachers/ school heads, highest educational attainment, and position.

Part II consisted of items for the six core behavioral competencies adopted from the DepEd Results – Based Performance Management System Manual.

For the purpose of this investigation, the researcher deemed it necessary to add some items and made some revisions of some of the items contained in the said DepEd RPMS Manual. For Self – Management, the five original items were made into six by making item number two in the RPMS Manual into two items. For Professionalism and Ethics, item number one was omitted, and item number three was improved and made into two items. Also item five was broken down into two items. Other than these, three additional items were formulated by the researcher. From the original five items for this competency in the RPMS Manual, this became nine item. For Result Focus, the original five items became ten. Item three was made into two items, item four was also made into two items, and three additional items were added, having ten items all in all under this behavioral competency. For Teamwork, one item formulated by the researcher was added to the original five items; thus, there were six items for this competency. And for Innovation, item number one was broken down into two, item number two into two, item number three into two and item number five also into two. The original five items for this competency became nine.

And Part III of the questionnaire consisted of open-ended questions pertaining to the behaviors of school heads while performing their roles and functions. The responses of the to the questions could expound their answers in Part II.

The questionnaire used the five point rating scale as follows:

5 – Manifested to A Very Great Extent;
4 – Manifested to A Great Extent;
3 – Manifested to Some Extent;
2 – Manifested to A Little Extent ; and
1 – Not Manifested At All

Data Gathering Procedure

Before administering the instrument to the target participants, the researcher sought permission from the Schools Division Superintendent. After getting the approval of the Superintendent, the researcher administered the questionnaire to the school head – participants. The researcher, likewise, administered the questionnaire to the teacher – participants and retrieved them as soon as these were accomplished.

The statistical methods used in this research were the following:

- Frequency counts and percentages were used describe the demographic profile of school heads; and
- Weighted mean was used to describe the core behavioral competencies. For the data gathered, the following interpretation was used;

Table 3. Weighted Means Obtained By Participants In Terms of Result Focus

Indicators	School Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Achieves results with optimal use of time and resources most of the time	4.33	Consistently Demonstrate	4.45	Consistently Demonstrate
2. Avoids reworks, mistakes and wastage through effective work methods by placing organizational needs before personal needs	4.27	Consistently Demonstrate	4.17	Consistently Demonstrate
3. Delivers error-free outputs most of the time by conforming to standard operating procedures correctly and consistently	3.93	Consistently Demonstrate	4.04	Consistently Demonstrate
4. Is able to produce very satisfactory quality of work in terms of usefulness/acceptability and completeness with no supervision required	4.60	Role Model	4.38	Consistently Demonstrate
5. Expresses a desire to do better	4.80	Role Model	4.57	Role Model
6. Express frustration at waste or inefficiency	3.87	Consistently Demonstrate	4.03	Consistently Demonstrate
7. Evaluates results of his/her work and gets feedback to improve himself/herself	4.53	Role Model	4.30	Consistently Demonstrate
8. Makes specific changes in the system or in own work methods to improve performance	4.53	Role Model	4.30	Consistently Demonstrate
9. Evaluates agreed plans with teachers	4.47	Consistently Demonstrate	4.26	Consistently Demonstrate
10. Makes clear to teachers the results/outcomes expected of their school	4.53	Role Model	4.35	Consistently Demonstrate
Grand Weighted Mean	4.39	Consistently Demonstrate	4.29	Consistently Demonstrate

Point System Interpretation Descriptive Rating

4.5 – 5.0 Manifested To A Very Great Extent

3.5 – 4.49 Consistently Demonstrates Manifested To A Great Extent

2.5 – 3.49 Most of the Time Demonstrates Manifested To Some Extent

1.5 – 2.49 Sometimes Demonstrates Manifested To A Little Extent

1.0– 1.49 Rarely Demonstrates Manifested To A Negligible Extent

- Analysis of Variance was used to the significant difference in the perceptions of school heads and teachers;
- t-test for independent samples was used to determine the significance of the degree of relationship of the ratings between school heads and teachers;
- Spearman rho was used to determine the significant correlation between the ratings of school heads and teachers on the core behavioral competencies of school heads; and
- Pearson r was also used to determine the coefficient of determination.

III. RESULTS/FINDINGS AND DISCUSSIONS

Participants' Perceptions of the School Heads' Core Behavioral Competencies

Table 1 reveals that the school heads considered themselves role models in terms of

Table 4. Weighted Means Obtained By Participants In Terms of Teamwork

Indicators	Schools Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Willingly does his/her share of responsibility	4.47	Consistently Demonstrate	4.52	Role Model
2. Promotes collaboration and removes barriers to teamwork and goal accomplishment across the organization	4.80	Role Model	4.48	Consistently Demonstrate
3. Applies negotiation principles in arriving at win-win agreements	4.73	Role Model	4.33	Consistently Demonstrate
4. Drives consensus and team ownership of decisions	4.60	Role Model	4.32	Consistently Demonstrate
5. Works constructively and collaboratively with others and across organizations to accomplish organizational goals and objectives	4.67	Role Model	4.36	Consistently Demonstrate
6. Does not blame subordinates when things fail	4.73	Role Model	3.99	Consistently Demonstrate
Grand Weighted Mean	4.67	Role Model	4.33	Consistently Demonstrate

Table 5. Weighted Means Obtained By Participants In Terms of Service Orientation

Indicator	School Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Explains and articulates organizational directions, issues and problems	4.47	Consistently Demonstrate	4.43	Consistently Demonstrate
2. Takes personal responsibility for dealing with and/or correcting customer service issues and concerns	4.60	Role Model	4.52	Role Model
3. Initiates activities that promote advocacy for men and women empowerment	4.53	Role Model	4.33	Consistently Demonstrate
4. Participates in updating of office vision, mission, mandates and strategies based on DepEd strategies and directions	4.67	Role Model	4.45	Consistently Demonstrate
5. Develops and adopts service improvement programs through simplified procedures that will further enhance service delivery	4.53	Role Model	4.41	Consistently Demonstrate
Grand Weighted Mean	4.56	Role Model	4.43	Consistently Demonstrate

self-management as shown by the grand weighted mean of 4.51. However, according to them, they consistently demonstrate self-management when it comes to "Setting personal goals and direction, needs and development" as indicated by a weighted mean of 4.33 and "Taking into account personal goals and values congruent to that of the organization" with a weighted mean of 4.47. On the contrary, the teachers rated the school heads as consistently demonstrating self-management as shown by the grand weighted mean of 4.37.

While it is true that the school heads think of themselves as models of self-management, the teachers do not obs1.erve them as actually demonstrating it as such. This means that constantly demonstrating it through verbal and non -verbal ways could help the teachers' observation become consistent with that of the school heads'.

The teacher-participants gave similar statements that refer to the indicator "(The school head) displays emotional maturity an enthusiasm." Some of them disclosed that their school heads easily get irritated, others said that their school head is impatient and upset when things go wrong or when problems arise in school and others also said that their school head easily changes his mood and cannot control his emotion that tends to affect his decisions. The teachers suggested that their school heads should remain calm and cool since their negative emotions could affect their dealings with the teachers.

In relation to the same indicator, majority of the teachers considered their school heads as

Table 6. Weighted Means Obtained By Participants In Terms of Innovation

Indicator	School Heads		Teachers	
	WM	Interpretation	WM	Interpretation
1. Examines the root cause of problems and suggests effective solutions	4.67	Role Model	4.23	Consistently Demonstrate
2. Fosters new ideas, processes and suggests better ways to do things (cost and/or operational efficiency)	4.60	Role Model	4.36	Consistently Demonstrate
3. Demonstrates an ability to think "beyond the box"	4.53	Role Model	4.32	Consistently Demonstrate
4. Continuously focuses on improving personal productivity to create higher value and results	4.53	Role Model	4.43	Consistently Demonstrate
5. Promotes a creative climate	4.60	Role Model	4.20	Consistently Demonstrate
6. Inspires co-workers to develop original ideas or solutions	4.53	Role Model	4.26	Consistently Demonstrate
7. Translates creative thinking into tangible changes and solutions that improve the work unit and organizations	4.67	Role Model	4.23	Consistently Demonstrate
8. Uses ingenious methods to accomplish responsibilities	4.33	Consistently Demonstrate	4.17	Consistently Demonstrate
9. Demonstrates resourcefulness and the ability to succeed with minimal resources	4.47	Consistently Demonstrate	4.43	Consistently Demonstrate
Grand Weighted Mean	4.55	Role Model	4.29	Consistently Demonstrate

Table 6.1. Overall Mean Distribution of Core Behavioral Competencies of School Heads As Perceived By Themselves and By The Teachers

Indicators	School Heads WM	Inter	Teachers WM	Inter	Ave.	Interpretation
A. Self – Management	4.51	Role Model	4.37	Consistently Demonstrate	4.42	Consistently Demonstrate
B. Professionalism & Ethics	4.67	Role Model	4.42	Consistently Demonstrate	4.55	Role Model
C. Result Focus	4.39	Consistently Demonstrate	4.29	Consistently Demonstrate	4.34	Consistently Demonstrate
D. Teamwork	4.67	Role Model	4.33	Consistently Demonstrate	4.50	Role Model
E. Service Orientation	4.56	Role Model	4.43	Consistently Demonstrate	4.50	Role Model
F. Innovation	4.55	Role Model	4.29	Consistently Demonstrate	4.42	Consistently Demonstrate
Grand Mean	**4.56**	Role Model	**4.36**	Consistently Demonstrate	**4.46**	Consistently Demonstrate

having a burning desire to achieve quality, approachable and easy to be with, willing to accept suggestions, and eager to accomplish and submit required reports on time.

Self-management competency is about the 'how' of the school heads' role not just the 'what'. "It includes how they present themselves, manage other's perceptions of themselves and apply the competencies (www.studymode.com, 2016)."

For the school heads to perform well the four basic management functions like planning, organizing, leading, and controlling, they must be versed in self-management competency. For without this competency, they cannot have the confidence and ability to effectively manage themselves and the teachers.

The school heads claimed that they are role models of professionalism and ethics competency with a grand weighted mean of 4.67 as reflected in Table 2. However, they themselves perceived that they consistently demonstrate the indicator "(The school head) adopts his/her behavior easily according to situation as indicated by the weighted mean of 4.40. The teachers had a conflicting view that the school heads consistently demonstrate the said competency as shown by the grand weighted mean of 4.42. However, the teachers agreed that the school heads are role models on account of the indicators such as "(The school head) observes regularity of attendance and punctuality" with a

Table 7. Correlation Distribution of Responses in School Heads' Core Behavioral Competencies

Indicators	Decision	
Self-Management	Weak Negative correlation	Not Significant t = -0.473 t(4) = 2.13
Professionalism & Ethics	Strong Positive Correlation	Not Significant t = 1.388 t(7) = 1.895
Result Focus	Very Strong Positive Correlation	Significant t = 5.2404 t(8) = 1.860
Teamwork	Moderate Negative Correlation	Not Significant t = -0.7473 t(4) = 2.132
Service Orientation	Strong Positive Correlation	Not Significant t = 0.874 t(3) = 2.353
Innovation	Negligible Correlation	

Table 8. Difference between the Perceptions of School Heads and Teachers

Indicators	School Heads Weighted Mean	Teachers Weighted Mean	Decision
Self-Management	4.51	4.37	No significant difference Accept the null hypothesis α = .05
Professionalism & Ethics	4.67	4.42	Computed F-Value 1.20 Critical Value 3.11
Result Focus	4.39	4.29	Degrees of Freedom
Teamwork	4.67	4.33	Numerator 5
Service Orientation	4.56	4.43	Denominator 6
Innovation	4.55	4.29	

weighted mean of 4.54"; "Acts with sense of urgency and responsibility to meet the organization's goal" with a weighted mean of 4.51; and "Treats teachers with dignity and respect" with a weighted mean of 4.54, respectively.

A group of teachers supported their observation to their school head on the indicator "(The school head) has good communication." They disclosed that their school head lacks communication skills. This coincides with the school head's assessment of himself as he humbly mentioned it as his weakness and it is something that he needs to improve. Referring to the same school head, and in support to the indicator "(The school head) observes regularity of attendance and punctuality, a teacher revealed that his school head 'hates' late, which gives a positive connotation that the school head wants the teachers to strictly observe regular attendance and punctuality just as he himself does.

Still, some teachers revealed that their school head is tactless and straight forward that sometimes hurts their feelings. This observation of the teachers supports the indicator "(The school head) practices ethical and professional behavior and conduct taking into account the impact of his/ her actions/decisions.

As school leaders, it is a must for the school heads to be models of professionalism and ethics as these values/competencies are enshrined in the Norms of Conduct and Ethical Standards for Public Officials and Employees (R.A. 6713).

As professional and ethical leaders, the school heads must lead with an ethics agenda, persistently talk about ethics, and create a living conversation about ethics, values and the creation of value for stakeholders.

As presented in Table 3, the school heads and teachers had the same perceptions as to the demonstration of result focus competency by the school heads. Both groups of participants believed that school heads consistently demonstrate the said competency as indicated by the grand weighted means of 4.39 obtained by the school heads and 4.29 obtained by the teachers, respectively. Both groups of participants were also consistent in claiming that the school heads are role models in so far as the indicator "Expressing a desire to do better" is concerned as reflected by the weighted means of 4.80 obtained by the school heads and 4.57 obtained by the teachers, respectively. Further, they were also consistent in giving the lowest ratings for the same indicator that is "Expressing frustration at waste or inefficiency" as revealed by the weighted means of 3.87 by the school heads and 4.03 by the teachers.

The Results-Based Performance Management System being implemented in the Department of Education emphasizes the importance of result orientation competency. In schools, the school heads, teachers, and other school personnel are properly oriented anent the practice of the results-based performance management. Their individual performance is based on the results of their work by considering quality, efficiency and timelines as the key indicators. Hence, the orientation of the school heads and teachers on this behavioral competency could be a factor that explains the consistency in their perceptions.

Relative to the indicator "(The school

head) makes it clear to teachers the results expected of their school", the teachers praised their school head for being goal-oriented and result-focused that would set a clear direction of their school towards excellence. However, her being so sometimes tends to force the teachers to attain their school goal without noticing that she is already hurting and making them feel a bit frustrated.

Results focus combines strong analytical skills with an intense motivation to move forward and solve problems. If a leader is seen as being strong on results focus, the chance of that leader being seen as a great leader is only 14%; if a leader is seen as strong on social skills, s/he is seen as a great leader even less of the time– a partly 12%. For leaders who are strong in both results focus and social skills, the likelihood of being seen as a great leader skyrockets to 72% (Zenger, 2009 as cited in Lieberman, 2013).

Noteworthy is that in the survey conducted by Rocket (cited in Lieberman, 2013), less than 1% of leaders were rated high on both goal (result) focus and social skills.

Significantly, the school heads need to know what results are important and understand how to achieve them. They may not always achieve the desired results successfully but they certainly do aim to do so and learn from their mistakes.

It is delineated in Table 4 that the school heads are role models in terms of teamwork as shown by the grand weighted mean of 4.67. However, they perceived themselves as consistently demonstrating the indicator "(The school heads) willingly does his/her share of responsibility" with a weighted mean of 4.33.

The teachers opposed the school heads' self-perception of themselves in relation to teamwork. As observed by the teachers, the school heads consistently demonstrate teamwork as indicated by the grand weighted mean of 4.33.

On account of the indicators "(The school head) promotes collaboration and removes barriers to teamwork" and "drives consensus and team ownership of decisions", the teachers noted that their school head always involves them in planning and holding school programs, projects, and activities. Despite this positive observation to one school head, some teachers had a different observation to their school heads and they wish that their school heads would learn to talk to them as a group or team on matters that can improve their work.

Teamwork is a crucial part of the school operation, as it is often necessary for the school heads and teachers to work well together, trying their best in any circumstance. It means that they try to cooperate, using their individual skills and providing constructive feedback.

The success of teamwork in schools lies in the ability of the school heads to model themselves as good team players that eventually builds cooperation and willingness of the teachers to work together to achieve a common purpose.

It can be gleaned in Table 5 that of the six indicators of service-orientation competency, the school obtained the lowest weighted mean of 4.47 for the indicator "(The school head) explains and articulates organizational directions, issues and problems". Whereas, the teachers obtained the lowest weighted mean of 4.33 for the indicator "(The school head) initiates activities that promote advocacy for men and women empowerment. Both weighted means show that the school heads consistently demonstrate service orientation competency based on the afore-cited indicators.

Generally, the school heads obtained a grand weighted mean of 4.56 showing that they are role models in terms of service orientation, while the teachers obtained a grand weighted mean of 4.43 indicating that the school heads consistently demonstrate the said behavioral competency.

School headship is a service-oriented position. School heads who are extremely service oriented are most likely to excel in their schools. Moreover, as service oriented individuals, they are "predisposed to have empathy for a customer's needs and concerns coupled with the desire to meet those needs. Broken down into specific traits, this may include the predisposition to be courteous, tactful, cooperative, helpful, and attentive- with a tendency to be people oriented and extroverted" (Walner, 2016).

The school heads believed that generally they are role models of innovation competency as indicated by the grand weighted mean of 4.55 as presented in Table 6. However, the indicators in which they believed they consistently demonstrate are "(The school head) uses ingenious methods to accomplish responsibilities" with a weighted mean of 4.33 and "(The school head) demonstrates resourcefulness and the ability to succeed with minimal resources" with a weighted mean of 4.47, respectively. On the basis of the responses of the teachers, the school heads consistently

demonstrate innovation as indicated by the grand weighted mean of 4.29. Hence, the school heads and teachers had opposing views relative to the demonstration of innovation competency by the school heads. One interesting point given by a teacher- participant that has to do with the indicator "(The school head) promotes creative climate" is that her school head does not recognize **and** appreciate innovation done by teachers. This could not help in developing innovation competency among teachers.

Majority of the teachers recognized the efforts of their school heads in effecting improvements in their schools specifically on physical environment. The resourcefulness of the school heads could be greatly accounted for such improvements.

Through innovation competency, the school heads can be able to address challenging technical, instructional, curricular, and other school -related situations and problems. They can move their schools forward by applying new ideas or old ideas in a new way to generate solutions and approaches.

Table 6.1 presents that the core behavioral competencies such as professionalism and ethics, teamwork, and service orientation received 4.5 and above interpreted as role model. It would seem that these are the most observed behavioral competencies of school heads as perceived by the school heads themselves and by the teachers.

2. Significant Correlation in the Ratings of School Heads and Teachers on the Core Behavioral Competencies of School Heads

As shown in Table 7, the ratings of school heads and teachers on result focus received a very strong positive correlation and this connotes high significance level at .05 since the computed value of 5.2404 is higher than its critical value 1.860. Thus, there is consistency in the ratings of school heads and teachers on this particular core behavioral competency. Further, it can be inferred that the indicators of result focus highly suggest outputs which manifest observable properties.

As also shown in the table, the ratings of the school heads and teachers on professionalism and ethics, teamwork and service orientation competencies received positive correlation but not significant at 05 level of significance since the computed value of 1.388 is lower than its critical value 1.895. Therefore, there is no consistency in the ratings of school heads and teachers on these behavioral competencies. It can also be concluded that the correlation conveyed by the school heads and teachers may be due to chance.

The ratings of the school heads and teachers on self-management competency received a weak negative correlation but not significant at .05 level of significance since the computed value of -0.473 is lower than its critical value 2.13. The determinable negative correlation may also be due to chance.

3. Significant Difference in the Perceptions of School Heads Themselves and Teachers on the Behavioral Competencies of School Heads

Table 8 reveals that there is no significant difference between the perceptions of school heads themselves and teachers on the core behavioral competencies of school heads since the computed F value of -1.20 is less than the critical value F value of 3.11. The perceptions of the school heads are consistent with that of the teachers. Hence, it can also be concluded that the school performance of the school heads is directly correlated with their core behavioral competencies. As the saying goes "Always state the facts; they are hard to argue with."

4. Implication of the Findings of the Study on Performance Management System in Public High Schools

The success of school heads in delivering school goals effectively, efficiently and timely solely depends on how they apply behavioral competencies across the key result areas such as institutional leadership, learning environment, human development and management, and parents' involvement and community partnership.

Through this research, the skills, knowledge, attitudes, and values of the public high schools heads were assessed and made as basis for determining their development needs for further coaching and training with the end view of helping them to fully develop the competencies in which they need improvement.

Hence, this research provides evidences useful for the conduct of a performance review program for school heads, which is a salient component of the Results-Based Performance Management System.

IV. CONCLUSIONS

1. The school heads still lack skills, knowledge, attitudes and values in order to become role models of the six core behavioral competencies.

2. The school heads demonstrate professionalism and ethics, teamwork, and service orientation more than the competencies.
3. The observation of the school heads and that of the teachers on result focus are strongly related.
4. In general, the views of the school heads and teachers on the core behavioral competencies of the school heads themselves are consistent.

Recommendations

1. The school heads should continuously work on their development needs by acquiring the necessary skills, knowledge, attitudes and values.
2. The school heads should maintain observing their behavioral competencies while they are managing their schools.
3. The findings of this research should be made known especially to the school heads for they may find these useful in improving their job performance.
4. The school heads should design a development intervention program appropriate for addressing their needs.

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A SOCIOLINGUISTIC ANALYSIS OF SALUTATIONS: INSIGHTS FOR FORMAL WRITING

Lani Generoso-De Guia
Master Teacher II - English
Kalayaan National High School
Schools Division Office– Pasay

ABSTRACT

This study analyzes salutations construed in the letters received by the office of the Principal, Kalayaan National High School with the goal of discussing the language of politeness in the context of administrative and executive functions. It argues that the major politeness device implemented in the letters is the so-called praescripto, broadly defined as the address, greeting and blessing formula preceding the body of the letter (Thomas, 2009). After a detailed investigation of the praescripto, the situational contexts of Department of Education are explored from the letters sent to the executive personnel. The positive and negative politeness strategies proposed by Brown and Levinson's (1978) theory were employed. A data of 38 letters were analyzed to examine their use of politeness strategies with specific focus in the writing of the salutation. The results collected from the analysis of letters written by senders revealed that polite markers are obviously written to reveal social and rank distance by the term of endearment "Dear". Additionally, the results demonstrate that social distance plays an important role in the employment of different strategies, particularly in choosing the type of salutation, which is an act requiring the positive politeness strategy to reduce face threatening act.

***Keywords**: polite devices or markers, FTA, salutations*

I.INTRODUCTION

Aristotle, the legendary Greek philosopher, is credited with the quote that people are by nature social animals.

Sociolinguistics is the study of language in relation to some social factors such as social class, education, gender, and religious conventions. It is the study of language as it functions in the society and the interaction between linguistic and social variables. It has something to say about both linguistic structure and social structure (Meyerhoff, 2011).

Language serves several purposeful functions in the process and exchange of either oral or written information to convey and receive the intended meanings. Each language is concomitant with the society's norms and expectations in achieving the communicative competence of their speakers (Van Dijk, 2006).

Language follows certain prescribed rules not only in the perspective of semiotics such as syntax, semantics and pragmatics but also of ethics. The distribution of politeness (who has to be polite to whom) is socially controlled (Huang, 2007).

For an effective and efficient communication, politeness in language plays a major impact. It makes a speaker competent in a community in order to attend to possible social or interpersonal disturbance (Meyerhoff, 2011). The concept of politeness is a universal notion. Brown and Levinson (1987 cited in Van Dijk, 2006), theorize that social context is identifiable via the major parameters of social distance, status, and degree of imposition. Politeness in language allows the satisfaction of needs of the individuals as well as satisfying social or cultural norms (Meyehoff, 2011). When satisfaction is met, a positive face is achieved. A certain degree of homogeneity and understanding is achieved. However, in the event that the particular need and want is deviated and failed to achieve, the negative face is solicited. A certain degree of disturbance is created. In order to save the individual's face, politeness strategies will be carefully taken into consideration in the language use. Conventions of politeness vary between communities. To wit: in the abstract of the study of politeness in Buginese language conducted by Halim, Kaseng, Taha and Hamsa (2015), there was a clear manifestation of social status symbols in Wajo Regency. Similar findings in the study of language in ancient Hebrew letters (Thomas, 2009), were found

wherein politeness strategies are highly practiced. There is an obvious stratified social class in the verification of who is being addressed and who has sent the letter. One of the indications of being polite in ancient Hebrew is the belongingness to lower social status. Devices and markers stratify a society. Politeness may be defined in a number of ways and will depend on a variety of factors. In the cultures of Hebrew and Africa, there are prescribed rules that people follow in manifesting strategies of politeness.

On an observable basis, similar phenomenon can be traced in the Philippines. In the study of functional and interpersonal use of language in computer-mediated courses conducted by Correo (2014), the results clearly supported the theoretical stance that Filipinos, specifically the Bicolanos, deploy politeness strategies to maintain the equilibrium. In an empirical observation among Ilongos, the residents of the province of Iloilo, south of the Philippines, there is a high degree of politeness even on an account of an argument. A fight is unknown in their manner of speaking. However, a valid and authentic documentation on this context accounts for further research. The degree of politeness in language is associated with the society of speakers.

On the note of the related literature on politeness in language that were reviewed, the question of 'who has to be polite to whom' postulates the hypothesis that the young should render polite strategies to the older ones while the elders expect polite markers and devices from the young. In the study conducted by Alfull and Mwinlaaru (2012) students' utilization of other address and reference terms functioned as a symbol of domination and resistance to dominations as well as markers of identities which were co-constructed by students. Another contention is that people who belong to higher social status do not necessarily observe strategies of politeness (Thomas, 2009).

To date, one contemplating and perceiving the social implications of the speech in formal letters specifically in the office of the Department of Education posed a question 'how do letters comprise unique incarnations of politeness behavior?' (Thomas, 2009). Nevertheless, one cannot fail to realize the potential of studying the letters in the Department of Education to develop and test sociolinguistic theories of politeness.

Since, majority of communication in the Department of Education are made up of letters, it is by taking into account this specific mode of letters that one has the advantage to gain new insights into the language of politeness as construed in the educational institution. Letters, in comparison with literary documents, are more immediately bound to the circumstances and events of social milieu. Thomas (2009) further claims that letters are direct vistas into society, unmediated by the alloying voices and hands that were not visible. Furthermore, the sociolinguistic value of letters is observed in their deliberative quality. That is to say, a sender must exercise a high degree of intentionality in writing and sending a letter. This is true in the Department of Education due to its vast and dispersed location. Letters are distinct from spoken conversation which is to certain degree, less deliberate, even spontaneous (Thomas, 2009). On an observable basis, letters in the Department of Education follow the conventions observed in writing a business letter. According to Hollinger (2005), business letters are mostly persuasive, that is the writer wants to convey certain message to the recipient and thereby make him take a specific course of action. One of the persuasion strategies used by writers of business correspondence is politeness. Since letters provide a direct vista into their immediate environs, the culture in which the document is assembled has import for the language of politeness and vice-versa (Thomas, 2009).

Brown and Levinson's approach to politeness relies on the fundamental notion of face which in technical term is very similar to the way word is used metaphorically in many varieties of English (Meyerhoff, 2011). The notion of face can be traced back to work by the sociologist Erving Goffman, who used the term to discuss some of the constraints on social interaction. Goffman's work, 'face' was a personal attribute or quality that each of us works to protect and enhance. However crucially, face is something we only possess if it is recognized or granted to us by others in the community (Meyerhoff, 2011). Politeness has also been defined as 'any behavior whereby a person shows regard for another person by trying to make that person comfortable or by making obvious effort to avoid making that person feel uncomfortable (Green, 1996: 148 cited in Hollinger, 2005).

Another approach sees politeness achieved either in a context of social distance, called the negative face of someone or in a context of closeness called the positive face of someone (Meyerhoff, 2011). A person's negative face is his / her need not to be imposed on by others. On the other hand, a person's positive face expresses his / her need to be accepted or liked, to have his/ her wants shard by others. Thus, formal politeness is somewhat close to the positive face. Someone using it will express respect, deference, for the

Table 1. Frequency of Politeness Markers in Salutations

Salutations	*frequency (f)*
Dear + Honorific+ Name	*11*
Dear Sir / Madam	*9*
Dear + Sir + Name	*4*
Dear Madam	*4*
Dear+ Madam + Name	*2*
Dear + Designation	*2*
Madam	*2*
Dear + Madam / Sir	*1*
Sir / Ma'am	*1*
Dear + Honorific + Name + Designation	*1*
Pronoun+ Dear + Honorific + Name	*1*
Total	38

other person, in other words will take pains to use strategies and the adequate linguistic formulations to point out that we do not impose, that we leave options free to our correspondent. As for the positive face of someone, this is linked with more intimate politeness, fostering a feeling of being closely connected with the other party in the written interaction. As a preliminary remark, politeness in business letter writing involves taking into consideration the correspondent's feelings. Therefore, the language used should always avoid any choice of words that might be face-threatening.

A dearth of researches about politeness strategies in writing a letter were focused on the body of the letter. However, in the survey of related literature there is scarcity if none were done in the salutations or greetings. This study is an attempt to determine and qualify the kinds of salutations used in the business correspondence in the Department in Education.

This study attempted to investigate polite devices and formulas deployed in formal letters. This research sought to answer the following questions:

1. What are the politeness devices and formulas utilized in the letters? and

2. How are these politeness devices and formulas were used in the letters?

II.METHODOLOGY

Research Design

The study employed a descriptive qualitative method because the nature of this study is to unearth how politeness devices were utilized in the salutations of formal letters.

B. The Research Data

This study made use of the salutations sourced from the letters of the Department of Education. Pertinent data were randomly chosen from the larger corpus in store at the school office. The total number of letters is 38.

C. Method of Analysis

The analytical framework that was considered appropriate in this study is based on the study of Thomas (2009) for having the distinctive features that indicate the distinguished frames to guarantee the fulfillment of identifying the variants

Table 2. Politeness Devices and Formula Received by RD

Salutations	*Recipient*	*Sender*
Madam	*RD*	*President (Organization)*
Our Dear Honorable Dr. Almeda	*RD*	*President, Private Schools Society*
Dear Dr. Almeda	*RD*	*Project Head, UP Research*
Dear Dr. Almeda	*RD*	*Operations Manager*
Dear Madam / Sir	*RD*	*President (Organization)*
Madam	*RD*	*National Chairperson (Organization)*

Legend : RD- Regional Director

Table 3. Politeness Devices and Formula Received by SDS

Salutations	*Recipient*	*Sender*
Dear Dr. Ladines	*SDS*	*Branch Head*
Dear Madam	*SDS*	*GPTA Federation President*
Dear Sir / Madam	*SDS*	*Seminar Director*
Dear Sir / Madam	*SDS*	*SDS-OIC-Office of Assistant Regional Director*
Dear Madam Ladines	*SDS*	*Chapter Administrator*
Dear Madam Ladines	*SDS*	*Vice-President of Pasay City Federation of Teachers*
Dear Sir / Madam	*SDS*	*Director III*
Dear Sir / Madam	*SDS*	*SDS-OIC-Office of Assistant Regional Director*
Dear Sir / Madam	*SDS*	*Chapter Administrator*
Dear Madam	*SDS*	*Chapter Administrator*
Dear Madam	*SDS*	*Coordinator*
Dear Sir / Madam	*SDS*	*RD*
Dear Dr. Ladines	*SDS*	*RD*
Dear Sir / Madam	*SDS*	*RD*
Dear Dr. Ladines	*SDS*	*Operations manager*
Dear Dr. Ladines	*SDS*	*Office IV, GSIS*
Dear Ms. Ladines	*SDS*	*Chief Operating Officer*
Dear Sir / Madam	*SDS*	*Direstor, Budget (Malacanang)*
Dear Sir / Madam	*SDS*	*RD*
Dear Sir / Madam	*SDS*	*RD*
Dear Sir / Madam	*SDS*	*RD*

Legend: SDS- Schools Division Superintendent RD- Regional Director

of politeness markers used in the letters. On the utilization of politeness devices, the data were subjected to both quantitative and qualitative analyses with the quantitative analysis using the frequency count.

III. RESULTS AND DISCUSSION

Table 1 displays the formula and politeness markers that occurred in the letters written to the executives of Philippine Department of Education, Division of Pasay. Apparently, 'dear 'is the most prevalent term of endearment which according to Thomas (2009) indicates closeness of the sender to the receiver.

The term dear as I say always appeared in every correspondence not only in business letters but in almost all types of letters whether formal or informal. Letters such as friendly letter, love letter, business correspondence, or even ordinary ones used the endearment "dear".

It was very seldom that the "dear" in letters were not used. As a matter of fact, the two letters that do not bear the word dear in their correspondence to the Regional DepEd director does not really create distance but formality though I mentioned that this in one way or another create distance between the letter sender or the addressee in Table 2.

The used of Dear + Honorific + Name entailed formality and respect to the person being addressed because of their title and position in the organization that makes them more respectable in their own right. Somehow, that becomes the reason why even if we do not know the person being addressed in the letter whether formal or informal the used of the word Dear is always present.

Salutation	*Receiver*	*Sender*
Dear Ms. Tolentino	*P*	*OIC-Director*
Dear Sir/ Madam	*P*	*Regional Director, DOST*
Dear Ms. Tolentino	*P*	*Chapter Administrator*
Dear Mr. Jesus B. Valencia	*P*	*Director*

Legend: P -Principal

Table 5. Politeness Devices and Formula Received by Other Personnel

Salutations	*Recipient*	*Sender*
Dear Sir. Gloriani	*Supervisor*	*Up Metro Sports & Events Group*
Dear Dr. Genia Santos, Chief, Regional B DRRM Officer	*Dear Dr. Genia Santos, Chief, Regional B DRRM Officer*	*Rafael P. Briones, Col. PN*
Dear Teacher_ Res	*Teacher*	*SGOD , Planning, Research Section*
Dear Sir/ Madam	*Teacher*	*Chairperson*
Dear Friends	*Teacher*	*President*
Sir / Madam	*Guidance Officer*	*Kgd. , Co-chairman Barangay Council*
Dear Ms. Tonel	*SHS Division Coordinator*	*Admission Director*

The Dear + Designation in my study also indicate that the designation of the person can be classified as politeness marker as well specifically if you are referring to someone whom you do not know personally. In this case, the statement of the person title in the organization gives more emphasis on how the sender showed respect to the person being addressed in the letter.

In the Philippine setting where the culture is very rich, I can attest that politeness as well is culture-based. The person whatever his/her status in life need to be respected and in a way that can make them more comfortable in a situation with which the person being addressed was not personally known by the letter sender.

Dear Sir/Madam somehow showed a full respect to the addressee whether the recipient is a male or a female. I mean, this played safe because sometimes we don't exactly know the gender of the person we address in the letter so we used the title Sir and Madam. In that way we are able to show our politeness to whomever receive our letter.

Table 2 shows politeness devices and formula received by the Regional Director, henceforth RD, who assumes the highest rank in the Department of Education in the National Capital Region (NCR) and reveals that term of endearment' dear' is prevalently used which indicates that the sender is of close relationship with the receiver. Only two senders were noted to have shown a distance from the rank of the RD with the absence of term of endearment and merely used 'Madam'. The example above like Madam, Our Dear Honorable, Dear, Madam showcase on how polite devices were actually manifested in the letters sent and received by the Regional Director of Department of Education. These justified how the politeness devices were predominantly used by people in different walks of life to address their superiors. The politeness devices indicate that the addressee name always come with the word Dear as a form of endearment or politeness to the receiver of the letter.

In different context, we can say that politeness marker is very relevant because this does not only omit distance but create a healthy relationship between the letter sender and the receiver.

I can also say that in the example given above in Table 2 the letter sender was already sure as to the gender of the recipient that is why Madam was used in the letter salutation.

Table 3 manifests that senders have a close relationship with the receiver and shows assumption that the sender and the receiver have the same rank.

Similar to the example shown above in Table 3, the relationship here between the letter sender and the receiver was already established. The term of endearment/ politeness "Dear" comes with the name only like Dear Dr. Ladines or Dear Madam Ladines etc. created an assumption that the correspondence was sent to a person with the same position in their respective offices. Different departments have their own superior in the Department of Education like DS (District Supervisor) or EPS (Education Program Supervisor) by subject areas. The communication addressed between them DS to DS or EPS to EPS appeared to be friendly and yet still formal in terms of correspondence. In the Department of Education all letters were compiled as to day and year for reference therefore I can say that it was also a reason why formality is manifested in every letter.

Similar to table 2, the letter sender is quite sure to the gender of the receiver of the letter that is why Madam only or Sir only was used alone, but then there are still uncertainty because of the preponderant used of Dear Sir/Madam in other cases of the letter sent to the different heads in the Department of Education in the National Capital Region.

Table 4 also reveals that the senders are of close relationship with the Principal who is the head of the school.

In the table above the preponderance of Ms and Mr was used as a pattern as Dear Ms.

Tolentino or Dear Mr. Jesus Valencia though still Dear Sir/Madam applied specifically the letter sender were Directors and Administrators of the Department of Education. The particularity of the sender to the receiver is out of question here since most of the directors and the higher-ups have direct connection to the different principals and school heads in their respective districts.

Furthermore, the letters received and sent by both parties still bear the word Dear in the salutation as tradition of politeness that not only showed respect but endearment to each other. Meanwhile the correspondence as I said earlier appeared to have the term "dear" in all aspect or situation.

The term "dear" as I see cannot be replaced at this time with any other terms since this is the only word applicable for different letters and correspondence.

The person of higher rank in the department created a camaraderie by using the term "dear" in their correspondences sent to the different designated principals of different localities and municipalities of National Capital Region as directed by their superiors no matter their position in the organization.

Though the immediate pattern here showed no particular pattern as regard to the politeness devices applied by the letter senders on their salutations whether the sender or the receiver regardless of rank still used the tern Dear.

This manifests that the predominantly used "Dear" is out of question and is the reliable term or word for politeness in every letter sent and received by the Department of Education.

The letters sent to each personnel in Department of Education whether Superintendent, Academic Director, District Supervisor, Education Program Supervisor, Principal or just ordinary teacher appeared to be using Dear and Dear only in every letter and seldom that they used only the word Madam, Sir, or the name of the individual being addressed solely in the correspondence.

This indicates that the "Dear" is the most classic term as regard to correspondence salutation and used solely and predominantly in whatever case applied.

CONCLUSION AND RECOMMENDATION

In light of the findings revealed in the study, salutations that were construed in the letters received by the office of the Principal, do not necessarily follow the conventions that were manifested in the Hebrew letters (Thomas, 2009).

The study conducted as well observed the predominant used of "Dear" and "Dear + the honorific and designation" in almost all letters sent and received by the different heads and superior of the Department of Education whatever positions they are in, whether Director, Regional Director, Supervisors, Principal or ordinary teacher.

Max Weber (1977) as cited in Leeuwen (2008) described "rationalization" as a form of social entitlement in which social action is no longer oriented toward meanings, values, and beliefs, but toward strategies as the term "Dear" + other devices were predominantly used in the letters or correspondence. Therefore, the used of the word "Dear" as polite marker appeared to be proceduralized, turned into a step-by-step method through intricate legalistic rules that aim at achieving the purpose of the action more efficiently in all aspects that somewhat rationalized social interaction. It is therefore no longer consensual representation which binds the members of society together, but common practice, procedures.

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PARTICIPATORY SCHOOL ADMINISTRATION, LEADERSHIP, AND MANAGEMENT, AND SUPERVISION OF SELECTED PUBLIC SECONDARY SCHOOLS IN THE NATIONAL CAPITAL REGION: BASES FOR EFFECTIVE LEADERSHIP

Winefredo B. Ranes
Schools Division Office– Pasig City

I. THE PROBLEM

The primary objective of the study was to evaluate the effectiveness of Participatory School Administration, Leadership, and Management, and Supervision as bases for an effective administrative, leadership, and managerial, and supervisory functions in establishing best school practices of Selected Public Secondary Schools in the National Capital Region (NCR).

II. RESEARCH METHODOLOGY

The descriptive method of research was used in this study. The respondents were the school heads, the head teachers, and the teachers of public secondary schools in the National Capital Region. There were two hundred twenty four (224) male respondents, six hundred fifty eight (658) female respondents, and fifty four (54) respondents with "No Response"; a total of nine hundred thirty six (936) respondents were included in the study out of the actual one thousand five hundred forty four (1,544) respondents from the eighty six (86) public secondary schools in the National Capital Region (NCR), Department of Education (DepEd), who filled out the survey questionnaire.

The instrument used was the survey questionnaire for school heads, head teachers, and teachers. It was designed to be administered individually or to an entire group of respondents. The survey questionnaire was adapted, with due permission, from Dr. Diosdado M. San Antonio, Ph.D., Director of the Bureau of Secondary Education (BSE), Department of Education (DepEd), Philippines, questionnaire which included the indicators on Participatory School Administration, Leadership, and Management, and Supervision. The researcher added the portion for Supervision.

The research instrument consisted of the following parts: Part I - Personal Profile of the respondents which included age, gender, school, and category; Part II – Participatory School Administration which measured 23 discrete questions; Part III-Leadership and Management which measured Commitment, Empowerment , and Trust; and Part IV – Supervision.

The data gathered were analyzed and interpreted using the following statistical tools: percentage, weighted mean, the One-way Analysis of Variance, and the Six Points Rensis Likert's scale. The assigned level of degree of significance was α .05 margin of error.

For this study, the conversion of the Rensis Likert's scale was done for an easy interpretation of the data: 6. Strongly Agree-Highest, 5. Agree- Higher, 4. Slightly Agree- High, 3. Slightly Disagree- Low, 2. Disagree-Lower, and 1. Strongly Disagree- Lowest.

III. SUMMARY

1. Profile of the Respondents

1.1 According to Gender

Out of the nine hundred thirty six (936) respondents, two hundred twenty four (224) were males and six hundred fifty eight (658) females. Fifty four (54) respondents did not respond.

1.2 According to Age

Out of nine hundred thirty six (936) respondents**,** two hundred fifty seven (257), were "21-30 years old", three hundred fifteen (315), "31-40 years old", one hundred thirty two (132), "41-50 years old", and one hundred seventy eight (178), "51 years old and above". Fifty four (54) respondents did not respond.

2. Respondents' Assessment Outcome on Indicator Participatory School Administration

The responses on indicator Participatory School Administration were assessed based on the following items for preferred Committees in the Participatory School Administration:

2.1 The "Student Discipline Committee" was first preference. The "Personnel Committee" was second, the "Curriculum Committee", third;

2.2. The effective suggestions to sustain the program, "meet 1-2 weeks before and

report to next meeting with the school head" was first, and "submit alternative solutions for consideration", second;

2.3 Decisions made should be done "by consensus", first. " By majority vote", second and, "on school head's recommendation", third;

2.4 To implement decisions, the first preference was, "it requires the school head to report progress at each meeting", and, second, "makes the school head responsible for implementation";

2.5 On how active and empowered the stakeholders were: first, they were active and empowered in crafting their schools' "vision and mission" statements; next, the formulation of their schools' "goals" and then, initiated action with regard to "students discipline" matters;

2.6 On the limitations and constraints on policy decisions, the preferences were: first, they "have to be within the broad guidelines of DEPED", and second, they "have to be within the regional/ division policy";

2.7 On the present composition of the Participatory School Administration: It was rated as "Good", "Very Good", and "Excellent", in that order;

2.8 On the question, what happens in the process? "Every member gets a fair chance to express his/her views"

2.9 On the question, Is there a particular group that dominates the decision making process? The "teacher representatives" ranked first, the "school heads", second, and the "parent representatives", third;.

2.10 "Yes", the domination by the group or groups worked to the detriment of the functioning of the school;

2.11 On the extent the effectiveness of the Participatory School Administration gave: "Much" ranked first, "Little", second, and "Very much", third;

2.12 On the question, what is the usefulness of the Committee structure? The respondents rated the usefulness of the Committee structure as "Very good", Ranked 1, "Good", Ranked 2, and "Excellent", Ranked 3;

2.13 The stakeholders' authority and power were "Not adequate", Ranked 1 and "Adequate", Ranked 2;

2.14 The respondents access to adequate information was rated "Good", and "Very good", in that order;

2.15 The respondents rating on availability of time were "Adequate" and "Barely adequate", in that order;

2.16 The ranking of respondents ensuring accountability was, first, "by consult opinion leaders regularly"; second, "take advice from and to respective fellow parents, teachers, students, alumni, or community leaders";

2.17 On the question, what is the influence of Participatory School Administration? The Participatory School Administration has influenced over the school environment. First choice was, "It has improved little", and second, "It has improved significantly".

2.18 The over-all functioning or operation of Participatory School Administration was rated as "Very Good", Ranked 1, "Good", Ranked 2,and, "Excellent", Ranked 3.

2.19 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Leadership and Management as a Dimension of Practices on Indicator Commitment

The head teachers and the teachers gave a grand weighted mean of 4.62 and 4.56 respectively, with verbal interpretation of "Agree", which were "higher" level. The school heads had the grand weighted mean rating of 4.41 with verbal interpretation of "Slightly Agree", which was "high" level of assessed Commitment.

The school heads had the verbal interpretation of "Slightly Agree", which was "high" level of assessed Commitment. The head teachers and the teachers had the verbal interpretation of "Agree", which were "higher" level of assessed Commitment.

In general, the school heads had "high" level of assessed Commitment.

2.20 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Leadership and Management as a Dimension of Practices on Indicator Empowerment

The head teachers had the grand weighted mean rating of 5.02 with verbal interpretation of "Agree", the school head 4.97, with verbal interpretation of "Agree", and the teachers 4.93, with the verbal interpretation of **"**Agree".

In general, the respondents' school heads, head teachers, and teachers had the verbal interpretation of "Agree". This implied the respondents had "higher" level of assessed experienced Empowerment in their work places.

2.21 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Leadership and Management as a Dimension of Practices on Indicator Trust

The teachers had the grand weighted mean rating of 4.33 with verbal interpretation of "Slightly Agree", the head teachers, 4.31, with verbal interpretation of "Slightly Agree" and the school heads, 4.18, with verbal interpretation of "Slightly Agree".

The grand weighted mean of the respondent school heads, head teachers, and teachers had with verbal interpretation of "Slightly Agree". This implied the respondents had "high" level of assessed Trust among each other.

2.22 Weighted Mean and Verbal Interpretation of the Respondents' Responses to Leadership and Management as a Dimension of Practices on Indicator Supervision

The school heads had the grand weighted mean rating of 5.33 with verbal interpretation of **"**Agree", the head teachers, 5.32, with verbal interpretation of "Agree", and the teachers, 5.16, with verbal interpretation of "Agree".

The grand weighted mean of the respondent school heads, head teachers, and teachers had verbal interpretation of "Agree". The respondents had "higher" level of assessed experienced Supervision among each other. This implied the school environment had very well supervised.

2.23 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Commitment, When Grouped According to Age

The respondents' grand weighted means and verbal interpretation, when grouped according to age from: the age bracket "21-30 years old" had the grand weighted mean rating of 4.52 with verbal interpretation of "Agree". The age bracket "31-40 years old" had the grand weighted mean rating of 4.62 with verbal interpretation of "Agree". The age bracket "41-50 years old", 4.55, with verbal interpretation of "Agree". The age bracket "51 years old and above", 4.50, with verbal interpretation of "Slightly Agree".

The grand weighted mean of all the age brackets of respondents had verbal interpretation of "Agree", except for the age bracket "51 years old and above", which had the verbal interpretation of "Slightly Agree", when the respondents were grouped according to age. This implied the respondents had "higher" level of Commitment, except for the age bracket "51 years old and above", which had "high" level of assessed Commitment, when the respondents were grouped according to age. The younger generation of teachers were more Committed compared to the older generation of teachers.

2.24 Weighted Mean and Verbal Interpretation of the

Respondents' Responses on Indicator Empowerment, When Grouped According to Age

The respondents' grand weighted mean ratings and verbal Interpretation, when grouped according to age from: the age bracket "21-30 years old" had the grand weighted mean rating of 4.90 with verbal interpretation of "Agree". The age bracket "31-40 years old", 4.93, with verbal interpretation of "Agree". The age bracket "41-50 years old" ,5.06, with verbal interpretation of "Agree". The age bracket "51 years old and above" ,4.94, with verbal interpretation of "Agree".

The grand weighted mean rating of the respondents had verbal interpretation of "Agree:" This implied the respondents had "higher" level of assessed experienced Empowerment, teachers perceived to have been empowered by their school heads when they were grouped according to age.

2.25 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Trust, When Grouped According to Age

The respondents' grand weighted mean and verbal interpretation, when they were grouped according to age from: the age bracket "31-40 years old" had the grand weighted mean rating of 4.39 with verbal interpretation of "Slightly Agree". The age bracket "41-50 years old" ,4.32, with verbal interpretation of "Slightly Agree". The age bracket "21-30 years old" ,4.27, with the verbal interpretation of "Slightly Agree". The age bracket "51 years old and above", 4.26, with verbal interpretation of "Slightly Agree".

The grand weighted means of the respondents had verbal interpretation of "Slightly Agree". This implied the respondents of all age brackets had "high" level of assessed Trust among each other, teachers perceived to have the level of trust was not that so really conceivable in the work place, when they were grouped according to age.

2.26 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Supervision, When Grouped According to Age

The respondents' grand weighted means and verbal interpretation, when they were group according to age from: the age bracket "51 years old and above" had the grand weighted mean rating of 5.31 with verbal interpretation of "Agree". Its item D7, "The school head makes sure the teachers faithfully attend to their classes regularly" had the mean rating of 5.51 with verbal interpretation of "Strongly Agree", which was "highest" level of experienced Supervision. The age bracket "41-50 years old" had the grand weighted mean rating of 5.23 with verbal interpretation of "Agree". The age bracket "31-40 years old" had the grand weighted mean rating of 5.17 with verbal interpretation of "Agree". The age bracket "21-30 years old" had the grand weighted mean rating of 5.09 with verbal interpretation of "Agree".

The grand weighted mean of the respondents had all verbal interpretation of "Agree". All the respondents "Agree" among each other on the indicator Supervision, when they were grouped according to age. This implied the respondents had "higher" level of assessed experienced Supervision among each other. The respondents of the age bracket "51 years old and above" had the "highest" level of experienced Supervision most particularly on item D7." The school head makes sure the teachers faithfully attend to their classes regularly" of the indicator Supervision. The teachers perceived to have experienced the school environment had very well supervised by the school heads.

2.27 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Commitment, When Grouped According to Gender

The grand weighted mean of the respondents both male and

female and verbal interpretation of responses on indicator Commitment according to gender, the male respondents had the grand weighted mean rating of 4.59 with verbal interpretation of "Agree", while the female respondents had the grand weighted mean rating of 4.56 with verbal interpretation of "Agree"

The grand weighted mean of both respondents male and female had ratings of 4.59 and 4.56, respectively, with verbal interpretation of "Agree", except for items A3," The School Head feels very little loyalty to this school" and A6, **"**The School Head tells that there is not much to be gained by sticking with this school indefinitely" of both male and female respondents with verbal interpretation of "Slightly Disagree". This implied that there was a cloud of doubt on the level of Commitment of the school heads. They had the feeling of pessimism about their jobs, when the respondents were grouped according to gender. The respondents both male and female had the "higher" level of assessed Commitment. Teachers were perceived to have been Committed with their profession in the work place.

2.28 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Empowerment, When Grouped According to Gender

The grand weighted mean of the respondents both male and female and verbal interpretation, when grouped according to gender. The female respondents had 4.97, with verbal interpretation of "Agree". While, the male respondents had 4.89, with verbal interpretation of "Agree".

The grand weighted mean, both respondents male and female had verbal interpretation of "Agree". This implied both respondents male and female had affirmed the fact their school heads had empowered them in their work places, when the respondents were grouped according to gender. They had "higher" level of assessed experienced Empowerment.

2.29 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Trust, When Grouped According to Gender

The grand weighted mean of the respondents male and female and verbal interpretation, when grouped according to gender. The male respondents had 4.41, with verbal interpretation of "Slightly Agree". The female respondents 4.29, with the verbal interpretation of "Slightly Agree".

The grand weighted mean of the respondents both male and female had verbal interpretation of "Slightly Agree". This implied the respondents both male and female had "high" level of assessed Trust towards their school heads, when they were grouped according to gender. The teachers perceived level of trust towards their school heads was not so conceivable considering it was only "high".

2.30 Weighted Mean and Verbal Interpretation of the Respondents' Responses on Indicator Supervision, When Grouped According to Gender

The grand weighted mean of the respondents both male and female and verbal interpretation, when grouped according to gender. The female respondents had 5.20, with verbal interpretation "Agree". While, the male respondents 5.12, with verbal interpretation of "Agree".

The grand weighted mean of the respondents both male and female had verbal interpretation of "Agree". This implied both respondents male and female had "higher" level of assessed experienced Supervision with their school heads. The teachers perceived the school environment to have been very well supervised.

3.1 Significant Difference Among the

Dimension of Practices as Indicators Commitment, Empowerment, Trust, and Supervision, When Grouped According to Gender

On the test for the significant difference on indicator Commitment: the male respondents had the grand weighted mean rating of 4.59, while the female respondents, 4.56, with a *f* -computed test of 5.129 and a P-value of .024. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Rejected". "*There was a significant difference on the dimension of practices of respondents on indicator Commitment among other dimensions of practices as indicators against, Trust, and Supervision"," but there was a significant difference on the dimension of practices of respondents on indicator Commitment among other dimensions of practices as indicators against Empowerment, when the respondents were grouped according to gender."*

On the test for the significant difference on indicator Empowerment: the male respondents had the grand weighted mean rating of 4.89, while the female respondents, 4.97, with a *f*-computed test of 8.264 and a P-value of .004. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Rejected". "*There was a significant difference on the dimension of practices of respondents on indicator Empowerment among other dimensions of practices as indicators against Trust, and Supervision," "but there was a significant difference on the dimension of practices as indicator against Commitment, when the respondents were grouped according to gender*."

On the test for the significant difference on indicator trust: the male respondents had the grand weighted mean rating of 4.41, while the female respondents,4.29, with a *f*-computed test of .058 and a P-value of .810. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Accepted". "*There was no significant difference on the dimension of practices of respondents on indicator Trust among other dimensions of practices as indicators against Supervision," "but there was a significant difference on the dimension of practices as indicator against Commitment and Empowerment, when the respondents were grouped according to gender*."

On the test for the significant difference on indicator Supervision: the male respondents had the grand weighted mean rating of 5.12, while the female respondents, 5.20, with a *f*-computed test of .408 and a P-value of .523. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Accepted". "*There was no significant difference on the dimension of practices of respondents on indicator Supervision among other dimensions of practices as indicators against Trust," "but there was a significant difference on the dimension of practices of respondents on indicator against Commitment and Empowerment, when the respondents were grouped according to gender*."

3.2 Testing for the Significant Difference Among the Dimension of Practices, Commitment, Empowerment, Trust, and Supervision, When Grouped According to Category (School Heads, Head Teachers, and Teachers)

On the test for the significant difference on indicator Commitment: the respondent school heads had the grand weighted mean rating of 4.41, while the head teachers,4.62, and the teachers, 4.56, with a *f*-computed test of 1.592 and a P-value of .204. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Accepted". "*There was no significant difference on the category of the school heads, the head teachers, and the teachers on indicator Commitment against Empowerment and Trust," "but there was a significant difference against indicator Supervision*."

On the test for the significant difference on indicator Empowerment: the respondent school heads had the

weighted mean rating of 4.97, the head teachers, 5.03, and the teachers, 4.93, with a *f*-computed test of .988 and a P-value of .373. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Accepted". "*There was no significant difference on the category of the school heads, the head teachers, and the teachers on indicator Empowerment against Commitment, and Trust"," but there was a significant difference against indicator Supervision*."

On the test for the significant difference on indicator Trust: the respondent school heads had the grand weighted mean rating of 4.18, the head teachers, 4.31, and the teachers, 4.33, with a *f*-computed test of .934 and a P-value of .393. The margin of error was at α 0.05 level of degree of significance. Therefore, the null hypothesis was "Accepted". "*There was no significant difference on the category of the school heads, the head teachers, and the teachers on indicator Trust against indicators Commitment and Empowerment," "but there was a significant difference against indicator Supervision*."

On the test for the significant difference on indicator Supervision: the respondent school heads had the grand weighted mean rating of 5.33, the head teachers, 5.32, and the teachers, 5.16, with a *f*-computed test of 3.869 and a P-value of .021. The margin of error was at α 0.05 level of degree of significance.

Therefore, the null hypothesis was "Rejected". "*There was a significant difference on the category of the school heads, the head teachers, and teachers on indicator Supervision against indicators Commitment, Empowerment, and Trust*."

3.3 Testing for the Significant Difference Among the Dimension of Practices: Commitment, Empowerment, Trust, and Supervision, When Grouped According to Age

On the test for the significant difference on indicator Commitment: the age bracket "21-30 years old" had the grand weighted mean rating of 4.52, the age bracket "31-40 years old", 4.62, the age bracket "41-50 years old" , 4.55, and the age bracket "51 years old and above", 4.50, with a *f*- computed test of 1.767 and a P-value of .152. Therefore, the null hypothesis was "Accepted". "*There was no significant difference among the dimension of practices on indicators Empowerment and Trust," "but there was a significant difference on the dimension of practices against indicator Supervision*."

On the test for the significant difference on indicator Empowerment: the age bracket "21-30 years old" had the grand weighted mean rating of 4.90, the age bracket "31-40 years old", 4.93, the age bracket "41-50 years old", 5.06, and the age bracket "51 years old and above", 4.94,with a *f* - computed test of 1.610, and a P-value of .185. Therefore, the null hypothesis was "Accepted". "*There was no significant difference among the dimension of practices on indicators Commitment and Trust," "but there was a significant difference on the dimension of practices against indicator Supervision*."

On the test for the significant difference on indicator Trust: the age bracket "21-30 years old" had the grand weighted mean rating of 4.27, the age bracket "31-40 years old", 4.39, the age bracket "41-50 years old", 4.32, and the age bracket "51 years old and above", 4.26, with a *f*- computed test of 1.884, and a P-value of .131. Therefore, the null hypothesis was "Accepted". "*There was no significant difference among the dimension of practices on indicators Commitment and Empowerment," "but there was a significant difference on the dimension of practices against indicator Supervision.*"

On the test for the significant difference on indicator Supervision: the age bracket "21-30 years old" had the grand weighted mean rating of 5.09, the age bracket "31-40 years old", 5.17, the age bracket "41-50 years old", 5.23, and the age bracket

"51 years old and above", 5.31, with a *f*- computed test of 4.299, and a P-value of .005. Therefore, the null hypothesis was "Rejected". "*There was a significant difference among the dimension of practices on indicators Commitment, Empowerment, and Trust against indicator Supervision*."

On the test for the significant difference on indicator Commitment: the null hypothesis was 'Accepted". "*There was no significant difference among the dimension of practices on indicators Empowerment and Trust," "but there was a significant difference on the dimension of practices against indicator Supervision*."

On the test for the significant difference on indicator Empowerment: the null hypothesis was "Accepted". "*There was no significant difference among the dimension of practices on indicators Commitment and Trust," "but there was a significant difference on the dimension of practices against indicator Supervision."*

On the test for the significant difference on indicator Trust: the null hypothesis was" Accepted". "*There was no significant difference among the dimension of practices on indicators Commitment and Empowerment," "but there was a significant difference on the dimension of practices against indicator Supervision*."

On the test for the significant difference on indicator Supervision: the null hypothesis was "Rejected". "*There was a significant difference among the dimension of practices on indicators Commitment, Empowerment, and Trust against indicator Supervision*."

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4P'S AND ITS RELATION TO SCHOOL ATTENDANCE & ACADEMIC PERFORMANCE OF STUDENT RECIPIENTS: A CLOSER LOOK

Winston E. Ebagat
Chairman
Teona L. Marcelino
Member
Social Studies Department
Batasan Hills National High School
Schools Division Office– Quezon City

ABSTRACT

This study aimed to establish the relation of Pantawid Pamilyang Pilipino Program (4P's) to the school attendance and academic performance of its student recipients. In order to achieve the purpose of this study, the descriptive case study method, descriptive survey method and purposive sampling technique in selecting the participants was employed. Likewise, a T-test of independent sample mean was utilized to compare the mean difference of 50 4P's and 50 non-4P's students on school attendance, absences and academic performance. The results of the study includes: the 4P's students are complying with the 85% school attendance set by the DSWD since they recorded a mean attendance of 183 school days or an equivalent of 91% school attendance for S. Y. 2015-2016. The primary reasons for 4P's recipients to be absent are sickness, laziness and taking care of siblings. Furthermore, the result of the survey and FGD with parents' shows that majority of the 4P's students were able to submit their school projects and requirements and that a "Sig. (2-tailed)" value of 0.179 was computed when the academic performance of the 4P's and non-4P's students was compared. Hence, the researcher suggested that 4P's students should be grouped into a blocked section among others.

Keywords: Pantawid Pamilyang Pilipino Program (4P's), Conditional Cash Transfer (CCT), School Attendance, Academic Performance

I. CONTEXT AND RATIONALE

Investment in human development specifically in education and health significantly improves a country's chances of achieving long-term progress. Health is central to well-being, and education is essential for a satisfying and rewarding life; both are fundamental to the broader notion of expanded human capabilities that lie at the heart of the meaning of development. At the same time, education plays a key role in the ability of a developing country to absorb modern technology and to develop the capacity for self-sustaining growth and development. Thus, both health and education are vital components of growth and development (Todaro & Smith, 2011).

The Philippine government is committed to investing in its human resources. In fact, the Philippines is one of the signatories in the Incheon Declaration 2015 that aims to provide equitable and inclusive quality education and lifelong learning opportunities for all. It is the beginning of an imperative phase in the development of international education policy, continuing the Education for All (EFA) that started in Jomtien and Dakar in 1990 and 2000, respectively (Incheon Declaration, 2015). The vision of the said declaration is to transform lives through education, recognizing the important role of education as a main driver of development and in achieving the other proposed sustainable development goals.

To prove the sincerity and ingenuity of the government to eradicate poverty and inequality, the social services allocation is already at Php 1.11 trillion based on the 2016 National Expenditure Program (NEP), the Department of Education was given Php 435.9 billion. However, poverty incidence seems to worsen as years passes by. Poverty rate in the country ascended from 24.62%

in 2013 to 25.8% in 2006 and it continued to increase to 26.30% in the first quarter of 2015 (psa.gov.ph). Hence, seeing all these findings, the Philippine government through the initiative of the Department of Social Welfare & Development (DSWD) was stirred to adopt a conditional cash transfer program commonly dubbed as Pantawid Pamilyang Pilipino Program (4P's).

In 2007, the Philippine government through the initiative of the DSWD implemented a conditional cash transfer program called the Pantawid Pamilyang Pilipino Program (4P's). It is defined as a poverty reduction and social development strategy of the National Government that provides conditional cash grants to extremely poor households to improve their health, nutrition and education particularly of children aged 0-14." It has dual objectives: 1) Social Assistance -to provide cash assistance to the poor to alleviate their immediate need (short-term poverty alleviation); and 2) Social Development - to break the intergenerational poverty cycle through investments in human capital. It helps to fulfil the country's commitment to meet the goals of Incheon Declaration 2015 which includes the following: ensuring the provision of 12 years free, publicly funded, equitable quality primary and secondary education; inclusion and equity to the most disadvantaged especially to those with disabilities; gender equality; improving quality education and learning outcomes; lifelong learning opportunities including the increased access to technical and vocational education and higher education and research; highlight the need to have a safe, supportive, and secure learning environment; and increase public spending on education, to mention a few (Incheon Declaration, 2015).

Moreover, the 4P's beneficiaries are expected to achieve the following goals in health and nutrition, education and poverty reduction. In terms of education the program is expected to achieve the following: 1) improve the current attendance of children by 8% in a school year, 2) increase the transition rates from primary to secondary school by 8%, 3) increase by one year the years of education completed, 4) increase by 5% the elementary school gross enrolment rate for children 6-12 years of age, 5) increase by 10% attendance in a school over 85% of school days, 6) increase the enrolment rate of children 3-5 years old to day care/pre-school by 5%. Based on the objectives of the program, 4P's has the potential to yield higher enrolment rates and improve the participation rate of students from extremely poor families.

The beneficiaries shall receive cash grant from the government amounting to Php 500 as health and nutrition grant and Php 300 per child as educational grant monthly. A maximum of three children beneficiaries shall be covered by educational grant. The household recipients will receive this educational grant on a condition that children 6-14 years of age shall enrol in schools and attend at least 85% of the time. Thus, it is anticipated that the students from extremely poor families will have more reasons to go to school for they have financial support from the government. Henceforth, improvement in school attendance is expected to materialize since parents will be receiving financial assistance from the government through this program and this financial grant can be used by parents in sending their children to school and in supporting their education needs like school allowance, school projects, transportation etc.

Likewise, looking at the objectives and long-term goals of 4P's it is safe to say that it is indeed admirable, ideal and could yield favourable outcomes for the government and beneficiaries. However, in any program, there are always loopholes and lapses, the researchers would like to determine in this study if the student recipients of 4P's in Batasan Hills National High School are regularly attending school to satisfy one of the conditions of the program which is children beneficiaries must enrol in school and maintain an attendance of at least 85% in a school year and to discover if the academic performance of 4P's students are at par to that of their non 4P's counterpart.

Review of Related Literature

Conditional Cash Transfer on Education Outcomes

Several researches in conditional cash transfer (CCT) program has been made in the previous years. Many of these studies focuses on the impact of the program on education, inequality and health and nutrition. Experts including Saavedra & Garcia (2012), Todaro & Smith (2011), Riccio (2010) and Son (2008) all made a study on the impact of CCT program on education outcomes. Saavedra & Garcia (2012), Riccio (2010) and Son (2008) all agreed that conditional cash transfer program is more likely to be effective in the secondary level compared to the primary level. Saavedra & Garcia (2012) said that CCT program has a 12% average size effect compared to the 3% in the primary level and has reduced drop outs by twice in the high school than in the elementary. Todaro & Smith (2011) that payments work well in increasing the school enrolments, attendance, progress through grades

and other schooling outcomes, further support this idea. The authors even reiterated that Progresa/ Oportunidades of Mexico has larger impact on enrolment and performance per dollar spent than building new schools and that school attendance have improved significantly especially in the transition period of grade six through nine (Todaro & Smith, 2011). Moreover, the authors argued that Progresa/Oportunidaes has increased by 20% the number of children who stay in school rather than drop out just before high school.

However, Riccio (2010) & Son (2008) seem to negate the ideas presented by Todaro & Smith (2011). Riccio (2010) mentioned that although the cash payment increased the proportion of high school students with 95% attendance rate by 5% conditional cash transfer has no impact on school achievement this argument is further seconded by Son (2008) that Progresa/ Oportunidades improved the enrolment rate in the high school level but has a little impact on the attendance rate, achievement or in attracting the dropout rates. Son (2008) further noted that conditionality should be introduced since cash transfer, alone, is not enough to increase the school attendance nor the participation of the students.

Nevertheless, Saavedra & Garcia (2012) reminded the policy makers that conditional cash transfer is more effective in context in which enrolment and attendance are relatively poor and that more generous transfer program results to a more positive outcome which means that the higher the amount of cash transfer the better the results could be.

Conditional Cash Transfer on Income Inequality

In the case of the impact of cash payment to income inequality, Reyes & Tabuga (2012) on their paper discussed the basic requirement of a conditional cash transfer program some of which are the following: 1.) it has to be multidimensional approach in which demanding coordination among the implementing agencies should materialize, 2.) there should be a state policy to withstand the changes in administration and funding. 3.) There should be strong statistical capacity and banking system and 4.) The necessary services are in place and of good quality. The authors suggested that first there is a need to establish empirical evidence that 4P's affects human capital outcomes. Second, there is a need to utilize more than one reference period to account for the movement in and out of poverty since majority of poor in 2009 are transient poor. Lastly, it will be good to review the strategy covering selected barangay in some of the municipalities since limiting the coverage to the "pockets of poverty" may lead to significant exclusion. Hence, there is a need to expand the targeting and coverage of the program.

The idea discussed by Reyes & Tabuga (2012) seems to be coherent to the ideas of Soares, Osorio, Medeiros & Zepeda (2007). Soares et al., (2007) discussed that there is a high level of income inequality in Mexico, Brazil and Chile prior to the implementation of conditional cash transfer program. The authors reiterated that conditional cash transfer was so well targeted in Mexico and Brazil that even with small participation in the total income they have an imperative contribution in decreasing inequality and only in Chile where in there had no pertinent impact. Soares et al., (2007) observed that due to excellent targeting, conditional cash transfer is a very low cost of reducing income inequality.

Conditional Cash Transfer on Health & Nutrition

In terms of the impact of conditional cash transfer to health and nutrition, Dammert (2008) discussed that *Red Protection Social* (RPS) program has a greater effect on households who would otherwise have had a high per capita total and food expenditures. He noted that households with lower expenditures are more likely to not be meeting the requirements.

On the same hand, Fernald, Gertlet and Neufeld (2008) pointed out, in their research, that Oportunidades intervention yielded better outcomes in many aspects of child's physical, cognitive and language development. Positive outcomes, according to these experts, included the following: 1.) increased in height, 2.) decreased in BMI for age percentile, 3.) decreased prevalence of stunting and being overweight, 4.) increased performance on one scale of motor development and 5.) Language development. The authors argued that conditional cash transfer programmes are positively associated with child well-being and that the amount of cash subsidy could be a source of variation of effects to the beneficiaries. Likewise, Fernald et al., (2008) conversed that additional income allow parents to have greater purchasing power and that income could affect child development by improving the psychological well-being of family members thereby improving the care.

Based on the review of related literature and studies, the researchers concluded that there are varying viewpoints from different experts as to the effectiveness of conditional cash transfer

program in improving the school attendance of students. Son (2008) reiterated that this program had little impact on the school attendance and achievement of students while other experts like Todaro & Smith (2012) noted that these payments to parents work well to increase school enrolment, attendance and school outcome of students. On the other hand, several experts like Riccio (2010) and Saavedra & Garcia (2012) discussed that cash transfers is more effective to the secondary level compared to the primary level and that conditional cash transfer program has improved significantly the enrolment rate and increased the school attendance of student beneficiaries. However, in spite all the researches made to evaluate the effectiveness of conditional cash transfer program, there has been no studies that aims to discover if 4P's students are complying with the school attendance requirement of the DSWD. This study will also make an insightful comparison on the school attendance of 4P's students to their non-4P's counterparts; this study is the first of its kind will determine if 4P's beneficiaries are really attending school regularly. It will also be the first study to discover if 4P's recipients academically perform better over their peers who does not have 4P's. It is also worth mentioning that public high school teachers who have direct contact and exposure on the school participation of 4P's students will conduct this research. The researchers believe that they can provide empirical and sensible results that can be used to evaluate the effectiveness of the program and offer suggestions on how the DSWD can work to ensure the effectiveness of the program and compliance of the beneficiaries.

Research Problem

The purpose of this study is to establish the relation of Pantawid of Pamilyang Pilipino Program (4P's) to the school attendance and academic performance of student recipients. More specifically, the study aimed to:

1. Compare the school attendance of grade eight Pantawid Pamilyang Pilipino (4P's) recipients and non-4P's students.

2. Determine if the 4P's recipients were able to submit school projects and requirements.

3. Find-out if there is a significant difference in the academic performance of 4P's and non-4P's students.

Scope and Delimitation

The study aimed to establish the relation of Pantawid Pamilyang Pilipino Program (4P's) to the school attendance and academic performance of 4P's students. The participants of this study are grade eight students of Batasan Hills National High School as of S. Y. 2015-2016 who are receiving cash grant from the government and a selected number of parents benefitting from the 4P's program. The grade eight students were chosen to be the participants of this research since the researchers conducting this study are handling the grade eight level thus it will be convenient on their part to focus in one-year level instead of covering all the 4P's recipients in the school. The study will explore on the compliance of the recipients to one of the conditions of the program which is to attend 85% of school attendance within the school year and to find out if the academic performance of 4P's students are at par to their non 4P's counterpart.

The study does not aim to evaluate the effectiveness of the program nor to assess its implementation procedures or its selection process since it requires a more thorough investigation and research.

II. RESEARCH METHODOLOGY

Methodology

In order to achieve the purpose of this research, the researchers employed the descriptive case study method and descriptive survey method. As for Cohen et al., (2007 in Geertz, 1973) case studies strive to portray 'what it is like' to be in a particular situation, to catch the close up reality and 'thick' description of participants lived experiences of thoughts about feelings for a situation. They involve looking at a case or phenomenon in its real-life context. The said method was used because they looked into the narrated real-life experiences of 4P's recipients and information given by the participants regarding the impact of Pantawid Pamilyang Pilipino Program (4P's) to the school attendance of the students. On the other hand, descriptive survey method (sample survey) is employed to gather relatively limited data from a large number of cases; it only deals with a portion of the population (Sevilla et al., 1992).

Sampling Procedure

In order to achieve the purpose of this study, the researchers employed the purposive sampling method. Cohen et al., (2007) stated that it is used in order to access "knowledgeable people" who have in-depth knowledge about particular issue may be because of their professional role, power, access to networks, expertise or experience. In this method, the sample has been chosen for a particular

reason or purpose. Fraenkel & Wallen (2009) reiterated that purposive sampling is different from convenience sampling for the reason that researchers do not simply study whoever is available but rather use their judgment to select a sampling based on the information that they have.

For this study, the researchers utilized the Slovene's formula to determine the appropriate number of student participants that will be included in the survey. The formula is as follow:

$$n = \frac{N}{1 + Ne^2}$$

where n = sample size, N = population size, e = margin of error

Substitution

$$n = \frac{425}{1 + 425\ (0.05)^2}$$

On the same hand, a group of selected parents were included in the focus-group discussion (FGD) to verify some questions that were not properly answered by the students and to validate the responses given by the student participants

Data Gathering Procedures

Instrument

As instrument for this research study, the researchers used a survey questionnaire that served as a primary tool in gathering the important data and information from the student beneficiaries of 4P's. In the survey method, the researchers asked the respondents to answer the Personal Data Questionnaire (PDQ), which is divided into two parts: 1.) questions pertaining to the demographic profile of the respondents 2.) Includes all questions related to the research study. There is also a separate sheet containing a letter addressed to the respondents, which was attached together with the PDQ. In the letter, the researchers assured the respondents that the survey will only be used for the completion of the research study and that all the documents will be confidential and will not be shared in any way that would compromise the identity of the participants.

Locale of the Study

Figure 1: Batasan Hills National High Schoool (BHNHS)

The study was conducted at Batasan Hills National High School (BHNHS). As of S.Y. 2015-2016 BHNHS has a student population of approximately 13, 000, one of the biggest secondary schools in Quezon City and the entire National Capital Region (NCR). One thousand and two-hundred one of which are beneficiaries of Pantawid Pamilyang Pilipino Program, a conditional cash transfer program launched by the Department of Social Welfare & Development in 2007.

Research Respondents

The respondents of this study are grade eight student recipients of Pantawid Pamilyang Program (4P's) as of S.Y. 2015-2016. As of the said school year, BHNHS has 1,201 student beneficiaries 425 of which or 35.39% are grade eight students based on the information given by the Office of the School Principal. Only the grade eight students were included on this since researchers are handling the said grade level hence it will be convenient on their part to focus on this group.

Upon identifying the participants for this study, the students were given a PDQ for them to answer and provide necessary information for this study. The researchers included a selected number of parents for a focus-group discussion (FGD). Including the parents in this study is justifiable since there are specific questions and issues to the program that students cannot answer or provide.

Statistical Treatment of the Data

After the data gathering procedure, the researchers clustered all the data and tabulated similar responses of the participants. The survey questionnaire tallied and the researchers will

$$\bar{X} = \frac{\Sigma X}{n}$$ Where:

$\bar{X}$ = the symbol of mean

ΣX = summation of scores

n = number of cases

$$S = \sqrt{\frac{\Sigma(X - \bar{X})^2}{N}}$$

where S = the standard deviation of a sample, Σ means "sum of," X = each value in the data set, $\bar{X}$ = mean of all values in the data set, N = number of values in the data set.

$$t_{obt} = \frac{\overline{X}_1 - \overline{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where:
t_{obt} = obtained t
$\overline{X}_1$ and $\overline{X}_2$ = means for the two groups
s_1^2 and s_2^2 = variances of the two groups
n_1 and n_2 = number of participants in each of the two groups

compute for the weighted mean and standard deviation. The formulas are as follows

Additionally, the researchers also compared the total school attendance, absences and academic performance of grade eight 4P's students and non-4P's. Hence, to achieve this purpose a t-test of independent sample mean has been utilized and the formula is as follow.

III. PRESENTATION, ANALYSIS AND INTERPRETATION OF THE DATA

Part I: Socio-Demographic Profile of 4P's Students

Table 1: Gender

Gender	f	%
Lalaki	110	53.4
Babae	96	46.6
Total	**206**	**100**

Part II A Students Survey:

Questions Pertaining to the Study

Question #1: *Gaano ka kadalas pumasok sa klase*? (How often do you come to school?)

Appendix D shows the result of the survey conducted among the 4P's recipients, 76.7% or 158 of the participants answered that they always come to school while 19.9% or 41 out of 206 says that they come to school very often. The result of the survey would tell that majority of the student recipients of 4P's always come to school regularly. On the same hand, the parents who were part of the focus-group discussion (FGD) conducted by the researchers said that their children are always present in school, see Appendix E, the parents also added that seldom their children are absent and they even reiterated that their children are even mad if they are told to absent even for a day.

The outcome of the survey conducted to the students and their parents would only prove that most of the 4P's beneficiaries follows to the condition set by the DSWD in which household families will receive cash grants as long as their children ages 6-14 will be enrolled in school and attend at least 85% of the total school attendance in a school year (Reyes & Tabuga, 2012).

Comparison of 4P's and non-4P's School Attendance

Result shows that grade eight 4P's students has a mean school attendance of 182.84 while the non-4P's grade eight students has a mean school attendance of 197.64, which is 13.80 higher than the previous group.

Independent Sample T-test 4P's and non 4P's Non Attendance

Appendix G shows the result of the t-test independent sample mean conducted to the school attendance of 4P's and non-4P's students. Upon comparing the school attendance of these two groups, this study found out that there is a significant difference between the school attendance of the grade eight 4P's and non 4P's students since the calculated ($p < .05$). It only means that the non-4Ps students attend school more regularly compared to their 4P's counterpart.

Question #2: *Gaano ka kadalas lumiban sa klase*? (How often do you commit absences in class?)

Based on the result of the survey in Appendix H, 112 from 206 respondents or 54.4 percent says that seldom they are absent in school while 45 or 21.8 percent claims that they are never absent in school. The weighted mean of 2.06 means that most of the respondents responded to option no. 1, 2 or in some instances no., 3. The standard deviation of 0.79 proves that the participants have a very narrow spread of responses in the given question. The result seem to contradict the conclusion made by Son (2008) that CCT programs had little impact on school attendance rate, on school achievement or in attracting dropouts to school. On the other hand, the result seems to compliment the assumption of Reyes & Tabuga (2012) that conditional cash transfer improves the school attendance of children by 8%.

Comparison of 4P's and non-4P's Students Absences in School

Appendix I shows the comparison of the mean absences of grade eight 4P's recipients and non-4P's students. The researchers compared the absences of 50 randomly selected students from each group and the result shows that grade eight 4P's students has a mean non-attendance of 18.16

and a standard deviation of 26.16, which means that the number of school attendance of this group is widely scattered. On the other hand, the non 4P's grade eight students has a mean absences of 3.36 and a standard deviation of 6.79 which mean compared to the 4P's recipients, the non 4P's students has a narrow spread of cases in their number of absences and seldom they are absent in school.

Independent Sample T-test 4P's and non 4P's Absences

Appendix J displays the result of the t-test independent sample mean conducted to the mean absences of 4P's and non-4P's students. Upon comparing the absences of these two groups, this study found out that there is a significant difference between the school attendance of the grade eight 4P's and non 4P's students since the calculated "Sig. (2-tailed)" using the SPSS (Statistical Package for Social Science) is .000 which is way lower than the critical p-value of 0.05.

Question #3: *Ano ang dahilan ng iyong madalas na pagliban sa paaralan?*

(What causes you to be absent in school?)

Appendix K identifies that sickness is the primary reason why 4P's recipients are often absent in school with a frequency of 64 or 31.1%. It is followed by laziness, taking care of younger siblings and not having allowance with 11.7%, 9.2% and 6.8%.

FGD Question: *Ano po ang madalas na dahilan ng pagliban ng inyong anak sa paaralan?* (What causes your child to be absent in school?)

Appendix L shows the responses of the parents when they were asked about the common reasons why their children are absent in school, most of them says that the only reason why their children are always absent is due to illness. The outcome of the interview seem to compliment the idea of Fernald, Gertlet & Neufeld (2008) that conditional cash transfer programmes are positively associated with the well—being of the children. That statement stated by Fernald et al., (2008) only means that cash transfer could allow parents to ensure the health and nutrition of their children by having nutritious food, and medicines. The answer of the students seem to adhere to the responses of the parents.

Question # 4: *Ikaw ba ay nakakagawa ng iyong mga gawain o proyekto sa paaralan?* (Were you able to submit your projects in school?)

Appendix M indicates that 88 or 42.7% of the student respondents says that they often submit projects in schools while 68 or 33% claims that they always submit their projects in school. Question no. 4 has a weighted mean of 4.07 and a standard deviation of 0.80, which means that most of the respondents answered always or often in the survey. The result of the survey is in line with the assumption of Reyes & Tabuga (2012) that improvement in school attendance is expected to materialize since parents will be receiving financial assistance from the government through this program and this financial grant can be used by parents in sending their children to school and in supporting their education needs like school allowance, school project, transportation etc.,

FGD Question: *Naibibigay niyo po ba ang kailangan ng mga anak ninyo tulad ng school project?* (Were you able to provide for the school project of your children?)

The parents said that they are able to provide allowance for the projects of their children in school, see Appendix N, as long as they will be informed ahead of time in order for them to prepare for it. In relation to the answer of the parents, Todaro & Smith (2012) have continuously mentioned that payment to parents work well in increasing school enrolments, attendance, progress through grades, other schooling outcomes. That means to say that cash transfer could help parents to finance school related expenses of their children. The response of the parents somehow validates the response of the students.

Question #5: *Anong dahilan kung bakit hindi ka nakakapagpasa ng mga proyekto at requirements sa paaralan?* (What causes you not to submit school projects & requirements?)

The most prominent reasons for failing to submit school projects and requirements among 4P's recipients, based on the result of the survey in Appendix O, is the shortage of allowance with 41 or 19.9% followed by not cooperating properly with groups members and absenteeism with 8.3% and 6.3% respectively. Other reasons would include the following: sickness, not being aware of the project, laziness to mention a few. The outcome of the survey adheres to the idea of Todaro & Smith (2011) that payment to parents work well in increasing school enrolments, attendance, progress through grades and other schooling outcomes.

FGD Question: *Anong dahilan kung hindi po kayo nagkakapagbigay ng pambayad o pambili ng projects*? (What causes you not to give or provide

for the school projects of your children?)

The parents during the interview answered that they were able to give allowance to their children every day and should they fail to give or provide it is due to their untimely salary, which is usually scheduled during 15th and 30th of the month. See Appendix P for the details of the interview.

Academic Performance of Grade Eight 4P's and Non 4P's Students

Appendix Q shows the comparison of the mean scores of the 4P's grade eight students and non -4P's students. The researchers took the GPA of 50 randomly selected 4P's recipients and another 50 randomly selected non 4P's recipients and based on the data, the grade eight 4P's students has a mean GPA of 81.35 and a standard deviation of 4.06 while the grade eight non 4P's students has a mean GPA of 82.46, which is slightly higher than the mean scores of 4P's group, and a standard deviation of 4.01. The resemblance of standard deviation result between the two groups shows that there is a similarity in the spread of scores of these groups.

Independent Sample T-test 4P's and Non 4P's GPA

Appendix R presents the result of the t-test independent sample mean conducted to the GPA of two groups. Upon comparing the GPA of grade eight 4P's recipients and non 4P's, this study found out that there is no significant difference between the academic performance of these two groups since the calculated "Sig. (2-tailed)" using the SPSS (Statistical Package for Social Science) is 0.174 which is way higher than the critical p value of 0.05.

Action Plan

School administrators may employ the result of the study in grouping or classifying the 4P's students. School administrators may group or classify the 4P's recipients in to a blocked section in order for teachers, or DSWD representatives in some cases, to monitor the school attendance and academic performance of these students.

Table 2: Action Plan

Action Plan			
Who	**What**	**When**	**How**
Head Teachers In-charge in each year level.	Classify-ing/ Grouping 4P's stu-dents into a blocked section.	S. Y. 2017-2018 and succeed-ing school year.	Identify the 4P's recipients per year level. Group and place 4P's students into blocked section/s.

IV.SUMMARY, CONCLUSION AND RECOM-MENDATION

Summary of Findings

The study aimed to establish the relation of Pantawid Pamilyang Pilipino Program (4P's) to the school attendance and academic performance of the student recipients. In order to achieve the purpose of this study, the researchers formulated a set of 20 questions for 4P's recipients pertaining to their compliance to school attendance. The instrument was submitted to a group of three validators who checked and looked upon the quality of questions that will be asked to the student recipients during the survey. Upon checking the validity of the survey instrument, the researchers administered the instrument to a selected group of grade eight students receiving 4P's.

To determine the appropriate number of respondents for the survey, the researchers utilize the Slovin's formula. Upon applying the 95% confidence level to the total number of 4P's recipients in the grade eight level which is 425, the researchers calculated that a total 206 grade eight 4P's students has to be included in the survey.

The survey instrument was administered to 206 randomly selected 4P's recipients of the grade eight level in Batasan Hills National High School. Upon completing the survey, the researchers tallied the responses of each respondent to every individual item question. The frequency and percentage distribution for every item questions were prepared.

To verify the responses of the students, the researchers conducted a focus-group discussion to selected number of parents The focus-group discussion was important in order to validate the responses given by the student participants and to answer some questions that were not given concrete answers in the survey.

To further validate the result of the survey and focus group discussion (FGD), the researchers compared the school attendance and absences of grade eight 4P's and non-4P's students. This was done by comparing the total school attendance of 50 randomly selected grade eight students from each group using the t-test of independent sample mean.

Furthermore, the researchers found out that there is no significant difference between the academic performance of grade eight 4P's recipients and non 4P's students upon comparing their GPA using a t-test of independent sample mean.

Conclusion

Based on the findings, the researchers concluded that most of the 4P's recipients complies with one of the basic requirements of the CCT program, which is to attend 85% of school attendance. The result of survey to the students and interview with parents strongly supports to this idea. To verify the claims of both the students and parents, the researchers compared the mean school attendance of 4P's and non-4P's students. Upon comparing the mean school attendance of 4P's students and non 4P's group, this study discovered that the non 4P's students performs better in terms of school attendance when compared to their 4P's counterpart. The non-4P's students have a mean school attendance of 197.64 much higher than the 182.84 of the 4P's recipients. In addition, the researchers found out that there is a significant difference between the school attendance of the grade eight 4P's and non 4P's students since the calculated "Sig. (2-tailed)" using the SPSS (Statistical Package for Social Science) is .000 which is way lower than the critical p-value of 0.05.

Moreover, following the condition of 85% school attendance set by the DSWD and if the total number of school days will be fixed at 201 days per school year it means that 4P's students should be in school for at least 171.85 or 172 days in a year. Thus, it is valid to accept that the 4P's students are complying with this condition since they recorded a mean attendance of 182.84/183 school days or an equivalent of 91% of school attendance for the S. Y. 2015-2016. The 4P's students have beaten the 85% condition on school attendance set by DSWD however; the mean school attendance of non-4P's is considerably higher than the mean attendance of 4P's students.

In addition, the researchers found out that most students who were part of the survey responded that seldom they are absent in school although there are a few who claims that they are absent occasionally but it is not often. The parents seconded the responses of the students during the FGD who answered that their children are never sluggish in coming to school.

Additionally, this study found out that there is a significant difference between the absences of the grade eight 4P's and non 4P's students since the calculated "Sig. (2-tailed)" using the SPSS (Statistical Package for Social Science) is .000 which is much lower than the critical p-value of 0.05. The non-4P's students have a mean absence of 3.36 considerably lower than the 18.16 mean absence of the 4P's recipients.

Furthermore, following the condition of 85% school attendance that means the total number of absences of the 4P's recipients should not exceed the remaining 15% of the total school attendance. If the total number of school days will be fixed at 201 days per school year then it means that 4P's recipients are allowed to be absent for 30 days in a school year. Therefore, it is valid to accept that the 4P's students are complying with this condition since they recorded only a mean absence of 18.16 or 18 days much lower than the allowed 30 days following the 85% school attendance rule of the DSWD. It means that the 4P's students have beaten the 85% condition on absences set by DSWD however; their mean absence is six times higher than the non-4P's students who only recorded a mean absence of 3.36.

In relation to the result on school attendance, the researchers discovered that majority or most of the 4P's students were able to submit their school projects and requirements in school. Similarly, parents says, during the FGD, that they were able to provide for the school projects requirements of their children as long as they will be informed ahead of time so as for them to prepare for these expenses. The parents who are receiving cash grant from the government has an additional income to support and finance the school related expenses of their children.

Moreover, the researchers also found out that there is no significant difference between the academic performance of 4P's and non-4P's students when the researchers compared the academic performance of these two groups using the t-test of independent sample mean. The computed "Sig (2-tailed) value is 0.179 which is higher than the critical p value of 0.05. The 4P's group recorded a weighted mean 81.35 while the non-4P's group has a weighted mean of 82.46 and a standard deviation of 4.0, which means 4P's students' performance in class, is just at par with performance of grade eight students in general. It could mean that the 4P's recipients were able to catch up with the performance of non-4P's recipients since they were able to submit school projects and requirements, which has a substantial portion in the K-12 grading system.

Recommendations

The researchers proposed the following recommendations based on the findings of the study and conclusion made:

1. The school administrators may group or classify the 4P's students and place them into a blocked section in order to easily

monitor their attendance and academic performance.

2. The DSWD representatives should coordinate directly to the teachers of the students concerning the matter of attendance in order for them to directly check and monitor the compliance of the students and to see how frequent these students are not attending their classes. The DSWD representatives can ask for a copy of School Form no., 2 (SF # 2) from the class advisers to check if the students are really attending school so as to lessen the load of tasks of Parent Leaders.

3. A tracer study may be conducted to the previous batch of 4P's recipients in order to see how the program affected their educational and personal pursuit.

4. Researchers may conduct an assessment or evaluative study regarding the selection process and monitoring procedures of the DSWD on the 4P's program.

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AN EVALUATION OF BAVOBASE BOARD GAMES MULTI-FUNCTIONAL PORTABLE EQUIPMENT IN TEACHING PHYSICAL EDUCATION

Rayand C. Saballe
Teacher-II
Pres. Diosdado Macapagal High School
Schools Division Office– TAPAT

ABSTRACT

*BAVOBASE BOARD GAMES (**B**asketball, **V**olleyball, **B**adminton, **S**epak takraw and **B**oard games) Multi-Functional Portable Equipment is an innovative and effective tool, designed as an instructional material which apply inside the classroom or even in the field. It will help P.E teacher/sports instructor and student to build up their potentials by experiencing the actual parts of the equipment and to performing sports activities like basketball, volleyball, badminton, sepak takraw, and board games.*

The advantage of this innovative flexible equipment is safe and manageable to use because it has a caster that could be transferred from one place to another, it can be assemble instantly depends on the sports that you want to perform or to teach, it has a retractable stand base cabinets covered by foam mat which serves as a storage for the game materials like ball, nets, dart, chess, scrabble, sungka, shuttle cock and badminton rocket. Also it has a galvanize iron pole, and lastly it has a six sack of "bistay" sand to balance the weight and the vibration of the equipment for the safety of the students while it is used.

Fifty (50) selected students of Pres. Diosdado Macapagal High School were chosen as respondents to test the quality and effectiveness of BAVOBASE BOARD GAMES equipment as a form of instructional materials to be used by the MAPEH teachers, students, and athletes in their lessons for theory and basic sports activity.

The researcher made use of the survey questionnaire as the main instrument for collecting data for the research. By this method, variables such as the respondent's age and sports inclination and the effectiveness of the equipment were examined and analyzed to identify which affect the study the most. Aquino (2009) defined the descriptive method of research as an organized attempt to analyze and interpret the reports and the present status of social institution, group or area. It includes all the studies that seek to present facts concerning the nature and status of anything, group of person, acts conditions or any other phenomenon, which they may wish to study.

*This study recommended **(a)**To emphasize the importance of BAVOBASE BOARD GAMES multi-functional portable equipment to be used for actual instructions in teaching sports such as basket-ball, volleyball, badminton, sepak takraw, and Board games in the classroom to achieve the goals of learning **(b)**To motivate the interest of students in physical education activities through the actual use of BAVOBASE BOARD GAMES **(c)** To provide P.E Teacher/instructors an instructional materials as an effective way of applying and demonstrating skills in sport activities for their students by having BAVOBASE BOARD GAMES inside and outside of the classroom. **(d)** It will keep the students away from the hazards and accidents that may happen during their physical education class.*

Keywords*:* (Improvised scrap materials, All in One Equipment, Innovative Instructional material)

I.INTRODUCTION

One of the problem that P.E teacher or sports instructor experience in the field is insufficient of equipment, and I think it should not stay as a problem, that's why as P.E teacher I need to use my creative mind and initiative to research and construct this instructional material as an alternative solution but not to replace for conventional sports equipment, because it will answer the existing situation.

The specification of materials that I used for the portable BAVOBASE BOARD GAMES

most of it are recycled materials and some are new materials. For the base cabinet body and the cover, I use ¾ "thk marine plywood with rolled foam and mat foam as the top finish. The lower part base cabinet is the compartment for 6 sacks of washed sand that serves as the counterweight of the equipment when in use. The flooring material we use is Ga. 26 (0.06 mm thk) plain G.I. (galvanized iron) welded to 1"x1" angle bar frame. The upper part of the base cabinet I used for the flooring and the wall is 3/4" thk plywood. The dimension of the base cabinet cover is 3ft x 2ft LxWxH (60cm x 90cm). for the base cabinet cover, I use ¾ "thk. Plyhood with 2" x 1" cabinet hinge and cabinet pull for easy storing of equipment.

For the modular pole, the material that I used is scrap material G.I. pipe (Sched. 40) with polyethylene foam as top finish. The pole has three (3) module of height. First pole is for the badminton and sepak takraw, net with a length of 5 ft. (150 cm) and it's attached directly to the base cabinet. Second Pole is for the volleyball net with a length of 3 ft. (90 cm), interlock with the first module. Third Pole is for the basketball board with a length of 2 ft. (60 cm), interlock with the second Module.

For **caster/ wheel** with push down lock, I use heavy duty and enough to carry the weight of base cabinet with 6 sacks of washed sand, pole and basketball board. For Basketball Board, I use ¾" thk. Marine plywood, painted with enamel. **Basketball ring**, custom-made basketball ring, painted with enamel (orange color).

The aim of this study is to construct innovative equipment that will seek to answer the following question: (a) What is the demographic profile of the respondents in terms of age and sports inclination (b.) What is effectiveness of BAVOBASE BOARD GAMES and its quality materials being utilized? (c) What is the effectiveness of BAVOBASE BOARD GAMES equipment as alternative in the field?

The input represents the "raw material" appropriated from the environment and introduced into the system according to the specification called by the intended product. The process or thru put consists of the complex set operation or stages, procedures or activities which transform the input.

The output is the "finish product" or the material in its terminal stage with new value added which is then issued or exported to the environment. In this study, the inputs will be to evaluate the BAVOBASE BOARD GAMES Multi-Functional Portable Equipment, in terms of effectiveness, quality, and the classroom instructional materials. The process will be the distribution of survey questionnaires to the respondents. The Output that can be acquired by this study is to recommend BAVOBASE BOARD GAMES Multi-Functional Portable Equipment as basis in teaching the K-12 instructional program and to develop the skills of the students in sport activities.

II. METHODOLOGY

Descriptive-Assessment method of research was used in this study. It is a fact-finding study with sufficient and real interpretation of date that is significant to the action research study. Since the study is concerned about the evaluation of effectiveness in terms of sports equipment which is used as instructional materials, descriptive method was the most suitable to use. According to good (2012), the descriptive method of research is used to secure evidence concerning the existing situations or conditions. It includes status on change in contrast to ascertaining what caused those of what their value and significance are.

The respondents in this study are the students of Pres. Diosdado Macapagal High School guided by MAPEH teachers. I chose fifty (50) selected students as the respondent to test the quality, effectiveness used as instructional material for the improvement of this equipment that will used by the MAPEH teachers, students, and athletes in their lessons for theory and sports activity in the classroom as basis for instruction.

Convenience sampling was the design used by the researcher in the study. This is to ensure that everyone who has the characteristics on the said locale has an equal chance of being selected to be included in the sample and also to promote the most suitable and fastest way for both the researcher and respondent. The researcher made use of the survey questionnaire as the instrument for collecting data for the research study. By these method variables such as the respondents profile and other information were examined and analyzed to identify which of the following affect the study the most. After studying and reading the sample of the questionnaires from the related literature and other references, the researcher constructed the questionnaires with enough items to gather all the information needed.

he questionnaire was submitted to the adviser for some correction and for the draft. The researcher distributed the copies personally to the respondents and after answering the researcher retrieved the entire questionnaire. The

questionnaire was assessed and tallied for further evaluation of the study.

Documentations in the library and internet are important materials in the realization of the study. Foreign and local book, thesis books, magazines and journals, pertinent to the study contributed to data gathering of needed materials. Ocular visitation of the different junk shop to get some scrap materials for the improvement of improvised equipment and gave survey questionnaires to the fifty students to conduct crosscheck information obtained from the BAVO-BASE BOARD GAMES Multi-Functional Portable Equipment.

For validation of data, the statistical techniques were used are frequency and percentage distribution, weighted mean, ranking, and likert scale.

III. RESULTS AND DISCUSSION

Table 1 presents the frequency and percentage distribution of respondents' in terms of age to have an equal opportunity to experience the effectiveness and the quality of the equipment.

As shown in the table, there are 36 out of 50 total respondents who belong to the age group of 14 to16 years old. The said group ranks 1, which comprises the 72 percent of respondents. Rank 2 is the age group between 17 to19 with a total of 9 or 18 percent while only 5 or 10 percent represent the age of 20 and above.

Table 1 Frequency of Percentage of Respondents in terms of Age

Age	*Frequency*	*%*	*Rank*
14-16	*36*	*72*	*1*
17-19	*9*	*18*	*2*
20 and above	*5*	*10*	*3*
Total	*50*	*100*	

Table 2 presents the frequency and percentage distribution of respondent in terms of sports inclination to identify the skills and the interest of the students.

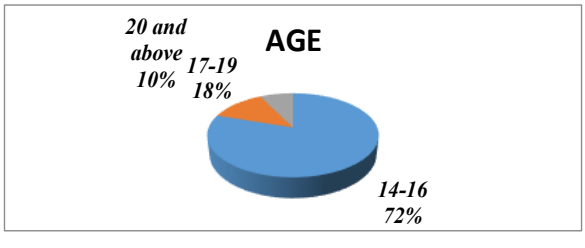


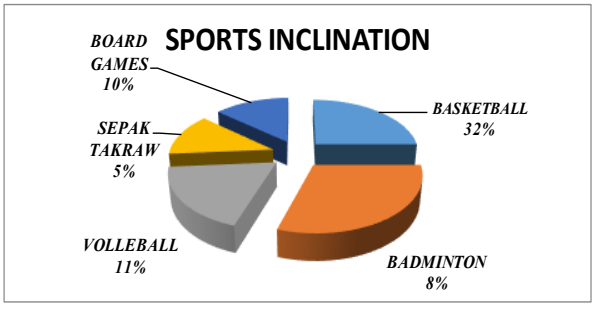
Table 2 Frequency of Percentage Distribution of Respondents in terms of Sports Inclination

Sports Inclination	*Frequency*	*%*	*Rank*
Basketball	*16*	*32%*	*1*
Volleyball	*11*	*22%*	*2*
Badminton	*8*	*16%*	*3*
Sepak Takraw	*5*	*10%*	*4*
Board Games	*10*	*20%*	*5*
Total	*50*	*100*	

As viewed in table 2, there are 16 or 32 percent of the total respondents are inclined in basketball. There are total of 11 equivalents to 22 percent shows interest in playing volleyball. There are 8 equivalents to 16 percent of the respondents are inclined in the badminton while only 5 or 10 percent prefer sepak takraw. There are 10 or 20 percent of the respondents prefer to different board games.

It means that out of 50 respondents or 32 percent shows greater interest in playing Basketball

Table 3: presents the weighted mean distribution of respondents' responses' in terms of quality, effectiveness use as instructional material.



As shown in the table, base on the quality of equipment Basketball has a weighted mean of 4.26, effectiveness as instructional material with 4.13 out of 50 total respondents, while Volleyball has a weighted mean of 4.19 in the quality, 4.22 in the effectiveness as instructional material. In badminton the weighted mean in terms of quality of effectiveness of equipment is 4.27, effectiveness as instructional material with 4.26, in terms of sepak takraw games the weighted mean of the quality and effectiveness of equipment is 4.22, while the effectiveness as instructional material is 4.25, as viewed in board games the

Table 3 Weighted Mean Distribution of Respondents' Responses in terms of Quality and Effectiveness use as instructional material.

Improvise Equipment	(WM) Quality and Effectiveness as Equip-ment	(WM) Effectiveness as Instruction-al Materials	Scale
Basketball	*4.26*	*4.13*	*VS*
Volleyball	*4.19*	*4.22*	*VS*
Badminton	*4.27*	*4.26*	*VS*
Sepak Takraw	*4.22*	*4.25*	*VS*
Board Games	*4.21*	*4.34*	*VS*
Composite Mean	*4.23*	*4.24*	*VS*

weighted mean in the quality and effectiveness of equipment is 4.21, while the effectiveness as instructional material 4.34.

The composite weighted mean of 4.23 for the quality and effectiveness of equipment, 4.24 for the effectiveness of equipment as instructional materials, it implies that majority of the young respondents of Pres. Diosdado Macapagal High School are **VERY SATISFIED** with the sports equipment BAVOBASE BOARD GAME which used as an alternative instructional material inside the classroom or even in the field as far as teaching of in Basketball, Volleyball, Badminton, Sepak Takraw, and Board Games is concerned.

IV. CONCLUSION

Based on the findings of the evaluation in this action research study, it indicates that majority of the 50 young respondents are **Very Satisfied** with the quality of material used and the effectiveness of the BAVOBASE BOARD GAMES equipment as basis for instructional material that will help the young students to become productive athletes and help in promoting sports development in our country.

RECOMMENDATION

Based on the findings and conclusions of the study, the following recommendations were suggested:

1. To emphasize the importance of BAVOBASE BOARD GAMES multi-functional portable equipment to be used for actual classroom instructions in teaching basketball, volleyball, badminton, sepak takraw , and board game in the classroom or gymnasium which is in line with to K-12 curriculum
2. To motivate the interest of students in physical education activities through the actual use of BAVOBASE BOARD GAMES.
3. To provide P.E Teachers and instructors an instructional material as an effective way of applying and demonstrating skills in sport activities for their students by having BAVO-BASE BOARD GAMES outside or even inside the classroom.
4. It will keep the students away from the hazards and accidents that may happen during their physical education class.
5.

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Best Research Abstracts

Effects of Result-based Capability Building Program on the Research Competency, Quality and Productivity of Public Junior High School Teachers

Warren A. Ramos
Education Program Supervisor-
Policy, Planning and Research Division

ABSTRACT

In the new rationalized structure of the Department of Education, programs, projects and activities are expected to be result-based. In the past years, capability building program specifically on research focused only on physical targets as the success indicator. Hence, the expected result in the capability program are long-term and impactful primarily on the competencies, quality and sustainability. This study was conducted to determine the impact of result-based research capability building program on the competency, quality and productivity among 78 public junior high school teachers in DepEd-NCR. An adapted research instrument was used to measure the research competency of the participants before and after the third phase of the program. After one month, their outputs were analyzed using the adapted rubrics for action research proposals. Descriptive statistics such as frequency, mean and percentage were used to analyze the data collected in assessing the research proposal outputs. Furthermore, the research competencies of participants increased from low to high before and after the training. For the inferential questions, t-test of paired samples was used to find the significant difference in the subjects' research competency before and after the training. It also revealed that there were significant differences in the research competency of the participants before and after the training. The assessed research proposals were rated "satisfactory" in terms of quality.

Consequently, the research productivity in terms of physical targets got 100% because of the proposals collaboratively crafted and submitted by the participants. Aside from that, the teacher-participants and even their students presented their researches and recognized in the Regional, National and International research awards Therefore, the researcher concludes that the program was impactful and it produced quality research proposals. Finally, this study recommends that teachers both from public and private must be empowered by the necessary competency in conducting action research with the mechanism of coaching, mentoring and consultation with the school heads and experts from partner Higher Education Institutions. This participative approach in research ensures that the effectiveness and impact of the program are geared towards the attainment of DepEd Vision, Mission and Goals.

KEYWORDS: *Result-based, Research capability building program, quality, productivity, mixed-method design, competency*

Intervention For Students With Reading Disability

Hazel May M. Salvador
Teacher III- Sped
P. Gomez Elementary School
Schools Division Office– Manila

Presented at the ***International Seminar on Education, Padang Indonesia*** *and* ***World Conference on Educational Leadership man-***

ABSTRACT

The primary goal of this study was to examine the effectiveness of a multisensory approach to reading intervention for students with reading disability. The researcher tested the effect of a packaged reading-intervention approach on the reading sub-skills of letter-word identification, spelling, word attack, sound awareness, speed of sight-word reading, and speed of phonemic decoding (nonsense words). Participants were 18 students attending remedial class for language and reading difficulties.

The researcher chose 9 participants for the treatment group based on a cut-off score criterion; the remaining 9 students served as the control group. The independent variable was the participation in the reading- intervention program. The independent samples t test showed that the pretest scores for the control group were significantly higher than the pretest scores for the treatment group. Results of the ANCOVA showed no significant differences between groups at post test. When the researcher controlled for pretest scores, participants in the reading-intervention group consistently made greater gains than participants in the control group, although post test scores remained higher for the control group. A t-test for non-independent matched samples was significant ($p < .05$) for treatment participants' post test scores for Word Attack.

Keywords*: Ball-Stick-Bird, phonic reading system, Fuller Approach, Morphology, Multisensory, Orton-Gillingham Approach.*

Picture Prompts: Its Effects on the Writing performance of Grade 6 Pupils in Makati Elementary School

Jayson O.Caraang
Makati Elementary School
Schools Division Office– Makati

ABSTRACT

Caraang, J. O. (2015). Picture prompts: Its effects on the writing performance of Grade 6 pupils in the Makati Elementary School. Unpublished Action Research, Makati Elementary School, Schools Division Office of Makati.

A writing problem is attributed to "writing block" and the lack of motivation of elementary pupils to write. The study looked into the effects of integrating picture prompts on the writing performance of Grade 6 pupils in the Makati Elementary School. It also aimed to identify the elements of picture prompts that caused the improvement, if any, of the writing performance of the pupils. Picture prompts were used to develop the writing skills of the pupils. Each story in the pretest and posttest was rated using a rubric in the Test of Written Language (TOWL, Third Edition) that contained the three components: contextual conventions, contextual language, and story construction.

The paired sample t-test was used to analyze the difference between the performances of Grade 6 pupils before and after treatment. Results indicated that the integration of picture prompts was effective. The study also used the analysis of variance to determine the most effective element of picture prompt. Results revealed that there was no significant difference on level of effectiveness of the elements of picture prompts. Thus, it is recommended that picture prompts be used as visuals to improve the writing performance of pupils.

Keywords: *Picture prompts, writing performances*

A Celebration of Filipino Family Life, Values and Traditions

Sylvia M. Castillo
Master Teacher 1- Technology & Livelihood Education
San Rafael Technological High School
Schools Division Office– Navotas

ABSTRACT

Family, School and Community had been always the pathway for the best move!!! When working together, families, schools and communities can successfully make a difference to improve student learning. In fact, evidence from the previous action researches which are bonding tayo to 1- 5, that was initiated and implemented confirms, what educators have long known that families can do have a positive influence on how well their children do in school. Now it's bonding 6!!!!! It is proven for a continuous implementation of the project. It really works! That family involvement appears to have a protective effect on student learning.

The longer families stay meaningfully together involved in their children's education, the more likely their children will be successful in school. Studies also show that communities, too, can have a positive impact on school effectiveness. Although less abundant, research on community engagement has found that when communities mobilize around school improvement efforts many positive outcomes can be achieved, including improved student achievement. Although conventional wisdom and evidence from research confirms the positive influence that families and community groups can have on student learning, experts caution that strong family, school and community connections are just one important aspect of high-performing schools: it takes more than engaged parents to produce high student achievement. Many studies of high-performing schools like San Rafael Technological High School "Now" headed by Ms. Joji R. Fernando has started from "Nobody" .Before were always on the last rank of student performance, thru the intense effort of the faculty, administrators and school personnel nothing is impossible, so we identify several key characteristics associated with improvement. These include high standards and expectations for all students and curriculum, as well as instruction and assessments aligned with those standards. They also include effective leadership, frequent monitoring of teaching and learning, focused professional development thru actively participating in quality circle and high levels of parent and community involvement. Has always prepared updated innovated interventions based on the multiple intelligence of our student. With these, we were able to comply on the standard set by the Department of Education aiming for a ZERO drop-out and upgrading the academic performance of every students.

***Keywords**: Family Bonding, Filipino Family Life, Filipino Family*

Teaching Through Flipping: The Effects of a Flipped Lesson On The Grade 10 Students' Improvement And Independence Toward Writing a Persuasive Essay

Darish Camla M. Gamit
Teacher 1, Tibagan High School
Schools Division Office– Makati

ABSTRACT

Gamit, D.C.M. (2015). Teaching through flipping: the effects of a flipped lesson on the grade 10 students' improvement, independence, and motivation toward writing a persuasive essay, Unpublished Action Research, Schools Division Office of Makati.

The study was conducted to determine how effective is a flipped lesson on the Grade 10 students' improvement and independence toward writing a persuasive essay. The problems in the writing class identified by the researcher that she wanted to solve using a doable action included the following: (a) students struggled with building sentences and constructing the parts of a persuasive essay such as the introduction, the thesis statement, the topic sentences, the body, and the conclusion and (b) the lack of self-regulation in their own learning that was evident on their full dependence to the teacher to produce a well -constructed written output. To solve these, the researcher employed the use of flipped teaching, which is a combination of face-to-face and online instructions. A free and open course offered by the Mt. San Jacinto College in California, United States of America in the Coursera, which was entitled "Crafting an Effective Writer: Tools of the Trade (Fundamental English Writing) was used as a resource for the learning management. She used the triangulation method to gather the data that included the observation, the scores in the written outputs, and the responses in the questionnaire and the reflection in the journal of the students to ensure validity and trustworthiness in the findings.

To analyze the data, the descriptive statistics such as the mean, percentage score, and standard deviation were used. The paired sample t-test was also used to determine if there is a difference between the prewriting and post writing assessments of the students. Results revealed that through flipped teaching, the students improved their skills and became independent in writing a persuasive essay although certain problems arose during the conduct of the study. It is recommended that careful and systematic planning must be made when deciding to use a flipped teaching in the class to achieve the desired outcome of learning.

Keywords: *Flipped teaching, persuasive essay, prewriting assessment, post writing assessment.*

Academic Transparency: Its Effects to Science Learning Efficacy

Randy Ocenar Salentes
Teacher 3, Benigno Aquino High School
Schools Division Office– Makati

ABSTRACT

Salentes, R.O. (2015). Academic Transparency: Its Effects to Science Learning Efficacy, Action Research, City Schools of Division of Makati, Makati City

This action research develops a "student personal academic records" or SPAR as an avenue of making learners academic records transparent to them as the important member of the educative process. This will somehow revolutionize our learning situations by providing an "out of the box" solution in dealing our new generations learners on the problem of their low participation and achievement level towards science as the one of the core subjects in todays enhanced basic education curriculum (K12).

The main goal of this study is to determine if this SPAR or student personal academic records really provide the opportunity for the science learners to have the 100 percent transparency on their academic records in science subject and to find out if this transparency affects their learning efficacy towards the subject as it shows on their participation and achievement rate.

The study was conducted in the first two grading periods of this school year. And data were produced sufficiently to be analyzed and leads to a concrete conclusions that a student who can access his personal records via his own "student personal academic records" performs well in science. This follows the study conducted by Harlen (1993) and Cabansag (2013) which emphasizes that our educations todays follows a complex process due to the entirely different types of learners. Thus, it is a big challenge to us as their teacher on how we arrive in providing solutions to every problem we have.

Results of this study were used in the succeeding two grading periods of this school year. Though, not already part of the study, results will still be considered for future and further study.

The Reading Comprehension Performance of Selected Senior Students of SJNHS Based On Two Different Approaches

Jay F. Macasieb
Master teacher I
Schools Division Office– San Juan

ABSTRACT

Reading is vital in learning almost anything in this world. The success and failure of the students depends largely on the ability of the students to comprehend what they read. The study was conducted to assess the reading comprehension level of the respondents when asked to utilize two different approaches in reading and comprehending the material. The intervention material used consists of a two-fold task – Assessment reading (Practical approach) and the SQ3R reading (Technique-based approach). The respondents belong to the two sections of the fourth year students handled by the researcher during the school year 2014-2015. After validation of the materials used, the same was pilot tested to two other 4th year sections.

The data were treated using the mean, frequency, percentage and standard deviation to clearly plot down the comparability of the indicated scores. The T- test was utilized to discover the significant difference in the respondents' scores after the used of the intervention. A follow -up interview and reflective journal were also done to document the study. The results revealed that there were significant differences in the scores of the respondents before and after the SQ3r as a focal intervention material.

This study concludes that using a technique-based approach in comprehending a material would greatly enhance students' comprehension level. Further, the teaching of the SQ3R as an approach to reading is still valuable for teachers to use.

Keywords: Reading comprehension, Practical approach, Technique-based approach, SQ3R technique, Intervention material

Enhancement of The Grade Iv Pupils' Written Expression Skill Through Guided Journal Writing

Rochelle T. Tallud
Teacher II, Nemesio I. Yabut Elementary School
Schools Division Office– Makati

ABSTRACT

Written expression is one of the most challenging tasks for children to learn.

Students who experience difficulties in acquiring fluent and efficient writing skills may struggle to generate ideas, construct meaningful sentences, sequence and organize their ideas into paragraphs, and use grammar appropriately. These students may also have difficulty with handwriting, punctuation and spelling.

Research by Tuan (2010) showed that journal writing is an extensive activity to foster learners' writing motivation and enhance their writing skill as well as to build a close bonding between teachers and learners.

To determine the consistency and reliability of Tuan's research in the Philippine setting, this study conducted.

This study aimed to determine the effects of guided journal writing on the enhancement of the written expression skill of the grade IV- Diamond pupils in Nemesio I. Yabut Elementary School. This research used the one- group pre-test and post- test experimental design adapted to classroom situation. The whole class composed of forty-one (41) pupils was involved in the study. Considered as one group, the class underwent a pre-journal writing and a post- journal writing after the intervention is provided. Guided journal writing serves as the intervention.

In order to gather data, the researcher used a pre-journal writing test and assessed it using an adapted journal scoring rubric to determine the current writing level of the pupils. After four (4) months of giving regular journal activities, proofreading and giving immediate feedback on the pupils' common written language errors and enrichment activities to reinforce pupils' vocabulary and spelling, a post- journal writing test was given. This is to determine if there is any improvement in the written expression skill of the pupils. Descriptive statistics such as Percentage, Mean, Standard Deviation and the T-test were used to analyze the data collected. This study revealed that there is a significant difference between the pre-journal writing test and the post-journal writing test.

The result suggested that guided journal writing is an effective way for struggling writers to enhance their written expression skill. Lastly, this study recommends that teachers must use journal writing regularly as a way of enhancing pupils' written expression skill.

The Effectiveness of Modular Instruction On The Academic Achievement Of Grade 10 Economics Students Of Parañaque Science High School S.Y. 2015 – 2016

Darius Daniel J. Villanueva
Teacher I – Social Studies
Parañaque Science High School
Schools Division Office—Parañaque City

ABSTRACT

Educational institutions are constantly looking for best and appropriate practices, methodologies and techniques to further improve the quality of teaching and learning process. Research literature suggests that modular instruction is one of the modes of instruction that suites the need of 21st century learner, advanced and challenged. To further establish the effectiveness of modular instruction, this study was conducted using experimental method, static group comparison design. The study aimed to measure the effectiveness of modular instruction on the study of Macroeconomics among Grade 10 students of Parañaque Science High School S.Y. 2015-2016. The instruments used for the conduct of the study are teacher-made modules that cover 3rd Quarter Lessons in Grade 10 Social Studies (Economics: Macroeconomics).

The conduct of the study started on November and ended December 2015. Each of the sections was given pretest and posttest. Modular instruction was implemented to Grade 10 Section C and Lecture Method to Grade 10 Section A. Comparison of pretest and posttest mean significance difference of the two groups through t-test.

There is a significant difference in the posttest mean scores of both of the sections, establishing effectiveness of methods of instruction used, lecture and modular. However, there is a larger increase to the group that was exposed to modular instruction. The utilization of modular instruction across grade levels in key Araling Panlipunan areas namely, Araling Asyano, Kasaysayan ng Daigidig and Mga Kontemporaryong Isyu is recommended.

Keywords: *modular instruction, academic performance, pedagogical, macroeconomics*

The Impact of Science Games in The Behavior and Academic Achievement of Selected Grade 7 Students of Makati High School

Sonia B. Pilitina
Makati High School
Schools Division Office– Makati

ABSTRACT

This action research attempted to investigate the impact of Science Games utilized as strategy in teaching science on the academic performance and behavior of selected Grade 7 students of Makati High School. The research utilized the pre-test and post-test experimental design. Descriptive statistics were employed to determine the impact of the treatment (Science Games) on the behavior and academic performance of the respondents. One science class was used as respondents in the study consisting of 36 students for the school year 2015 – 2016. The scores of students in the 50-item test which served to measure academic performance was administered as pre-test and post-test were tabulated based on mean score and mean percentage score.

The pre-test mean score was 10.83 and post-test mean score of 27.75. The study shows a significant change between the pre-test and post-test scores of the respondents. The result further revealed that science games used as teaching strategy shows a positive impact to learners' behavior, positive attitude towards science tends to score higher in their post-test scores which showed that there was a significant relationship between the attitudes and their academic performance. The positive result of the study suggested that Science Games was appreciated by the respondents.

Children's Instrumental Music And Its Relationship Towards The Reading Comprehension Of Slow Learners In Grade Vi Pascal Pupils Of Bayanan Elementary School (Main)

Rhea Janina V. Bohol
Teacher III, Bayanan Elementary School Main
Schools Division Office– Muntinlupa City

ABSTRACT

This study was designed to examine the effectiveness of children's instrumental music on the reading comprehension of pupils in Grade VI at Bayanan Elementary School (Main). Ten slow learners out of forty – five (45) Grade VI students belonging to section Pascal consisting of 23 males and 22 females of Bayanan Elementary School (Main) was selected to take reading comprehension test. Only one section out of the eleven sections was selected to participate in the study.

The control group underwent the traditional method while the experimental group underwent the 8 sessions utilizing instrumental music, (Disney Sound Tracks).

This study aimed at identifying the relationship of children's instrumental music to the reading comprehension level of slow learners in Grade VI - Pascal Pupils of Bayanan Elementary School (Main). This study is limited to the relationship of instrumental music on the reading levels as well as giving of recommendations on how to improve it and to correct or remediate the reading difficulties. This study did not attempt to try out remedial measures for the discovered deficiencies.

This study revealed that children's instrumental music was effective in improving the reading comprehension level of the slow learners in Grade VI – Pascal Pupils of Bayanan Elementary School Main.

Keywords: *Relationship, children's instrumental music, slow learners, reading comprehension, VI – Pascal pupil*

Scaffolding: Teachers' Teaching Strategy That Elevates Pupils' Learning Performance

Jaime G. Bautista
Bagong Silang Elementary School
Schools Division Office -Muntinlupa City

ABSTRACT

This study aimed to determine if the use of scaffolding technique will elevate the learning performance of the learners.

The study was conducted at Bagong Silang Elementary School involving 41 pupils of Grade III – Matapat as the respondents. The pupils were grouped randomly into two. Group A - Experimental Group used scaffolding technique while group B - Controlled Group used traditional technique.

The research showed that there is a difference between the mean scores of the two groups.

The experimental group performed well than the controlled group as shown by the MPS of two groups which are under mastery level and nearing-mastery level respectively.

In view of the findings, it is recommended that scaffolding must be used by teachers as one of the teaching strategies to elevate the learning performance of the learners.

Assessment of Continuous Improvement Projects in The Department of Education- National Capital Region: Basis for Program Enhancement

Romela M. Cruz and Emmanuel I. Maninang
Field Technical Assistance Division

ABSTRACT

This study was conducted in the six (6) school's divisions at the NCR Cluster Manila North and Central. It sought to assess the factors affecting the completion of CI Project towards the program enhancement.

The qualitative research techniques were employed like Focus Group Discussion and Key Informant Interview. The fifteen (15) CI Team Leaders and Members were randomly selected to join in the Focus Group Discussion. The discussion was focused on factors affecting before, during and after conducting the Continuous Improvement Projects. The documentary analysis was also utilized to assess the reports pilot implementation of the CI Projects in the 6 school's divisions.

The research revealed that factors affecting the completion of the CI Projects are selection of team members, planning and policy, capability building and consultation, timeline and coaching venue, availability of team members, financial resources, technical support of coaches and focal persons, monitoring of the actual process, issues and concerns anent roll-out plan and division monitoring and evaluation. The findings of this study may be utilized as inputs towards the program enhancement at the DepEd, NCR.

Keywords: *Continuous Improvement, School Improvement Plan, School-based Management, Focus Group Discussion, Key Informant Interview*

Collaborative Filipino Webquest: Its Relationship on the Learning Achievement In Science Of Grade VI Pupils Of Cupang ES

Dennis B. Romano
Teacher , Cupang Elementary School
Schools Division Office– Muntinlupa City

ABSTRACT

The advent of modern technology changes the society and creates a generation of digital natives. Thus, the teaching and learning process must adapt with this drastic transformation. Educators are given more opportunities to apply instructional strategies to inquiry-based learning environment.

The purpose of this study is to determine the relationship of collaborative Filipino WebQuest on the learning achievement in Science VI. The participants were students from Grade VI-Darwin as the control group, and Grade VI-Flores as the experimental group. In the quasi-experimental design, the experimental group was taught through collaborative Filipino WebQuest, while the traditional non-ICT teaching activities were utilized for the control group. The data gathered from the post test were statistically analyzed through t-test. The results showed that there is a significant difference between the group that utilized Webquest and the group that underwent traditional teaching activities. This study concludes that the Collaborative Filipino WebQuest is effective in enhancing students' learning achievement

A Supplemental Module to Improve the Conceptual Understanding of Hydrocarbons of Selected Grade 9 Students

Brigida A. Blanco
Teacher III
Muntinlupa Business High School
Schools Division Office– Muntinlupa City

ABSTRACT

For so many years, instructional materials have been developed and utilised in different subject areas, but still the use of an effective intructional materials in teaching has long been a concern.

This study attempted to design and evaluate a supplemental module which aims to determine whether the students will have a better conceptual understanding of hydrocarbons. The subjects of the research were sixty (60) students of Muntinlupa Business High School during the school year 2015 – 2016. The students were divided into two (2) groups: thirty (30) of them had undergone learning with the use of the module marked as Group 1 and the other thirty (30) had undergone learning without the use of the module marked as Group 2. Researcher-made pretest and post test were the research instruments.

The findings obtained from the quantitative data showed that there is a significant difference in the conceptual understanding of the students about hydrocarbons particularly those students who had undergone learning with the use of the module compared to the students who had undergone learning without the use of the module. This suggested that the supplemental module significantly contributed to the conceptual understanding of students about hydrocarbons. The use of the module, indeed, improved the quality of instruction making the entire teaching-learning process more meaningful and relevant.

Keywords: *hydrocarbon, module, conceptual understanding, teaching-learning process, meaningful, relevant*

The Skill Enhancement Approach in Arnis Resulting Positive Academic Performance and Behavior

Teresa Capati – Arias
Teacher III - MPES
San Rafael Technological High School
Schools Division Office- Navotas

ABSTRACT

Sport significantly enhances the quality of a child's urban life. Numerous studies of social cohesion have found that sport and community recreation play a key role in life in a city, and that recreation and sports facilities contribute to a child's integration into his or her community surroundings. Sport provides pleasure for children and gives them the opportunity to meet new people and make new friendships, breaking the isolated mold many low income and underprivileged youth fall under. Children develop a sense of self-belonging and confidence through social cohesion. Participation in sport improves the development of peer relationships, establishes the notion of trust and builds teamwork skills. Sports challenge children to excel physically and mentally, and teach valuable skills such as leadership, hard work and perseverance which translate beyond the playing field to all aspects of life, whether it be in the classroom, at work, or in the community.

Some believe the positive hype around youth sports is spread by adults who either blindly accept the notion that sports are good for all kids or who are in the business of developing high-performing athletes. Generally, studies indicate three important aspects of sports participation that affect positive youth development - intensity, continuity, and balance. A combination of all three offers the greatest benefits to kids.

SPARKR Model: Co-Creating A High Impact Lifelong Learning Culture

Emerson O. Fababaer
Charlie O. Fababaer
Schools Division Office– Pasig City

ABSTRACT

The value of lifelong learning in the 21st century education has now become an indispensable guiding principle of education reforms. However, establishing a framework that will enable educators to put this concept into practice remains a challenge in today's educational system. In response to this, we developed the SPARKR Model in our attempt to ignite genuine enthusiasm for lifelong learning within individuals in the education community. This paper presents the six (6) principles that embody the model and how each principle was applied in the school setting. Using the Kirkpatrick's Model of Learning Evaluation, we gathered and analyzed the personal reflections and feedback of the teachers who have been using the SPARKR model, in order for us to understand the positive contributions of the model to their own learning and that of their students. The teachers appreciated the value of the model as indicated by their willingness to apply it to their teaching practice. Although adjusting to this new model posed some challenges in terms of actual implementation, the teachers considered the model as helpful in transforming their teaching practice for the better. We recommend the use of the SPARKR model as an innovative way of dealing with situations in the classroom and beyond.

Keywords: *lifelong learning, 21st century education, shared-learning, praxis approach, assessment, reflective thinking, knowledge transfer, resource management.*

Improving Skill Literacy In English through Project Tasa Of San Rafael Technological High School

Ma. Fe M. Jubilo
Head I, English Department
San Rafael Technological High School
Schools Division Office- Navotas City

ABSTRACT

Assessment plays a key role in tracking the performance of the learners. It is part and parcel in the holistic development of the learners given in different modes of measurement and evaluation .Results and findings from these modes of assessment are transformed to purpose of intervention and best practices for ongoing learning process and development. As stated in ***DepED order No. 73,S,2012****," Assessment should be used as quality assurance tool to*

- *track student progress*
- *basis for profiling of student performance*
- *attainment of standards*

Administering the SKILLTEST by subject areas served one of the goals of the school's ***PROJECT TASA*** *which focus on improving student learning, especially in Reading, Mathematics and least learned skills in other subjects.* ***PROJECT E-TASA*** *guides the teachers to set –up interventions by providing appropriate and relative assessment tests in the improvement of the target skills.*

Setting up these interventions are regularly planned and documented in the conduct of the Teachers' Quality Circle for project implementation plan for the learners.

The English Department makes the strategy implementation work in carrying out the school thrust through PROJECT TASA by resolving the learning gaps on macro-language skills in Reading, Listening, Speaking, Writing and Viewing. Learning gaps are visualize then in Professional Learning Community (PLC) where planning, assessing and making decisions about the interventions on the basis of the data stipulated from the assessment he cycle goes on until the desired goal is achieved .

Keywords: assessment ,skillstest, tracking

Science Instruction in Organize Set of Study For Grade VIII

Jose Victor D. Gulmatico
Teacher I – Science
San Rafael Technological High School
Schools Division Office- Navotas City

ABSTRACT

Through the years the problem that we encountered in teaching professions is reflect to its system. Although the curriculum we used are needed to upgrade, in order meet the standard all over the word. To restate one of the national education aims, the educational system must respond effectively for changes the needs and condition of our education in our nation through systematic planning and evaluating our educational system.

It is important to develop a learning strategy that could assess the student's comprehension in various competencies. This will address the strengths and weaknesses of the learners in the skills and competencies of Science Grade 8. Evaluations of test results will help identify the least mastered skills of the learners that should be further develop together with other potential skills.

Keywords: *Self-directed, science skills, skills enhancement*

Science Instruction in Organize Set of Study For Grade VII

Marvin B. Alambra
Teacher I- Science
San Rafael Technological High School
Schools Division Office- Navotas City

ABSTRACT

Relevance and quality education-over the years, this is the recurring theme that staunch critics have demanded of the Philippine Education system. Although the words "relevance" and "quality" have been Interpreted in various contexts and dimensions, there is agreement that, as applied to education, they reflect these two important values made imperative by the fact that we have a dynamic culture fraught with complexity and challenge. To restate one of the national education aims, the educational system must "respond effectively to changing needs and conditions of the nation through a system of educational planning and evaluation"

The primary concerns for these is to enhance student's skills, in order to developed these skills TEACHER give some activities for every students, but first they must to know their strength and weaknesses of the students in order to identify what particular strategy can be used in order to obtain knowledge in studying their lesson in Grade 7.

Keywords: *Team Teaching, Collaboration, Teaching Innovation*

Science Instruction in Organize Set of Study For Grade X

Geraldine A. Guevarra
Teacher I – Science
San Rafael Technological High School
Schools Division Office- Navotas City

ABSTRACT

Education undeniably, has the greatest impact on progress and development of a nation. It entails other related field such as work and economy. With the implementation of K to 12 program of the Department of Education and the rise of demands for technical vocational skills (TechVoc) it calls for the need to produce competitive individuals. In part of the Education System, as the curriculum changes, challenges were also inevitable as faced by the teachers and learners.

Developing and providing teaching strategies that would help the learners to enhance their basic science process skills are necessary. It is one great factor in producing 21st century learners that are globally competitive and ready to respond in the call of times. Skills enhancement can create a huge difference in the skills and abilities of the learners.

Keywords*: Science Process Skills, Skills Enhancement, Skills Test*

Employment of Monitoring, Evaluation and Plan Adjustment Technology on Program Development in DEPED-NCR

Victoria R. Mayo, Warren A. Ramos, Marco J. Realista, & Ma. Elena A. Remollino

Policy, Planning and Research Division
Department of Education, National Capital Region, Philippines

ABSTRACT

MEPA stands for Monitoring, Evaluation and Plan Adjustment. It is a funded project of Australian Aid via Basic Education Transformation Sector which aims to systematically determine barriers, bottlenecks and opportunities to access, efficiency and quality of education that contributed to high and low key performance indicators (KPIs). In this study, the utilization of MEPA tools such as dashboards, segmentation, Pareto analysis and forecasting enable the Department of Education-National Capital Region-MEPA team to realize its importance and implications, particularly in the changing landscape of educational policy. The dashboards revealed findings that there were alarming trends in the key performance indicators (KPIs) primarily on School Leavers and Achievement rate from 2010-2015. From the Pareto analysis, the three big divisions in the Region were identified to be part of the "vital few" and should be prioritized in terms of Regional and Division Initiatives. Moreover, the use of forecasting tools has helped the NCR to determine the regional, division and school targets for future KPI's. In the Division –MEPA, the schools to be prioritized were identified using segmentation techniques. Furthermore, the results of the study would be used as inputs towards plan adjustment and continuous improvement of Programs, projects and activities in the implementation of K-12, consequently institutionalizing MEPA in all levels of governance of the Department of Education-National Capital Region.

Keywords: *Department of Education, Monitoring, Evaluation and Plan Adjustment, Key Performance Indicators, Mixed-method design*

Effectiveness of DAMATH In Improving the Basic Computational Skill in Mathematics of At-Risk Grade Seven High School Students

Kenedy M. Cayabyab
Teacher I – Mathematics
San Joaquin-Kalawaan High School
Schools Division Office- Pasig City

ABSTRACT

A recurrent problem in teaching high school mathematics rooted on the weak foundation of basic computational skills. One learning transition of the students from grade school to junior high school is the operation of signed numbers which is fundamental in learning both symbolic and non-symbolic mathematics. Research literature, however, showed that some Teachers tried to initiate interventions to address problems encountered in teaching operations on integers but of different context. It is the advent aim of this study to test whether playing Damath is an effective strategy to increase mastery of the students in the basic computational skills.

The study is descriptive and made use of quantitative method with quasi-experimental design. It was performed through pre-tests and post-tests with 36 students in each group of at-risk grade seven high schools students of San Joaquin-Kalawaan High School in 2014. The students were purposively chosen based on their performance in performing fundamental operations on integers as resulted from the first quarterly test.. Students exposed to playing Damath performed better than the students exposed to lecture method.

Keywords: *DaMath, computational skills, intervention*

Improving Students' Mole Conversion Skills Through the Use of Algorithm Flowcharts

Renier G. Celiz Jr.
Teacher I – Science
Maysan National High School – Paso de Blas Annex
Schools Division Office- Valenzuela City

ABSTRACT

Inevitably, teaching at the microscopic level to high school students is not an easy task, the reality that most learners easily grasp concepts through visual learning makes studying mole is a big challenge to science teachers.

Moreover, the stoichiometric part of the mole conversion which is mathematical in nature is also adding to the confusion at some point. Because of this, the study was conducted to improve mole conversion skills of students and help them perform calculations using an algorithm flowchart. Four heterogeneous middle sections of Maysan National High School were used in the study and through random sampling, 10 students' scores from each class were analyzed. The study made use of a pre-test, post-test and the series of lessons blended with the use of algorithm flowcharts as the strategic tool for discussion. At 0.05 level of significance, the computed t is t (9) = -5.180 whose absolute value is higher than the critical value of 2.262.

This clearly shows that the intervention plan improved the test and performance scores of students is performing mole conversions.

Keywords: Algorithm, flowchart, mole, mole conversion, stoichiometry.

Popcorn Recitation: It's Effect on the Performance of Grade 7 Students Towards Mathematics

Joan J. Postrado
Teacher III - Mathematics
Lawang Bato National High School
Schools Division Office- Valenzuela City

ABSTRACT

The focus of the study was to determine the effect of Popcorn Recitation on the performance of grade 7 students of Lawang Bato National High School for school year 2015 - 2016. The researcher used oral assessment tool with categories on problem solving, math content, math communication, presentation and use of mathematical terminology. Results of the two – group posttest – only randomized experiment revealed that the performance of students who used popcorn recitation obtained a higher mean value than the performance of students who did not use popcorn recitation. Moreover, popcorn recitation registered to have significant effect on the performance of students in learning Mathematics.

Based on the thorough investigations and findings, the researcher arrived at the following conclusions: (i) the performance of students who used popcorn recitation was higher than the performance of students who did not use popcorn recitation, and (ii) popcorn recitation was more effective than the usual recitation used in teaching mathematical concepts. It was recommended that (i) popcorn recitation should be used in oral assessment; (ii) teachers should learn the proper techniques of using popcorn recitation, and (iii) a similar study involving larger groups of respondents be undertaken to further affirm the findings of this study.

Keywords: *Mathematics, Oral Assessment, Performance, Popcorn Recitation*

The Effect of Concept-Skill-Value Mapping in the Performance of the Students in Araling Panlipunan 10

Frallie R. Tolentino
Teacher III – Araling Panlipunan
Dalandanan National High School
Schools Division Office - Valenzuela City

ABSTRACT

It is an experimental study which used the weighted average as basis for students' performance and the achievement test of two group designs to determine the effects of concept-skill-value mapping strategy on grade 10 students of Araling Panlipunan. Ten prepared lessons on Unit II: Microeconomics was implemented for two sections of grade 10 students of Dalandanan National High School. One group was taught using concept-skill-value mapping strategy, while the other group did not use the same strategy.

The mean, t-test, and percentage were utilized in the analysis of data. Although both groups had passing grade, it was found out that there are differences in students' performance to learn economics. Through this study, it was revealed that the students who were taught using the concept-skill-value mapping strategy had a higher mastery than those who were not exposed to it. The two-month exposure in concept-skill-value mapping strategy brought positive views in terms of facilitating students' understanding of lesson and making students aware of what they are capable of doing.

Keywords: *Concept-Skill-Value Mapping, Performance*

The Effect of Literature Circles Method to Students' Test Scores In English 10

Maria Carmela D. Fajardo
Mapulang Lupa National High School
Master Teacher I – English
Schools Division Office- Valenzuela City

ABSTRACT

This study was conducted to determine whether the Literature Circles Method (LCM) in teaching literature in English 10 class had significant effect to the students' test score in posttest. An experimental group composed of forty three (43) students who had undergone teaching in Literature Circles Method (LCM) in English 10 while the control group was forty three (43) students under regular classroom teaching method. The posttest scores of the two groups were compared and analyzed so as to find out the difference of Literature Circles Method (LCM) in teaching literature to grade 10 students of Mapulang Lupa National High School. At the end of 5 week instructions, the posttest was administered.

The findings of the study showed that there was no significant difference in using LCM to students' pretest scores in English.

The findings of the study showed in the posttest mean score reveals that Literature Circles Method has significant difference in the students' test scores in English 10.

Keywords: *Student's Performance, Literature Circles Method, Collaborative Learning*

Use of Information and Communication Technology Enhanced Classroom Intervention in the Achievement of Grade 7 Students in Araling Panlipunan

Maria Lourdes Y. Sayman
Teacher II - Araling Panlipunan
Dalandanan National High School
Schools Division Office– Valenzuela

ABSTRACT

As an agent of change, we have to embark on productive effort that may bring people innovations. Learning in the 21st century encourage contemporary students question what they are learning and contribute to their own learning. The use of this action research helped the teacher and the students in Araling Panlipunan to utilize Information and Communication Technology enhanced classroom intervention to improve the level of achievement of students as an evolution of teaching practice.

The lesson plan of the teacher was prepared for teaching historical thinking skills that discussed about the effects of imperialism among Asian Nations for the third grading period and lesson was Integrated with the current events. The researcher tabulated and analyzed the data with statistical tests such as mean and t-test. The result revealed that there was a significant difference in the achievement level of the two groups of respondents after the experiment.

***Keywords**: Constructivism, Information and Communication Technology*

Utilization of Classroom's Concept Board in the Achievement of Grade 10 Students in Economics at Canumay East National High School

Charlyn SR. Dela Cruz
Teacher II – Araling Panlipunan
Canumay East National High School
Schools Division Office– Valenzuela

ABSTRACT

This study on utilization of classroom concept board in the achievement of grade 10 students was designed to determine if the concept board will improve the achievement of grade 10 students of Canumay East National High School in the comprehension and understanding of Economics.

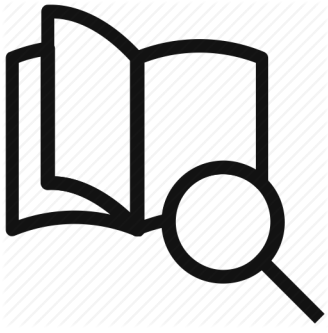
The objective of this study was to improve the achievement of grade 10 students in Economics in preparation for the National Achievement Test (NAT). In the previous National Achievement Test, student vocabulary resulted with low mastery. Thus, the researcher purposively designed a classroom's concept board for grade 10 students to enhance and improve their learning in some definition and vocabulary in Economics and for the challenge that Economics is taught only on the scheduled three hours a week in the new curriculum.

This study used Quasi-experimental research design that aims to evaluate interventions but that did not use randomization. Quasi-experiments aim to demonstrate causality between an intervention and an outcome.

The researcher concluded that utilization of classroom's concept board is an effective method in improving the grade 10 students' cognitive process.

The researcher recommended that the utilization of classroom's concept board should be continued, since it showed effectiveness in increasing the achievement of the students' vocabulary. Furthermore, enhancement of the concept board like including trivia, higher order thinking skills (HOTS) questions and problem solving should be included.

***Keywords:** Concept Board, Achievement*



Exemplary Research Projects

TEACHER AGENCY IN THE K TO 12 EDUCATION REFORM: NARRATIVES FROM MINDFUL TEACHERS

Marnelli A. Bautista

Education Program Supervisor for English
Schools Division Office- San Juan

ABSTRACT:

Along with the K to 12 Basic Education Program, the Department of Education has put in place the so-called Rationalization Program to articulate, more than ever, the pivotal role of teachers in the implementation of the curriculum, including its attendant learning outcomes. Implicitly, that role demands that teachers become high-level technicians. This paper explores spaces in the K to 12 education reform where teachers can exercise their personal visions and become transformative intellectuals. Using case study approach in qualitative research, it teases out the issues raised by three teachers during the several extended interviews that allowed the

m to reflect on their system-driven, reconfigured subject positions and practices. These reflections illuminate the ways in which these teachers make sense of their motivations behind the range of strategies they deploy to navigate the imperatives of standards-based, learner-centered curriculum and pedagogy. The analysis relates such reflections to two of the Department of Education's official platforms namely the Professional Learning Communities and Action Researches, focusing on their potentials to effect substantial change from the bottom-up in which teacher agency can be realized on a wider scale. In the process, the analysis implicates aspects of the political and economic dimensions of the K to 12 to shed light on the conditions that can make possible the making of agentic teachers on the ground.

Keywords: Teacher Agency, Transformative Intellectuals, Professional Learning Communities, Action Research, K to 12 Curriculum, Rationalization Program

INTRODUCTION

The Philippine Educational System has evolved into what it is today as a result of numerous comprehensive reforms that aimed to address fundamental issues that plagued the sector. From the time Commissioner Counts of the Monroe study (1925) came out with his observations on the language, teaching staff, and the curriculum itself, the subsequent technical reports on basic education showed similar findings that reflected the inability of the leadership to effect substantial change in a massive and sustained scale through the years. In the paper entitled, *"When Reforms Don't Transform"* (Bautista, et al., 2009), the authors highlighted the different educational surveys, sector studies, reform packages, and major development projects from Monroe Survey in 1925 up to the Basic Education Sector Reform Agenda or BESRA in 2006. They articulated their reflections on these institutional initiatives and pointed out significant lessons that catapulted the educationists in authority to operationalize the principles distilled in those painful years that gave us the Rationalization Program *(RAT Program)* and the K to 12 Curriculum today.

Cognizant of the fact that a lot of efforts have been raised to tackle pressing issues, it was time to harmonize all acts together to preserve the resources and provide focus to the main business of education which puts the learners at the core. There was a need to streamline the organization and redefine the roles, expectations, and standards of operations in order to achieve the common goals articulated in the vision-mission statement of the Department of Education *(DepEd)*. This places all members accountable for every performance delivered and measure it against the imperatives of assessments that are proven to be contributory to the attainment of the organizational goals as defined by the Constitution and interpreted by our education leaders who engineer the landscape for the interplay of actors and deployment of their agentic features.

In light of the recent institutional changes, it invites attention to how different members of the DepEd family can strengthen their positions to carry out their duties and act as catalysts for substantive change. We take a closer look at one actor in the scene that is in direct contact with the learners on a daily basis and interrogate the ways to explore their human agency which implicates the capacity to respond to existing issues that plague the sector.

RESEARCH QUESTIONS

This paper attempts to unpack the pivotal role

of teachers in the implementation of the curriculum and serve as agents of change against the backdrop of their social realities that affect their decisions to participate in the current set up of the educational landscape.

Specifically, it seeks to answer the following questions:

1. What mechanisms are in place under the K to 12 Education Reform that can facilitate teacher agency?
2. How can teachers scale up their agentic features in light of the changes in the sector to effect substantial change from among their ranks?
3. What implications can be gathered from the selected narratives of teachers that can navigate the imperatives of standards-based, learner-center curriculum and pedagogy?

It is hoped that such articulations will allow readers to find points of convergence that might resonate with their situation at one point or another and agree on a common understanding that teachers can do something from the personal level and beyond in the interest to empower the agentic formulations of a critical mass. This will impact the lives of not only the learners in the classroom but the teachers themselves and ultimately, translate in societal gains.

RESEARCH METHODOLOGY

This paper uses the case study approach in qualitative research where it teases out the issues raised by three select teachers during the several extended interviews that allowed them to reflect on their system-driven, reconfigured subject positions and practices. These reflection illuminate the ways in which these teachers make sense of their motivations behind the range of strategies they deploy to navigate the imperatives of standards-based, learner-centered curriculum and pedagogy. It brings to the fore how their experiences in the field can be connected to understand the social realities they operate in to illustrate the context of where the decisions are made and negotiated to influence others that strengthen the concept of teacher agency in favor of their kind as they aspire to be what Henry Giroux termed as transformative intellectuals (Giroux, n.d.).

From this point of view, teachers are considered as *"professionals who are able and willing to reflect upon the ideological principles that inform their practice, who connect pedagogical theory and practice to wider social issues, and who work together to share ideas, exercise power over the conditions of their labor, and embody in their teaching a vision of a better and more humane life"* (Giroux and McLaren, 1989 ,p.xxiii, quoted by Kumaravadivelu ,2003). This means that the role of teachers is now stretched *"beyond the borders of the classroom. As transformative intellectuals, teachers are engaged in dual task: they strive not only for educational advancement but also for personal transformation"*

CONCEPTUAL FRAMEWORK

In order to provide better appreciation for this topic, it is important to define teacher agency as how experts view it. Decades of institutional reforms have been adopted largely as a product of commissioned studies premised on theory-grounded educationists that bring with them academic lens that see issues from a detached viewpoint in the interest to be objective and devoid of emotional biases. While we do not discount the validity that their findings bring, it underplays the role of teachers and relegates them to mere high-level technicians of prescribed curricula and oppressive regimes of testing and inspection. (Priestley, et al., 2012).

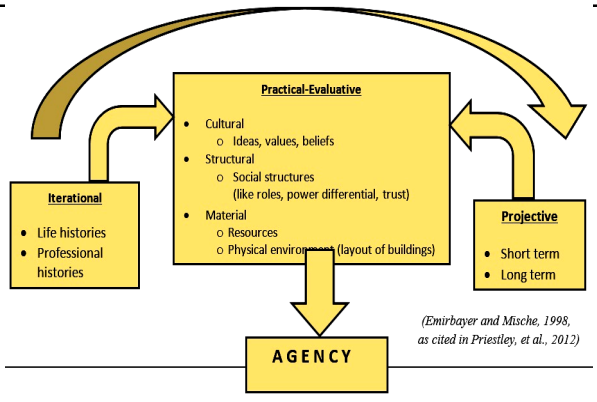
In the article entitled, *"Teacher Agency in Curriculum Making: Agents of Change and Spaces for Manoeuvre"*, Priestley et al., (2012) mentions that the formulations of these curricular reforms reflected innovations which by definition mean policy that promotes change, and the term change is implied as social practices that may occur as a result of engagement with the innovation. Elmore (2004) further suggests that change does occur in schools but innovation is often mediated to fit with prior practice. These ideas allow for liberal data-mining from the field to anchor on teachers' explicit experiences to be theorized so as to put premium on their collective capacity to enact on pressing issues and spread this paradigm shift to own the process of catalytic activity to promote their legal rights and other various interests.

Our perspective on agency has its theoretical underpinning on the pragmatist philosophy of John Dewey and George Herbert Mead (Biesta, 2005, 2009). Agency is viewed as the capacity of actors to *'critically shape their responses to problematic situations'*. It takes into consideration the concrete settings and ecological conditions that give rise to the interplay of individual efforts, available resources and contextual and structural factors. (Biesta and Tedder, 2007 as cited in Priestley, et al., 2012). Furthermore, it is not something that people can have but it is something that people do. It denotes a 'quality' of the engagement of actors with temporal-relational contexts-for-actions, not a quality of the actors themselves. Viewing agency in such terms helps us to understand how humans are able to be reflexive and creative despite being constrained by social and material environments (ibid).

In the same vein, we adhere to the principles of the chordal triad that speak of either routine, purpose or judgment (Emirbayer and Mische, 1998). The concept of teacher agency brings to

towards the future, and engagement with the present which are referred to as the iterational, the projective, and the practical-evaluation dimensions, respectively. They suggest that agency should be understood as:

> *'temporally embedded process of social engagement, informed by the past (in its habitual aspect), oriented toward the future (as a capacity to imagine alternative possibilities) and 'acted out' in the present (as a capacity to contextualize past habits and future projects with the contingencies of the moment) (Emirbayer and Mische, 1998, as cited in Priestley, et al., 2012).*



The figure illustrates the relationship of these three dimensions that inform the actions of teachers that exercise their agency. It emphasizes that achievement of agency is the result of the past experiences of teachers covering the personal and professional histories to comprise the iterational dimension; the orientation of the future in combination of the short and long term objectives and values to refer to the projective dimension; and the enactment of the present condition brought about by factors such as cultural, structural, and material resources available to the actors as indicated in the practical-evaluative dimension.

Profile of Teachers and their Challenges

The selection of teachers included in this study is premised on their positive regard for agency as manifested in their solid performance of duties as teachers in the Schools Division Office of San Juan City, the smallest division in the National Capital Region. They bring with them the different contexts of the schools they represent and the positionalities they carry as defined by their personal and professional motivations to hurdle the challenges they faced as shared in the interview. In the interest of confidentiality, the three teachers will be referred to in pseudonyms to protect their real identities.

Teacher Ana is 34 years old and has been in the public school service for ten years. Her position as the School Math Coordinator with a Teacher III item was earned as her academic background centered on a specialization course she had as a scholar of a prestigious Math organization that sponsored her graduate studies. She is a few units away of completing her Master's degree, a task proves to be problematic as she admitted to conflict of schedule in her tour of duty given the daily scope of her job in the school, covering not only the academic concerns but also the auditing component of the school operations as she takes care of the financial inventory in general. She talks about the lukewarm attitude of her fellow teachers during meetings that usually result in low commitment to innovations and interventions she would introduce and the overlapping functions of some teachers that affected performance exacerbated by the strong demands of the school head to deliver to score points and outdo other schools in terms of competitions and ranking.

Having an entrepreneurial mind, she is concerned with the low financial literacy of her peers as shown in their spending habits and lifestyle choices in the way they manage their resources along with the habitual acts of clinging to loan sharks and other similar venues. She sees the value of educating them about ways to improve on their fiscal maturity so as to lessen domestic concerns that would free them up of unnecessary stress related to economic matters and would therefore bring joy and passion to their conduct of duty as teachers. Her exposure to good financial models and her healthy mindset of wealth give her the confidence to preach on the gospel truths about money despite the limitations she face when confronted with setbacks from family obligations.

When asked about her plans for the future, she sees herself finishing the degree course in Mathematics and putting up her own pre-school that would strengthen the foundational skills on reading, writing, and arithmetic. She quips that she might continue doing her retailing business of ethnic bags and other products from her hometown province as this gave her good income on the side, although this was stopped as she decided to concentrate on her role as a School Math Coordinator.

Teacher Becky is 53 years old and has been in the public school system for three years at the time of interview. However, her 27 years of practice as an English grade school teacher in a private sectarian exclusive girls' school gave her depth and the expertise to handle the role of being the School English Coordinator of her current school with a Teacher II item, the appointment of which was afforded to her by DepEd San Juan in recognition of her excellent service to the institution as attested and recommended by her school head. She had finished the academic requirements for Educational Management prior to her entrance to the public school but due to several constraints inherent to the stringent demands of her former school that was undergoing

the accreditation process then, she was not able to complete the degree until the time had elapsed and she went on to other ventures which led her to the decision to leave the private sector.

Her professional history molded her the discipline to embrace challenges at face value as evident in her no-nonsense stance in dealing with deadlines inherent to her job as the coordinator for English in charge with journalism and other related office work that required her competence for records management. Being a neophyte in the dynamics of the public school system, she finds it bothersome that Master Teachers were promoted to their positions but do not necessarily serve their functions outlined in their job description, leaving to her hands the responsibilities expected of them like in the running of the Summer Reading Camp which is supposed to be under the leadership of the veteran ones.

She also views the dismal state of school facilities as contributory to the poor performance of her students and even of her colleagues as these affect the social climate for learning necessary to boost the morale of everyone in the quest for better quality of education given the limited resources available to their disposal. She takes note of the seemingly congested school activities that snatches the focus away from academic pursuits and causes distraction to lessons as pupils are being excused from classes to attend practices in favor of extra-curricular activities held every month. She cannot help but to compare it with her previous orientation but catches herself adjusting to the norms of her current conditions and negotiate to bring a certain balance to her attitude and disposition that leaves her with a joyful hope to institute change in her capacity as a teacher in authority, inviting attention to her vision of being a school head some years from now and promising to live out the values she formed as a Catholic.

It helps to appreciate this pronouncement coming from a situation that she takes care of an ailing husband who goes through expensive dialysis thrice a week while supporting two grown up schooling children with only tutorials and a few investments made to augment their financial needs. Her ability to juggle work and home concerns give inspiration to most, if not all of her colleagues, and her decision to enroll in a graduate course on top of all these responsibilities, earn the admiration and respect of everyone who hears of her condition. She believes that if her intention is to lead the school someday, it will be wise to prepare herself now and be equipped with the qualification to guide her in the journey.

Teacher Charlie is 30 years old and has been with the system for four years with academic background in a degree course in Science. His first year of service is reported to be interesting as he already assumed the presidency of the faculty club several months after he became permanent with his Teacher I item due to natural vacancy. His colleagues voted him for the position because of his eagerness to learn about the system every time he was given a task to perform on top of his duties as a classroom teacher back then. His being the eldest and the breadwinner of the family he left in the province gave him the motivation to persevere in the job and assert his right to be a public school teacher.

He read the Magna Carta to educate himself on the basic rights of teachers so when the time came that his service was sought, he could provide technical assistance more than moral support which put him in clash with the school head at the onset of the rotation of principals on the second year he was with the school. He got into a heated confrontation when there was an issue of contention as to the transfer of the former principal and the incoming one, with whom he got in conflict with, because of a communication that was mistaken to be a form of a protest. After a serious dialogue with the concerned parties before the office of the superintendent then, it was resolved with him as the representative of the faculty which earned him the power struggle in the years to come.

His position made him a popular personality among his colleagues to be in the lookout for issues of abuse hurled upon them by circumstances but at the time of interview, he mentioned the passive attitude of teachers when it comes to school policies which explains their inability to stand up for their rights when the situation calls for it. This is on top of a lack in set-skills for professional development that T. Charlie offers in hindsight that hinders the facility for teacher agency to be maximized to serve their purposes. His eventual promotion to Education Program Specialist in the Schools Division Office draws attention to this agentic exercise of teacher agency despite the challenges he faced back then so his inclusion to this study deserves emphasis to arrive at an understanding on the interplay of different factors to achieve changes in the course of one's life that determine the trajectory of the decisions and actions made.

The Current Educational Landscape: K to 12 Curriculum

In keeping with the ecological behavior of our actors in this study, it is helpful to remind us the context of the K to 12 Curriculum from which the teachers operate in as a backdrop of the formulations of their actions. The following section briefly brings to mind the salient points of the K-12 Program that covers Kindergarten and 12 years of basic education – six years of grade school, four years of Junior High School, and the additional two years of the Senior High School (SHS). This offers increased contact time of students with the different learning areas as the

curriculum is streamlined and decongested for better mastery of competencies.

The entire system is provided free for Filipinos in public schools as articulated in Republic Act 10157 or the *Kindergarten Education Act* and Republic Act 10533 or otherwise known as *The Enhanced Basic Education Act of 2013*, which are built around the needs of the students and the community in particular, and the country in general. It advocates a curriculum that is learner-centered, standards-based, culture-appropriate, and global in nature as it covers a number of topics such as Children's Rights, Disaster Readiness, Climate Change, Gender Awareness and Development, Financial Literacy, Entrepreneurship, and Reproductive Health, among others. It is anchored upon the ultimate goal with 21st century skills as reflected in the Vision-Mission and Core Values of DepEd, with a strong curriculum support system and a mechanism for monitoring and evaluation.

As for the Senior High School Program (SHS), the students are given four tracks to choose from namely: Academic, Technical Vocational Livelihood, Sports, and Arts & Design. Each of these tracks has different strands to be offered that caters to the varied interests and potentials of the students. Regardless of what tracks they may choose, all SHS students will go through a core curriculum with eight learning areas such as the Language, Humanities, Communication, Mathematics, Philosophy, Science, Social Science, and PE & Health. These common courses are intended to solidify their characters and competencies so they get to be more matured in dealing with adult matters should they find themselves in the work place, business, or higher education. Under the Core Subjects, there will be the same contents and competencies for all SHS learners. In the Applied Track Subjects, contents will be different but competencies will remain the same and the Specialized Track Subjects will have different contents and competencies determined by the tracks and strands to be chosen by the learners.

Interestingly, the emphasis on the development of entrepreneurship skills empowers the young ones to go beyond the employee mentality which is at the mercy of profit-oriented capitalists. With a strong background on economic literacy embedded in the SHS curriculum, students are taught to be more enterprising as they learn the tools of the trade and become immersed in the field. Therefore, in the event that they do stop schooling or are unable to go to college, they will have the set-skills to fend for themselves and still become productive members of society because the assumption is that, the schools would have already prepared them for real life-long learning which is reminiscent of Dewey's educational goals of schooling.

Thus, DepEd's battle cry of *Trabaho, Negosyo, Kolehiyo* as exit points becomes more appealing to all stakeholders as all learning opportunities are being explored during the course of basic education where education is free as mandated by the Education For All Policy (EFA) in the Philippine Constitution. With the current thrust of the government to take part in the ASEAN Integration, it is all the more imperative for Filipinos to create a solid sense of self-identity through the kind of education that is given to the learners. Given the limited resources at our disposal, there is a need to be more sensible in the investments we make and the partnerships we venture into because we see how education becomes a great equalizer for the rich and the poor, the urban and the rural, the boys and the girls, and the other existing dichotomies in our society.

Articulations of Teacher Agency

Such is the context on which our teachers operate in. In response to the first question about the mechanisms in place under the K to 12 Education Reform, the following shows spaces in the Department that facilitate teacher agency.

A. The Rationalization Program

RA 9155 or the Governance of Basic Education Act of 2001 clarified the mandates per level which are reflected in key thrust areas and organizational functions. This helped define the parameters and expected deliverables of each service unit classified into core, support or conscience functions. The law stipulates that the State shall encourage local initiatives for improving the quality of basic education. Schools and learning centers shall be empowered to make decisions on what is best for the learners they serve.

The goals are set against the expectations for each level. While the central office provides the over-all leadership with its agenda-setting, policy-making, research and standards formulation, and both the re-engineered regional and division offices are in charge of the field leadership in the enforcement of these standards down to the levels they supervise through technical assistance, the schools and learning centers remain the ultimate place of implementation where performance indicators are met. Teachers are in the position to represent the organization to the ultimate recipients of the program and service of the very people we vow to serve, the learners. This is where we give the face of DepEd to the public where we can seal our brand of excellence to ensure that we live out the mission and advocacy we committed ourselves to when we entered into this profession.

B. Results-Based Performance Management System (RPMS)

In a Department as huge as DepEd, it is important that all personnel contribute meaningfully in the realization of the vision, mission, and goals. It is incumbent upon all teaching and non-teaching personnel to adhere to performance standards to ensure that learners are able to get quality basic education and the RPMS is one system in place that helps keep everyone focused at hitting the shared target. It allows teachers to do their mandate being at the forefront of the curricular implementation right at the heart of their classroom by setting the objectives anchored on their key result areas with clearly-stated performance indicators to measure actual outputs in the conduct of their sworn duties. With the four-stage cycle, there are processes that give space for teachers to exercise their agentic features to advance their personal and professional mission as they take responsibilities for their own growth and development. They are provided with means to plan out their activities for the year as they aim to be strategic and results-based taking into consideration the interplay of iterational, projective, and practical-evaluative values they bring for themselves. This is where they can build on their strengths and work on improvement areas to yield high impact results relative to their job description. The amount of leap and the rate of progress are largely dependent on the degree of commitment one has to further advance to the next level of competence outlined in the service manual.

C. Professional Learning Communities (PLC)

In the interest to produce a growing number of professionals working together towards excellence, DepEd instituted a means to create mindful gathering of individuals who are similarly situated to address a pressing need or concern. PLCs subscribe to the six core principles that talk about the following: culture of collaboration; shared vision, mission, and values; collective inquiry into best practice; action orientation; continuous improvement; and focus on results (DuFour & Eaker, 1998). The National Capital Region saw its practicality in the field to organize PLCs according to various needs and interest of the teachers in order to cultivate the expertise of everyone while already in the service, on top of the encouragement to enroll in graduate programs and other formal courses designed to sharpen knowledge, values, and skills required of the position. This also serves as a venue to develop or enrich relationships in the field as teachers exchange experiences, insights, practices, and everything in-between as they expand their territories to attract like-minded individuals and influence change the way they deem necessary. It allows them to define the purpose of their unity so they can work as a team and face the challenges with pooled resources.

D. Action Research

Mills (2000) defines Action Research as a systematic inquiry done by teachers (or other individuals in an educational setting) to gather information about, and subsequently improve, the ways their particular educational setting operates, how they teach, and how well their students learn. It is a space for teacher agency which officializes findings from actual experiences or insights arising from actual immersion from the field in order to facilitate change in the system. It recognizes the authority of teachers as experts because they are the ones in direct contact with the primary stakeholders, the learners. The discipline embedded in the data gathering helps teachers become perceptive of their ecological conditions that inform their behavior and decisions in their exercise of agentic features. They are afforded a platform to raise their voice on matters of interest which is reflective of their causes they wish to carry.

Teacher Agency in Situated Contexts

Research Question 2 asks how teachers can scale up their agentic features in light of the changes in the sector to effect substantial change from among their ranks. The following section covers the strategic practice of our respondents in specific contexts in their quest to address their respective challenges. We bring to mind the three dimensional process of social engagement as espoused by Emirbayer & Mische and how these relate to the experiences of our respondents in this study.

A. **Iterational Dimensions**

The iterational component builds upon the past achievements, understandings, and patterns of action of our three teachers.

T. Ana's early exposure to frugal lifestyle stems from the fact that she came from a big family back in their hometown province where her parents and siblings make do with their income to meet basic needs. Being the youngest among the fourteen siblings, she was used to hand-me-downs and practical ways of cutting back with school and home expenses to live a modest lifestyle. There was a strong presence of significant adults who modelled her ways to manage resources that enabled all children to finish school and earn stable jobs as they matured in life. This consequently resulted in her ability to be financially literate as she could identify ways to supplement her salary and live within her means to increase her savings. She would sell native bags and do tutorials on the side after her teaching duties. Her strong sense of fiscal management extended to her school functions as she took care of the auditing protocols in the canteen and other

related records-keeping procedures.

T. Becky's solid background on Journalism dates back in her twenty-seven years of service in the private school prior to her appointment in her current workplace. She was assigned to be the School English Coordinator and simultaneously, the School Paper Adviser, by the wealth of her experiences and exposures to the discipline having rose to the ranks of being a coordinator herself as part of her professional history. Her involvement in the accreditation process of her former school for several years gave her the necessary training to conform to certain performance standards because she had people under her care and a unit to run so she understood the value of command responsibility, timetable, and quality assurance in exigency of the service. She carries the years of lessons learned in the field to respect the fundamentals of school politics whether it be in terms of curriculum, governance or operations. Age was neither an issue that deterred her compliance with the school activity nor had become a source of entitlement for any reason.

T. Charlie, for his part, anchored his motivation for excellence on his desire to provide for his family in the province being the eldest among the four siblings. His strong relational skills and the natural tendency to lead people came from his drive to bring his family out of poverty through education. This resulted in his positive regard for work as a means for social mobility so despite the challenges of a power struggle between him and his superior, along with the very few in the community who apparently did not sit well with his assertive behavior, he was able to surpass the trials and carried on with his job, earning the respect of his colleagues at the onset of his career as a teacher-leader.

B. Practical-Evaluative Dimensions

All three work hard to craft relevant lessons for their pupils. T. Ana has made the connection of teaching her pupils the practicality of numeracy skills in her presentation of math problems. She situates the lessons on the interests of her learners, animating them with examples that deal with their internal realities as she uses the contexts of their family dynamics to explain concepts of fractions when there is a need to discuss partitions for big-sized households or delegation of tasks for siblings as she infuses values and humor when deemed possible. She shares in jest the following observations:

> *"Alam mo, sa bilis ng mga bata nating magkwenta sa soup at sa tray, kakayanin nilang makipag-sabayan sa mga private schools eh. Binibigyan ko rin sila ng mga exercises na based sa bentahan at suklian kasi mas lapat sa katotohanan at napapatulin yung mastery ng skills kasi kita agad ang application eh. Maaga pang natatapos ang recess namin."*

This anecdote was made on the occasion when she was reminded of a lively engagement with her class that reflected the immediate gains of her lessons. The practical application of such mastery of adding and subtracting skills allowed increased time to do other things during recess which would not have been possible had they been trapped to inefficiency or mediocrity of *'trading of goods'* that regularly happens during the supervised recess in a typical public school classroom where snacks are being sold in trays by either the teacher or the pupils as form of skills and habit formation.

In her capacity to evaluate her ecological conditions, T. Becky uses literature to further enhance the critical and creative thinking skills of her pupils so they can better situate themselves against the social realities that they find themselves in. Her understanding of narrative texts help facilitate the appreciation of her pupils in negotiating meanings so their class discussions are not devoid of the conflicts that happen around them and make sense of polarities of situations that necessitate informed judgments which is what the K to 12 curriculum promotes. Such pedagogy presupposes literacy as a construct shaped by the 'funds of knowledge' (Moje, et.al., 2004; Moll, Amanti, Neff, and Gonzales, 1992) developed by the learners themselves in the social spaces of home, peer groups, communities, and popular culture. Strategic connections between home and school are therefore essential to come up with a relevant and engaged class. (Moll, 1992).

In view of the critical literacy that T. Becky adheres to, there is an emergence of metacognition for the learners as a way to have control over what constitutes good education for them as they get to interpret multimodal texts not only on the basis of linguistic codes and conventions but to include semiotic systems such as visual, audio, gestural, and spatial modes of meaning (Bull and Asntey, 2010). The decision to involve the learners as active partners negotiating meaning places teachers in a facilitative position who are supposed to provide mapping of literacy instruction so the bulk of learning is dependent on the pupils themselves. This allows a big space to explore their giftedness and potentialities which can stimulate personal motivation to pursue learning. This kind of learning environment encourages the teacher agency of Becky to look beyond the limitations of her current conditions and persevere with her duties so she can see ripples of change slowly taking place

in her school if she remains consistent with her ideation of what constitutes a committed public servant.

It can be recalled that being the breadwinner in his family, T. Charlie had to take his job seriously and kept his motivation so he could send financial support to his parents and younger siblings who are still completing their formal education. This explains the reason why he exudes a strong sense of discipline whenever he is given a role to perform despite being a newbie on his career. He offered the following insights:

> *"I put premium on education because it will give you the leverage to advance in life. It pays to be informed with your choices and to be able to take calculated risks. This will give you confidence as you decide on what to do when faced with uncertainties. After all, life is what you make of it. And I bring this truth to my students so they can take their schooling seriously."*

This articulation of a belief system is practical-evaluative in nature as he serves as a living example of a teacher who walks his talks. He embraced a methodological pedagogy in Science and taught pragmatic thinking to his pupils to inspire them to create change for themselves as manifested in their grades or behavior in and outside the school. His struggle to make both ends meet made him the person he is today because he paid attention to his studies that earned him the capacity for social mobility now that he works as an Education Program Specialist in the Schools Division Office of San Juan who monitors existing programs in the Department in all the schools of its jurisdiction.

All three showed steadfast commitment to trainings and development of good study habits not only for the gifted and the talented ones but to everyone in their care. They would always be part of the division and regional contests for their respective subject areas, providing technical support to their contestants with the aim of giving them a competitive chance to display their competencies accordingly. Their concept of inclusive education is seen in their treatment for the non-competing pupils who still enjoy the love for learning as they are presented with meaningful activities that help develop their knowledge, skills, and attitude towards the subject they teach.

As part of their continuing professional development, all three are in the process of completing their graduate course. Not only do they sport a healthy attitude towards formal studies but they also see the need to engage in informal ways of keeping attuned with educational policies and current trends through participation to focus group discussions, consultation meetings, and other related activities. They attend to trainings, seminars, and workshops regardless in whatever capacity whether as participants, facilitators or resource speakers, across all levels – from school to the international scale.

As a result of this exemplary performance, all three hold key positions in school whose opinions and insights matter in shaping the public discourse of their colleagues. This is essential in the exercise of teacher agency as they get to influence people and eventually move them to action. As a matter of developing methodological skills on attacking issues that beset the schools, all three likewise adhere to the ideals of Continuous Improvement (CI) Technology. They are part of their respective CI Teams actively engaged in seeking out ways to respond to the pressing concerns. T. Ana is involved with improving the low performance of pupils in a school subject and resolving recurrent problems associated with low interest in school. T. Becky is currently working on strengthening the reading practices of their pupils in order to facilitate better understanding of other content subjects. T. Charlie, however, being a certified CI Master, serves as a coach to the schools providing technical assistance when necessary. He is part of the Division-led team who is monitoring the conduct of two-tiered seminar as a design for effective service delivery in the area of field technical assistance provision.

The quality of their work necessitates enduring partnership and linkages with like-minded individuals or entities that share the same vision. And true enough, the contingencies of the moment present to all three teachers proved to be enough to perform the expected major final outputs in their attempts to exercise their agentic features.

C. Projective Dimensions

In elevating the teaching scenario to the exit points of the Senior High School Curriculum as discussed early on, it leads to the practical gains of a preferred track or strand by the students. In San Juan where there is an abundance of medium and small-scale retail industries, T. Ana was able to establish the relevance of strengthening the entrepreneurial sense of students so they can have solid foundation of the basic tenets of consumerism and ethical standards of trading as a means to sustainable resource of living because of the ability of students to replicate the skills developed in her class and the availability of employment or business opportunities, especially when students are taught feasibility projects, marketing and promoting, financial work plans, basic bookkeeping, and other related courses that can be able to launch

low-budgeted commercial endeavors like in the food industry. When asked about what she intends to accomplish several years from now, she shares her vision of putting up her own pre-school with a strong program on literacy and numeracy skills along with relevant life skills that will be helpful in coping with the demands of the big schools.

As for T. Becky, she believes that given the opportunity to pass the principal ship exam several years from now, she resolves to use public funds to ensure its effective use for human capital through investments on knowledge. This is her projective component of teacher agency at play as she imagines herself being the key actor in the hope to improve management of resources for the greater good. She is supportive of sending teachers to state-sponsored or Department-initiated trainings, seminars, immersions, or bench-marking activities that will improve practices and outcomes. She likewise sees the importance of being reflective practitioners in the field with the integrity and dignity to develop non-templated skills that are emancipatory in nature and resonate well with the efforts of nation-building in the context of multiple intelligences and multiliteracies. She intends to integrate spirituality in the workplace as an enabling force that will provide the moral compass for all employees, including herself. She wants to pay tribute to formation she received from the Catholic institution that nurtured her for the most part of her teaching career.

In the several extended interviews conducted with T. Charlie, he mentioned the need for teachers to be empowered on political and economic issues. He accounted much of the apathetic and non-committal disposition of the teachers to their lack of time to study the issues that beset the sector, robbing them of the opportunity to make informed judgment. The passivity of some may also be a manifestation of the lack of understanding of the Magna Carta that warrants their protection from all forms of abuse that curtail their innate rights as teachers. Therefore, he dreams of a more empowered agency for each teacher who can brave institutions or individuals who threaten the democratic ideals of the organization. He is also motivated to see an influx of teachers who are able to rise above the poverty line commensurate to the dignity of a true professional. He wants to see the mechanism for this social mobility as something that is accessible to all and not as a privilege of the few that usually results in a dichotomy, whether between the haves and the have-nots, the intelligent and the weak, the favored and the unwanted.

Implications of Teacher Agency

The following section invites attention to how teachers can make sense of the narratives shared by our respondents.

First, teachers facilitate learning in classes that are responsive to the needs and aspirations of the community other than the dictates of a foreign market that is far from the consciousness of the locals. Relevance is defined by the concrete conditions of the people and how they can thrive in the society given certain dynamics like relations of power, mode of production, purchase power, and other related context.

We remember T. Ana as she is able to use her iterational component of her agency that banks on her personal experiences and life history to advocate the teaching of math skills anchored on the practical gains of learners of her lesson, stretching the implications to her own story of survival in being enterprising while doing her work as a teacher.

The ability to establish connections from school to opportunities to real-life learning as referenced in the projective view of employability or the increased possibility of entrepreneurship among the learners through the SHS preparations is another form of agency that places T. Ana in support of the K to 12 Curriculum which brings to the next point that teachers act as conduit of learning for the learners in the interest to achieve holistic development, social mobility, cultural preservation, sound patriotism, moral ascendancy, and other similar life goals which are also deemed to manifest in the teachers' lives. They operate on abundance mentality taking care to see the power of small, repeated actions in creating habits of success that determine the kind of future they want today as they nurture young minds to own up to their learning and make sense of the world as they experience it.

Next implication is the access that teachers get for continuing in-service education reflective of their needs and interests for faculty development through the Professional Learning Communities (PLCs). They are given opportunities to engage in capacity-building activities in flexible terms like through online platforms or face-to-face sessions on a negotiated scheme according to their needs and levels of proficiency.

It is noteworthy that Riveros, Newton, and Burgess (2012) presented their critical reflections on the conduct of PLCs. Their studies show how the experts have recognized the essential points that peer collaboration and the meeting of minds of these professionals bring in the improvement of school operations because they are able to build a sense of ownership to the process. It also results in stronger commitment and willingness to participate because they get to feel that they are important in the successful implementation of the legislated mandate

of education spoken in their own terms, taking care to see the subtleties and other minute details of their daily proceedings. Goals are further contextualized down in their specific conditions thereby giving them opportunities to explore viable solutions that will address issues within their sphere of influence.

T. Becky made a sharing on how her exposure to Journalism in her former school helps her lead the organization of school paper advisers in the division in her capacity as the current editor-in-chief. She is able to keep up with her time frame in as far as deadlines and the rudiments of the discipline are concerned which in effect gives credence to her leadership during meetings held. In spite of her amateurish venture to the public school system having been just two years in service, she comes with the iterative experience of more than twenty years of solid history of dealing with the daily grind of journalistic principles from her former school. This is a situated account of a teacher that can provide a robust theoretical framework for understanding the dynamics of a professional learning community as espoused by Putnam and Borko (2000).

She relates the following in one of her interviews,

> *"I feel that it is my duty to share my experiences with the young generation of teachers to continue to sharpen their skills in pursuit of excellence. There are always new things to learn apart from graduate studies. The world is brimming with resources to discover ways to do things anew. As purveyors of knowledge, teachers should remain in the forefront to model behaviors and attitudes that will capture the essence of learning through the five senses of which everyone is gifted with."*

As for T. Ana, she welcomes the idea of PLC as an added learning space for teachers to share content knowledge without going through the drills of mounting expensive in-service seminars that factor in budgets for venue accommodation, food, and other logistic expenses. There is agreement among like-minded individuals to work on common goals in flexible shifts for as long as there is a need to meet and address concerns on shared topics of interest to deploy certain strategies in improving the teaching-learning process in as far as instruction is concerned.

In the working paper of San Juan's Learning Academy, it states the Division's response to the thrust of the Continuous Improvement Program of the Department as initiated by the Schools Division Superintendent then, Dr. Jenilyn Rose B. Corpuz, which will ensure critical thinking among its stakeholders. The project aims to provide various learning platforms to improve its services by engaging individuals to organize learning circles among themselves on matters of interests, advocacy, priority needs, and other similar concerns. It further provides venue for healthy and dynamic discussion of relevant issues and concerns through face-to-face sessions or online portals.

As of writing, DepEd San Juan hosts a number of online communities that have healthy membership on different areas of concerns like in the Math Group, English Group, Action Research Group, and other similar communities that have become a haven of support for vibrant exchanges of communication for peers that exhaust the virtual world in terms of resources and modes of transmission. Teachers have reported appreciation for this mechanism that increases productivity, participation, and enthusiasm, which taps into the likelihood of enduring relationships that cut across school boundaries, subject areas, and other normative classifications. It also explores spaces for publishing that can reach out to as many stakeholders as virtually possible.

The third implication focuses on the capacity of the teachers to act as transformative intellectuals who are capable of critical analyses of existing data from the field as implicated in the systems and processes in the Department. They are constantly engaged in public or private discourse that speaks of the core business of education stipulated in the vision-mission-goals of DepEd. They are involved in endeavors that are not divorced of the social realities outside the schools. It also speaks of the right of teachers to organize their ranks through faculty clubs, unions, or federations. This is in the interest to have a legal identity and assert their basic rights as articulated in the Magna Carta. Such formulation is evident in the account of T. Charlie when he narrated the misunderstanding between him and the incoming school head in his former school. He maintained his argument that the letter that came out was not in protest to her appointment but rather of request for the outgoing principal to continue the programs that were launched. Apparently, it did not sit well with the new leadership so upon the onset of the school year, tension filled the environment.

The power struggle became real when he felt that his needs and requests were deliberately ignored even if he was competing to the regional and national level for the Science contests on two categories. There was a blatant disregard for logistic support which he overlooked at the time of the competition as he took it upon himself to find back-up help for transportation. There was also an account that an available item was withheld from him for promotion despite his being ranked 1 at the official qualified list of Teacher I. Submission of pertinent papers was not disclosed on time and movement did not actually

commence which resulted in a stand still. In his desire to just go on with the natural flow of events, he signed a waiver that indicated his willful recommendation to give the slot to the next candidate in rank.

T. Charlie took everything in stride and went on his usual tour of duty. He continued to represent the faculty at one point where a fellow teacher was compromised. It was a case of extortion by the relative of the pupil, a situation that necessitated an entrapment operation that was carefully planned out and executed by the whole faculty club in cooperation with the barangay officials. He provided the essential moral and technical support to the distressed teacher with the concerted effort of the community until the case was resolved in favor of the school.

His leadership earned him the respect and admiration of his peers to this date. He recalled that his confidence came from his clear understanding of his role as an educator who is mandated to deliver the learning outcomes as stipulated in the prescribed curriculum and as a faculty president who is supposed to represent the organization in official functions. He points out that the fear that usually resides in the heart of teachers stems from the lack of knowledge of basic rights. He asserts the need to educate oneself in the dynamics of the organization because he reiterates that everything he needed has already been written down by the experts. His past experiences taught him to rely on the Magna Carta as his reference which he studied in preparation for his role as an education leader, and that is the same invitation he extends to the others.

Teacher agency, as seen in Charlie's narrative, is transformative in nature as defined by Kumaravadivelu (2003, p.14) which affirms the engagement of the teacher to strive more than the educational advancement but also for personal transformation. He is currently an Education Program Specialist who mans the Monitoring and Evaluation, Social Mobilization, Networking and Linkages, a position he applied for when his promotion for the next level-grade was denied of him in the name of school politics. He used his criticality on crucial points that warranted action from his contingencies of plans to execute his trajectories he deemed fit for his life. This brand of determinism when shared by the community to achieve desired results will translate to profound change.

The last implication has something to do with the adoption of a research culture that legitimizes findings based on solid evidences and disciplined ground work. Being a part-time research instructor for undergraduate students in a technical school at night, T. Charlie wishes to stress out the benefits of adopting a culture of inquisitive thinking in the field. In his exercise of agency, he postulates the beauty and discipline of action research as a way of addressing the pressing concerns identified in the school. It facilitates the mental faculties of teachers in using different tools of analysis to troubleshoot gaps and respond mindfully at improvement areas. His professional background as a Science teacher serves as a solid testament to the legitimacy of his claim to invest on the research skills of teachers as a means to officialize the knowledge that can be gathered from their explicit experiences and be regarded as empirical data.

This initiative of grounding teachers with various theories of knowledge will yield high-impact results that anchor on their agentic features to not only mobilize resources for personal consumption but rather to implicate community goals as they endeavor to collaborate with other stakeholders in the interest to share program innovations or interventions. This projective vision is something that T. Charlie aspires for as he advocates for greater accountability of one's life regardless of the conditions of the past because he believes that the present is constantly defined by the choices we make and the chances we take.

T. Ana agrees to this perception in her efforts to influence her colleagues to reflect on their spending habits as a way to combat their financial woes. She is worried that some might not be able to liberate themselves from the constant pressure of debts as she retorts the easy ways they view money come payday. While it is true that basic commodities continue to spiral their way up and the value of salary does not always seem to compensate for the growing needs of a typical family, T. Ana's practical mind is quick to point out the lifestyle choices that teachers make which define the maturity framework they observe. She said,

> *"It is not always about how much you make that matters but how much you save. If you have well-defined priorities, you will know where to put your resources. You will live within your means and set boundaries for your family as to the things that they can have and you can have. You can do delay gratification because you understand the need to settle the balance and get rid of debts that have exponential interests. You negotiate judiciously because every cent is worth the fight. These thoughts require mindful thinking and saving money does not just happen. You make it happen."*

Her observations on financial matters stem largely from the unpleasant practices of some who cause the delay of canteen operations and even the collection of funds. While her intention is never condescending, she feels strongly for those who get affected by the mismanagement of resources if only

there was some sort of control mechanism and careful planning to avoid the unnecessary stress. She has expressed her interest to put up financial coaching as part of capacity-building for the organization and the conduct of personal research to reflect on certain practices that do not add value to the financial vitality of the individual teachers.

In summary, a picture is presented that puts a teacher in a position to be in control to effect substantial change in the personal and professional level. If a person is able to reach out to one's dreams as premised on the interplay of the chordal triad, imagine the possibility to scale it up with a critical mass that can focus on structural reforms from the bottom-up to champion the causes they so preciously want. Will some elements from the society thwart this budding force? Definitely so, because it is a constant negotiation of power relations embedded in structures by key players. But teacher agency allows for the opportunity to define the responses we make in the face of challenges.

CONCLUSION

The study is premised on the narratives of three select mindful teachers who are deemed to be performing according to standards as attested by their superiors. They bring to the fore their reflections on the changes brought about by the K to 12 curricular reform as implemented in the smallest division in the National Capital Region. There is a specific support system that allowed such experiences to happen which adds value to what the literature explains in as far as teacher agency and the interplay of the chordal triad are concerned. This enables teachers to manifest proactive postures and viewpoints within reasonable bounds as it also summons how else it can be further utilized for maximum effects. The analysis drawn is anchored on sociological underpinnings played out in the discussion and as a result of the exposure and practice of the author in the field.

However, the paper does not claim supremacy over the conduct of things in the wider or national level as it only deals with local anecdotes that documented insightful reflections. It does not offer a formulaic solution to address age-old issues and concerns that plague the Department, but rather offer assertions that either facilitate or hinder teacher agency. It is limited to the scope of experiences of teachers who are ten years and below in the system but with explicit high regard for continuing education and professional ethics as shown in their results-based performances.

In closing, it calls out the readers to reflect on their own positionalities and determine how much of their past will they bring to the fore in order to make sense of the practical evaluation of the different factors at play in their present so the sweetest version of their tomorrow can be achieved within their lifetime. It is time that teachers own up to the choices they make as they gather empirical data from their ecology to refine the voice that will reverberate with the symphony they wish to create in this borrowed time.

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ENREACH INTERVENTION PROGRAM: EFFECTS ON STUDENT ENGAGEMENT AND ACHIEVEMENT IN MATHEMATICS

Charlie O. Fababaer

Lead Researcher

Mark Paul R. Alquiza
Elmer A. Atutubo
Annie R. Ascotia
Arianne A. Labonete
Joseph S. Lara
Aiza C. Dumapias
Ma. Asuncion S. Salvador
Members

Schools Division Office– Pasig City

ABSTRACT:

The study investigated the effects of the enREACH Intervention Program on student engagement and achievement in mathematics using a one – group pretest – posttest quasi – experimental design. This intervention program was developed to help students meet the academic standards of a science – oriented high school. Eight students from the 9th grade were the focal participants of this study. Over a period of four weeks, the researchers gathered the data through observations, surveys, achievement test, and focus group discussions. Specifically, the Student Engagement in Mathematics Scale (SEMS) was used to measure students' level of engagement while the Achievement Test was used to measure students' performance in mathematics. The results obtained from these instruments were further substantiated using the Student Engagement Walkthrough Checklist (SEWC) and the Student Perception of Engagement Scale (SPES).

The Wilcoxon Signed-rank test showed an improvement in the scores of students in their achievement test and level of engagement. Deeper analysis revealed that the observed difference between measurements is significant. Thus, the enREACH Intervention Program helped in improving both student performance and engagement in mathematics. Spearman Rank Correlation Coefficient also showed a strong, positive association between student engagement and achievement.

These results suggest that the school should continue to provide opportunity for the implementation of the enREACH Intervention Program across different levels. In addition, teachers should continue to look at student's engagement as a strong predictor of achievement in mathematics.

Keywords: mathematics intervention program, student engagement, mathematics achievement, struggling students, science – oriented high school

CONTEXT AND RATIONALE OF THE STUDY

Today's mathematical skills are taught in increasingly diverse classrooms (Kroeger & Kouche, 2006), painting out that mere physical inclusion of students is not sufficient to ensure social or academic success.

Intervention has become vital instrument for teachers to use to ensure that all students succeed (Brilz, et al., 2014). According to Kroesbergen and Johannes as cited by Brilz, et. al (2014), intervention is defined as a specific instruction for a certain period to teach a particular subdomain of the Math curriculum. They further added that the type of intervention used will depend on how the student receiving the intervention learns best and which math objective the learner is struggling to understand. Students who are struggling with math may benefit from early interventions aimed at improving their math abilities and ultimately subsequent failure. Students who have math difficulties include those who perform in the low average range or below the required percentile on math achievement test. Student's low achievement in Math is a matter of

national concern. Students may perform at an average level in some areas but have deficit in others. The first step is to help these learners succeed in identifying the skills they need to learn in order to help them overcome these deficits. On the other side of the spectrum, there are many students who have mastered these basic skills as well as their grade level skills and are not challenged enough. They are becoming bored and not making the gains in their mathematical knowledge. Intensive interventions are then provided to support students in need of assistance with math learning. Hence it is the creative side of the teacher, as manifested by Fucks, et. al, as cited by Brilz, et al. (2014), to an instructional design that is carefully sequenced and integrated to eliminate misunderstanding and minimize the learning challenge which is important in effective Math interventions. Drill and repeated practice, cumulative review and motivations to assist with student attention are the three other principles in the choice of Math Intervention Program. Researches have shown that improved math abilities have implications for positive social change which may help students gain the math skills needed to enter rewarding careers.

Today students are faced with new demands on their learning abilities because of the increasing knowledge and the consequent necessity for lifelong learning (Perels, 2009). Students have to be qualified to be active learners to prepare them for these demands. Math is a gatekeeper, keeping students from higher level, rigorous math classes, diploma tracks and the job market (Brown, 2008).

Students enter the school system from different backgrounds, practicing different styles of learning and carrying different expectations from self and others (Wong, et. al, 2003). With the implementation of the universal education, where everybody stays in school, it is possible that student's motivation to learn varies and their interest becomes diversified. Such diversity in individual differences could be one of the major issues classroom teachers have to contend with.

The present research explores another intervention program designed to the students of a science– oriented high school who are in academic probation. In the SY 2016 – 2017, Math teachers were greatly alarmed by the large number of students in Grade 9, specifically in Math, who were under academic probation. The school has a very stringent policy on student's retention specifically on the grade requirement. As soon as the SY 2016-2017 commenced, Math teachers designed the intervention program tagged as enREACH. This is an intervention program intended to help students improve engagement and performance in mathematics through the five – step process which includes review, enrich, achieve, collaborate and help. These were based from the different learning theories that promotes student learning. The intervention primarily was initiated as a response to the school's Retention Policy; help students with difficulty cope with the demands of the teaching – learning process of Science High Schools in the National Capital Region and teachers are not blamed for students transferring – out at the end of every school year.

Researchers, educators and policy makers are increasingly focused on student engagement as the key to addressing problems of low achievement, student boredom and alienation and high drop – out rates. To increase student engagement, educators and evaluators need to understand how engagement has to be defined and to assess the options for measuring it (Fedricks, 2011).

Jimerson, et. al as cited by Brown (2008) incorporated multiple dimensions into the definition of school engagement:

> *School engagement is a multifaceted construct that includes affective, behavioral and cognitive dimensions. Furthermore, in measuring this multi – faceted construct the primary contexts include: academic performance, classroom behavior, extracurricular involvement, interpersonal relationships and school community (p.2).*

The definition cited by Brown (2008) was used as the basis of this investigation as the academic performance, classroom behavior and interpersonal relationships. Engaged students attend school, earn better grades, score higher on standardized tests of achievement are more personally adjusted than students who do not engage in school. Simply, engagement affects student engagement.

LITERATURE REVIEW

This section discusses how the different interventions support students in mathematics. Specifically, this examines the effects of some of the level of student engagement and achievement.

Mathematics Intervention and Student Achievement

The extant literature shows different intervention strategies in addressing achievement gap in mathematics. These strategies are mostly intended to students who have learning disabilities.

Wagner (2013) compared the achievement gains of one group of students who participated in an extended – day program to the other group who did not participate. Specifically, the researcher used the outcome-based program evaluation to compare the

differences in math scores between the two groups. Results showed that the group participating in the extended-day program made significantly more progress than the group that did not participate.

In the study of Arroyo, Royer & Woolf (2011) on math intervention, they reported that intelligent tutors and fluency training appear to complement one another, impacting math achievement. The results of their study also suggest that training both strategy and fluency provide an advantage in accuracy and speed at answering math problems.

Brilz, Fridley, Just and Stein, noticed a need for more differentiated math interventions. They have found that their district provides an adequate amount of intervention resources and support in the area of reading but a very limited amount of resources and support in mathematics. There are 21 district approved reading interventions teachers can choose from to meet the needs of every student. However, there are only four district approved mathematics interventions. For this reason they saw the need to search for an effective mathematics intervention to use with students at all levels. After researching mathematics interventions they have chosen to implement iReady. This program is an online, adaptive, individualized computer based intervention tool for students at all levels of K-12. After the four week implementation of the iReady mathematics intervention, data indicated increased student achievement for students performing below grade level and above grade level. However, the assessment data showed it was more effective for the below level students.

Mathematics Intervention and Student Engagement

Researchers suggest that students are increasingly disengaged from school because they are not attuned with the digital world (Bloemsma, 2013). In the study of Shearman, Rylands, and Coady (2012), anecdotal evidence suggested that it was students' lack of engagement with all aspects of the subject that accounted for the lack of use of support mechanisms. In this study, results indicating an improvement in student engagement were based on comparing tutorial attendance rates, performance in assessment items and attendance rates in optional support sessions over several years.

In the study of Bloemsma (2013), majority of students reported higher levels of "Emotional Engagement" when iPads were used, but little to no increase in "Behavioral Engagement". A majority of the students desired more frequent use of iPads and stated that they wished their teachers had been better trained how to best use the iPad in the classroom.

According to Boren (2012), students are highly engaged in the classroom when the teacher allows them to have the autonomy necessary to become deeply invested in the material and established an environment where students felt comfortable and confident enough to ask questions and show their work. The teacher with the lowest reports of engagement was more controlling in how she wanted students to complete their work and created an atmosphere where students relied on her for permission and help to move forward with the new tasks presented.

The enREACH Intervention Program as an Enabler for Academic Success

enREACH is an intervention program intended to help students improve engagement and performance in mathematics through the five - step process which includes review, enrich, achieve, collaborate and help. Some of the best intervention practices from the literature were integrated in the development of this intervention program. The table below shows the components of the intervention program and how each of them enables the different principles in teaching and learning.

Review. Review was chosen to be the first step of the intervention process to clarify some of the distorted information gained from the classroom discussions, connect with the learners' perspectives of the lesson, and generate evidence of what has been previously learned.

Review helps student learn and retain important information gained during class discussions. Studies on recall show that reviewing the materials previously learned helps in improving the memory of the student. The best time to review is within a day or two after the material has been studied or presented in a lecture. The review session lasts for about 10 to 15 minutes.

Enrich. After reviewing the lesson covered in the previous discussion, students practice independently by answering 5 to 10 questions. The questions in this independent practice should serve as a supplement to the exercises given in class. It should not be an addition or deviation from the curriculum contents of the grade level of the participating students. This is an additional exercise to enrich student's understanding of the lesson. The outcome of this enriching activities will also gauge whether student's need more or intensive intervention.

Achieve. Participants to the enREACH intervention program are trained to develop a need for success. They should be able to reach a certain level where they could say that they have achieved something in understanding the lessons in mathematics. As a measure of success, each student

should be able to get a minimum of 95% score in the independent practice. This would mean additional time and practice for them until mastery is achieved.

Collaborate. This program integrates online components where students have the opportunity to collaborate. It uses the available learning management system such as Quipper to promote further understanding of the lessons being covered in class. Using the chat tool, students will be encouraged to post questions and clarify concepts on the questions that appear to be difficult for them. This will also

be utilized to extend discussions of the concepts that were not resolved during the last intervention session. If all students reached the required achievement level during the in-class intervention session, new lesson or exercises may be introduced to spark discussions among them.

Help. The first four steps of the intervention are designed to place students at the center of learning. Less mediation from the teachers are essentially observed in the process. However, if there is already an apparent gap of learning from among the students, they will be encouraged to ask help from the intervention teacher. However, in general, the learning cycle throughout the intervention should continue to exist even with the least help from the intervention teacher. The learning intervention cycle transition from having the "help" as a significant component to a cycle where the learning continues to happen even without the intentional help from the teacher.

RESEARCH QUESTIONS

1. Does the level of student engagement in mathematics improve after attending the enREACH Intervention program?
2. Does the level of student achievement in mathematics improve after attending the enREACH Intervention program?
3. Is the student level of engagement related to achievement in mathematics?

SCOPE AND LIMITATION

The researchers limited the focus of this study on selected Grade 9 students who were placed under probationary status in mathematics for AY 2016 - 2017 in a science-oriented high school. The main considerations for choosing the research participants are their mathematics grades in the previous school year. The researcher followed the curriculum prepared by the school. The entire experiment consisted of 7 instructional sessions, 4 Focus Group Discussions (FGD) and 4 observation sessions.

The study was conducted in a science-oriented high school in Pasig City. Entrance of students in this school is based on the results of their written examination and series of interviews. Top three hundred (300) students are selected every year and evenly distributed to ten (10) sections in the 7th grade. Due to its strict retention policy, the number of sections on the upper level decreases every year. From the 10 original sections in the 7th Grade, it is usually reduced to an average of 7 sections in the 10th grade level. An average of 30% to 40% of the students transfer to other schools due to academic reasons.

RESEARCH METHODOLOGY

a. Sampling

The focal participants were 5 female and 3 male students in the 9th - grade math class. The peers of these focal students were also participants of the study, but only to the extent to which they engaged in important interactions with focal participants during class discussion. The students in one of the researcher's advisory class (n = 36 students) constituted a convenience sample. Purposeful sampling (n = 8 students) was used to select focal students from this group.

b. Data Collection

A variety of data collection methods were used to determine what effects the implementation of enREACH Intervention Program would have on engagement and achievement in mathematics. The Student Engagement in Mathematics Scale (SEMS), Student Engagement Walkthrough Checklist (SEWC) and Student Perception of Engagement Scale (SPES) were used to determine whether students exposed to the enREACH Intervention Program will improve class engagement in mathematics.

The Achievement Test was used to determine whether students exposed to the enREACH Intervention Program will improve performance in mathematics.

The Student Engagement in Mathematics Scale (SEMS) and results of the Achievement Test were used to determine whether student engagement is related to student performance.

Pre-intervention phase. The baseline assessments were given prior to the beginning of the study to the focal participants. Specifically, they were asked to answer the Student Engagement in Mathematics Survey (SEMS) and answer the Achievement Test (AT). Four teacher – researchers were assigned to different roles in the entire duration of the study. Each of them served as a classroom teacher, intervention teacher, observer or FGD facilitator. The results of the survey and

achievement test were used to compare differences in engagement and achievement in mathematics before and after the intervention period.

Intervention phase. The focal participants were exposed to enREACH Intervention Program together with the other students who signed up before the beginning of the intervention. Although they are the main subject of this study, they were treated the same as the other participants of the intervention program. The first data collection source was the Student Engagement Walkthrough Checklist (SEWC). The researcher asked permission from Jones (2009) for the use of this checklist in this study. This instrument is a short observation checklist used to check the different characteristics of engagement of the 8 focal participants observed during class discussions. These characteristics are positive language, consistent focus, verbal participation, student confidence, and fun and excitement. The observer paid more attention on how well the participants are engaged rather than on what kind of instruction is being delivered or how the classroom is set up. The focus is on the focal participants rather than on the teacher. The observations were done 4 times during the entire intervention phase.

The second data collection source was the Focus Group Discussions which were done after their last period. This is essentially the second part of the observation but this one requires conversations with students to gather details about the degree to which they are engaged in a learning experience. There were five strategies employed to measure student perception of engagement. For each aspect, questions were provided to encourage conversations with students. The facilitator used the Student Perception of Engagement Scale to get the necessary data from the 8 focal participants. They were gathered in a closed room where they can express and freely describe their engagement in math class. The facilitator checked on the following engagement characteristics:

- *Individual attention*
- *Clarity of learning.*
- *Meaningfulness of work*
- *Rigorous thinking*
- *Performance orientation*

The facilitator also recorded any other observations or comments shared by the participants. These were done 4 times during the entire intervention period.

The third data collection source was the Student Engagement in Mathematics Scale (SEMS). This instrument was adapted with permission from the work of Rimm-Kaufman (2010). This is designed to assess student engagement in mathematics after a math class. Students were asked to complete the measure immediately after a math class. The scale measures three dimensions of engagement: social, cognitive, and emotional.

Post – intervention phase. The 8 focal participants were asked to answer the Student Engagement in Mathematics Scale (SEMS) and the posttest. The data collected from these instruments were compared to the data obtained before the intervention phase.

PRESENTATION, ANALYSES, AND INTERPRETATION OF RESULTS

The data were analyzed through the different instruments. The Student Engagement in Mathematics Scale (SEMS), Student Engagement Walkthrough Checklist (SEWC) and Student Perception of Engagement Scale (SPES) were used to determine whether students exposed to the enREACH Intervention Program will improve class engagement in mathematics. The Achievement Test was given before and after the intervention phase and was used to measure student's performance in mathematics.

The Wilcoxon Signed-rank test was used to test if there is a significant difference between the pretest and posttest scores in the Student Engagement in Mathematics Scale (SEMS), Student Engagement Walkthrough Checklist (SEWC), Student Perception of Engagement Scale (SPES) and Achievement Test.

enREACH Components	REVIEW	ENRICH	ACHIEVE	COLLABORATE	HELP
Enabler	Prior Knowledge Recall	Independent Learning	Achievement Motivation Self – Efficacy	Collaborative Learning Constructivism	Teacher Mediation Teacher Presence
Methods/ Processes	Inquiry Game- Based Problem Posing (15 minutes)	Independent Practice (25 minutes)	Practice for Mastery (20 minutes)	Students answer exercises online Watch Videos Reflect and ask questions.	Stimulate, guide and support peer –to – peer online collaboration.

Table 2

Wilcoxon Signed Rank Between the Pretest and Posttest Scores in the Student Engagement in Mathematics Scale

Ranks

		N	Mean Rank	Sum of Ranks
SEMS _Posttest - SEMS _Pretest	Negative Ranks	0[a]	0.00	0.00
	Positive Ranks	8[b]	4.50	36.00
	Ties	0[c]		
	Total	8		

Test Statistics

	SEMS_Posttest- SEMS_Pretest
Z	-2.521[b]
Asymp. Sig. (2-tailed)	0.012

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

a. SEMS _Posttest < SEMS _Pretest
b. SEMS _Posttest > SEMS _Pretest
c. SEMS _Posttest = SEMS _Pretest

Table 3

Wilcoxon Signed Rank Between the Pretest and Posttest Scores of Students in the Achievement Test

Ranks

		N	Mean Rank	Sum of Ranks
AT _Posttest - AT _Pretest	Negative Ranks	0[a]	0.00	0.00
	Positive Ranks	8[b]	4.50	36.00
	Ties	0[c]		
	Total	8		

Test Statistics

	AT_Posttest- AT_Pretest
Z	-2.527[b]
Asymp. Sig. (2- tailed)	0.012

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

a. AT_Posttest < AT_Pretest
b. AT_Posttest > AT_Pretest
c. AT_Posttest = AT_Pretest

Table 4

Spearman Rank Correlation Between Student Engagement and Achievement in Mathematics

Correlations

			SEMS	AT
Spearman's rho	SEMS	Correlation Coefficient	1.000	.683
		Sig. (2-tailed)	.	.023
		N	8	8
	AT	Correlation Coefficient	.683	1.000
		Sig. (2-tailed)	.023	.
		N	8	8

Spearman Rank Correlation Coefficient was used to determine the relationship between student engagement and achievement.

Effects of enREACH Intervention Program on Student Engagement in Mathematics

The Wilcoxon signed rank test shows that the observed difference between both measurements is significant. Thus, the enREACH Intervention Program helps in improving student's engagement in mathematics.

The results indicate that the after measurements show an increase in student's scores in achievement test in mathematics (average difference of 4.5). The Wilcoxon signed rank test shows that the observed difference between both measurements is significant ($Z = -2.527$, $p = .012$). Thus, the enREACH Intervention Program helps in improving student's performance in mathematics.

CONCLUSION

As revealed by the results of this study, the enREACH Intervention Program positively affect student engagement and achievement in mathematics.

In particular, the following conclusions were derived from the findings of this research:

1. There is a significant difference between the pretest and posttest scores in the achievement test of students who were exposed to the enREACH Intervention Program.

2. The enREACH Intervention Program helps in increasing the level of engagement of the students in mathematics

3. There is a strong, positive relationship between the students' level of engagement and achievement. This means, the higher the level of engagement, the higher the achievement.

RECOMMENDATIONS

In light of the findings and conclusions of this study, the researcher recommends the following:

1. Mathematics teacher should continue implementing the enREACH Intervention program to improve engagement and achievement in mathematics.
2. Students should be given enough access to enREACH Intervention Program.
3. School administrators should support the implementation of the enREACH Intervention Program across different levels.

Finally, results of this research can be subjected to further analysis and investigation. The following are recommended:

1. More comprehensive quantitative data and more descriptive qualitative data can be collected and analyzed to gain a deeper understanding as to how the enREACH Intervention Program affects student achievement and engagement level.
2. Examine how the use of technology helps in the successful implementation of the enREACH Intervention Program.

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LEVELS OF RESEARCH SELF-EFFICACY AND ANXIETY OF PUBLIC HIGH SCHOOL TEACHERS: IMPLICATIONS FOR ENHANCING SCHOOL RESEARCH CULTURE

Marco D. Meduranda
Schools Division Office– Navotas

I am a Master Teacher for two years in Navotas National High School. Besides handling regular classroom load, I was also assigned as the learning action cell and action research coordinator of our school, two roles that have been shaping my perspective as a teacher-leader.

My context today was a source of pride and inspiration because just last month, we were able to undertake the 1st NNHS Action Research Festival. Imagine a school where teachers are not afraid to do action research because they see it as contextual and embedded to their day to day job as teachers and considered it as a way to improve the teaching learning situations in their classroom. I believe that we were able to achieve that in NNHS. Today, all of our 136 faculty members, who were divided into 32 teams, are doing 32 action research projects, for which all topics and interventions are aligned and directly linked to our priority improvement areas based on our school improvement plans.

But looking back, this was not the scenario nine months ago. Back then, there was no evidence of collaboration in doing action research. Only master teachers were doing action research. And teachers did not have a deep understanding and appreciation of action research.

The decision to focus on intensifying teacher's capacity to do action research came in the time when DepEd has issued a number of DepEd orders that sought to improve teaching and student achievement through evidence-based, data-drive and learner-focused practices.

That time, the school leadership has already saw the potential of action research to carry out DepEd's different programs and projects. We at the school research Team were challenged to develop a school-based action research program that would be meaningful and relevant to all 136 teachers.

Having read some literature on research self-efficacy and research anxiety, I conducted a study that sought to explore and examine these significant constructs before designing a capacity-building program on action research for junior high school teachers.

Forester (2004) defined research self-efficacy as one's confidence in successfully performing tasks associated with conducting research like doing literature review or analyzing data. Study of Bieshke (2006) revealed that high research self-efficacy has been connected to both future research involvement and higher research productivity.

In terms of research anxiety, we looked into the variables or characteristics which learners perceive as discomforting, to the extent that productivity may be reduced. In the study of Davis (2006), research anxiety can affect the quality and quantity of research production.

And so, my research questions were (1) What is the level of research self-efficacy of junior high school teachers? (2) What is the level of research anxiety of the junior high school teacher as revealed by the Research Anxiety Rating scale (RARS)

The study involved all our 136 faculty members. The research instrument that we used was a questionnaire. It has three sections: 1st part is the profile of the teachers; 2nd part is the adapted research self-efficacy scale (RSS) taken from the study of Forester (2011) and the 3rd part was the Research Anxiety Rating Scale adapted from Onwuegbuzie (2013).

The RSS looked into the following dimensions:

1. ***data analysis*** *(i.e., confidence in one's ability to work with and analyze data),*
2. ***research integration*** *(i.e., confidence in one's ability to integrate one's research ideas with the existing literature),*
3. ***data collection*** *(i.e., confidence in one's ability to complete data collections tasks such as training raters and keeping accurate records), and*
4. ***technical writing*** *(i.e., one's ability to write research articles for publication)*

On the other hand the RARS involved the following subcategories:

1. ***Fear of Libraries*** *(I am looking forward to conducting research in the library.)*
2. ***Fear of Writing*** *(Writing a research proposal scares me.)*
3. **Fear of Statistics** (Since I do not like statistics, I do/will not enjoy research methods.)
4. **Fear of Conducting Research** (Conducting research takes *up too much time.)*
5. ***Fear of Research Language*** *(Research methods textbooks are difficult to understand.)*
6. ***Fear of Research Training*** *(Taking a training in research methods frightens me.)*
5. ***Perceived Utility and Competence*** *(Research*

meetings/conventions intimidate me.)

Results of the RSS reveal that moderate levels were observed on all factors of research self-efficacy of the teacher respondents with technical writing and data collection as factors that obtained the lowest scores.

On the other hand, results of the RARS section shows that teacher respondents had moderate levels of research anxiety when they registered mean scores ranging from 2.06 to 3.11 on seven factors. Nevertheless, it was evident from the analysis that fear of statistics and fear of writing were the most anxiety-provoking factors.

The team also conducted unstructured interviews and group discussions through learning action cells to confirm and verify the answers to the questionnaires and to obtain additional insights and responses.

Table 1
Overall Mean of the Research Self-efficacy Scale

FACTORS	Weighted Mean	RANK
Data Collection	3.20	2
Data Analysis	2.12	3
Research Integration	3.28	1
Technical Writing	2.08	4
OVERALL MEAN	2.67	

Guided by the results, the school research team need to design research capability training that should boost the research self-efficacy of teachers especially on the dimensions of data analysis and technical writing. The trainings can be embedded as part of monthly school learning action cells.

Professional development sessions should follow adult learning principles and the learning environment should provide a positive climate for collaboration to further enhance research elf-efficacies of teachers. Research anxiety among teachers can be diminished once research self-efficacies are increased.

Table 2
Result of the Research Anxiety Rating Scale

FACTORS	Weighted Mean	RANK
Fear of Libraries	3.11	7
Fear of Writing	2.08	2
Fear of Statistics	2.06	1
Fear of Conducting Research	2.26	5
Fear of Research Language	2.11	3
Fear of Research Courses	3.05	6
Perceived Utility and Competence	2.14	4
OVERALL MEAN	2.40	

Involving teachers in the design of the school-based action research program can be done to foster greater sense of ownership and ensure relevance to faculty professional development. Provision for more opportunities for collaboration, peer coaching and active learning should be hallmarks of school learning action that focus on action research.

Since then, the school leadership has conducted several activities and follow-up meetings in order to ensure that teachers are guided in the process. Through this experience, we are also able to develop tools and materials that scaffold teachers learning on action research. We hope to put these templates and tools together to come up with an action research toolkit that can be used not only in our school but also to other public high schools.

And so, this is the study that leads us to where we are now- a school that champions action research for continuous improvement.

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CARRYING OUT A SCHOOL- BASED ACTION RESEARCH PROGRAM: A PRINCIPAL`S PERSPECTIVE

Maria Cristina A. Robles
*Schools Division Office- **Navotas***

One way a principal can address the challenges that education faces today is through the knowledge and application of Action Research. According to Sagor (2000), leaders who engage in Action Research find the process to be an empowering experience. He stated that relevance is guaranteed because the focus of the research is determined by the researcher, who utilizes the findings to enhance professional practice (2000).

School administrators should be the driving force and role model to begin the movement for change or to facilitate the change process in the school. One way to begin modeling the realities of change within professional practice is to utilize Action Research.

In my context as principal of Navotas National High School, I saw the huge potential of action research as a means to generate instructional interventions to uplift the students' achievement level and use it as a tool to improve school practices and processes. Having been involved in research as part-time graduate school faculty in a university in Manila, I also personally advocate the goals of action of research.

With the issuance of DepEd Order # 43 series of 2015 or the Revised Guidelines on Basic Education Research Fund and DepEd Order # 39 series of 2016 also known as Adoption of Basic Education Research Agenda, I realized that it was high time to spearhead a school-based action research program that will help improve school and classroom effectiveness.

On December, 2015, the school leadership, together with the department heads and the school's technical working group, formulated the objectives and conceptualized the initial plan for the school-based action research program.

We, agreed that the main goal of the 1st NNHS Action Research Festival was to promote the culture of research, and intensify data-driven instructional decision-making by equipping teachers with the skills in conducting classroom-based action research projects which are all aligned with the School Improvement Plan and Continuous Improvement Process.

We envisioned that this project will encourage NNHS teachers to undertake, document, write and present action researches that focus on solving classroom or grade level problems, developing interventions that impact teaching and learning activities, and intensifying efforts on child protection and disaster risk reduction management. We did this at the time we have to comply with all the Organizational Development Processes introduced by DepEd.

On December 28, 2015, we had a soft launching of the program which was participated in by thirty-two teachers. The purpose of this was to clearly communicate to teachers the goals of the research festival and to gather feedback from them before the full fledged roll-out of the program. One valuable insight gained in this initial activity was the chance on how to explore ways on how we can raise the faculty's research capabilities and lower their perceived stress towards research.

The research on self-efficacy and research anxiety levels of NNHS faculty that was conducted by Mr. Marco D. Meduranda helped and guided us in making a relevant faculty development training on Action Research. In the process of luring teachers to conduct action research, there was a lot of unlearning to do since most of them perceived action research as comparable to writing a thesis or dissertation which is not. We emphasized the fact that action research should be contextual and embedded in the day to day work of the teacher rather than an extra work added to their teaching tasks.

Through LAC or learning action cells, we explained to the teachers the difference of action research from pure research. Follow-up sessions were focused on clarifying misconceptions and refining knowledge and attitudes towards action research.

The training we got from the Schools Division Office – Navotas City initiated action research workshop last March 16-18, 2016 led by SDS Romulo Rocena was also instrumental in the development of our action research program. In addition, learnings from seminar workshops conducted by the Basic Education Transformation

and HABI Education Lab enriched the skills of the TWG. We used the knowledge we got from there to craft an intensive training design for the teachers.

The summer of 2016 was very productive as department heads, master teachers and the school research team worked together in developing the learning activities that teachers would undergo in the intensive action research training. There were also some teacher quality circles or department meetings that were conducted to prepare and preview the teachers on the deliverables of the week long intensive training.

On June 6 to 10, the technical working group conducted the intensive action research training through our week-long school learning action cell. All 136 teachers received training and were able to work collaboratively in crafting their action research proposals. We tapped experts from the field and we got support from the school's division office for this effort. Teachers worked in teams by subject area per grade level to craft their collaborative action research projects. By the end of the training, thirty four action research proposals were presented for peer critiquing.

Follow up sessions (June 27) were undertaken to monitor progress. Teachers were so enthusiastic as they improve their action plans and research methodologies for every critiquing time. Suggestions and comments from the research consultant paved the way for more improvement of the proposals.

On July 28, 2016, teachers were able to successfully present their proposals in a poster presentation of their outputs during the school (LAC) learning action cell. The event was attended by Schools Division Officials who gave inspiring remarks about the work of the teacher-researchers.

To celebrate success and formally launch the NNHS Action Research Festival, we were able to get funding from the local government for food and from private stakeholders, Cojuangco and Sous Foundation (CSF) for transportation of the teachers to Baguio where we hold the event. This activity was attended by the SDS and the city mayor who both personally saw the action research projects. They were convinced that improvement on instructional skills of teachers could help students in their classes. A Solidarity Night was conducted which gave way for the recognition to exemplary projects included in the Festival.

After that, continuous coaching and mentoring teams were established to monitor progress of each team of teacher-researchers. Indeed, we are on track with our timelines and hopefully we will be able to hold a symposium like this to present the findings of the teachers once they are done with their action research projects.

In conclusion, setting a research culture proved very important in my work as a principal. The following are the insights I gained in this journey:

1. Action Research can be done, and it can be made more fun and action packed if teachers can be given more chances for collaboration and professional development processes.

2. Action Research paved the way for our journey to a lifelong pursuit for continuous improvement process and deliberate attainment of school vision, mission and goals.

3. Action Research done at NNHS is our simple way of serving our clientele, our students with passion and with a heart. "Para sa Bata, para sa Bayan"

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YOUNG LEARNERS' PERCEPTIONS OF GENERIC REFERENCE TERMS IN A SELECTED SCHOOL IN METRO MANILA SOUTH

Joey Zorrilla Balsomo

Pulanlupa Elementary School
Schools Division Office - Las Piñas

INTRODUCTION

Every society sets its own gender role standards. The expectations of a society, in its every individual, with regard to gender are based on its individuals or groups which the concerned society values and believes. Gender is a social construct basically drawn from sex. Gender constitutes patterns socially and culturally linked to women and men; hence, behaviors of a man and a woman must conform to the gender assigned to them. From its definition, one understands that gender roles present bounds on how people must behave according to their sex. However, one must not be confused between the difference of gender and sex. Gender entails meanings and characteristics assigned to both sexes. In contrast to sex, for it refers to someone's biological characteristics of sex.

According to Bandura & Bussey (2002; in www.lyceumbooks.com), our social interactions provide the bridge of recognizing information associated to gender terms. For instance, since gender roles are chiefly dependent on sex, there are societies who have viewed women as nurturing and emotional compared to stiff and aggressive men. Thus, if a girl leaves in this particular society, she must live and behave according to the expectations of her environment. This is similar with the case of a boy living in a patriarchal society. He must be strong and dominant by all means as these characteristics (which are considered stereotypes) are being dictated by his gender role.

As a consequence of upholding traditional views of gender roles, it created negative evaluation of an individual belonging to a sex classification. This is what we call **sexism**, the result of norms and expectations occurring in religious beliefs, human relations, and laws that put woman, in particular, at disadvantage. Sexism can be at interpersonal level, for instance, when family members do house chores; mother and daughter does domestic concerns such as house keeping, while father and son are in the authority and control over decisions (www.lyceumbooks.com). Institutionalized sexism, meanwhile, can either be hostile or benevolent. Hostile when women are viewed weak and inferior to work than man. Benevolent when woman can do better by nurturing and caring others. These situations lead later to the society's evaluation on men and women's work performance.

Gender roles can then be associated to expectations of men and women's performance in a workplace. Both genders perform their tasks and assume different job roles according to their sex. Women are preferably assigned to clerical works and men are considered to hold managerial and administrative positions. These are all illustrations of jobs inside structured companies within a classification of several job titles in order to classify genders predetermined by their personal backgrounds.

The language of several societies, further, reveals the denial of women's existence wherein men's affairs are used as the standard pattern of behavior. The generic language such as businessmen, chairman, mankind or even the use of "he" to refer both sexes, although deemed gender neutral for others, are perceived by other researchers as a sign of dominance of men over women (www.lyceumbooks.com). To circumvent from possible gender stereotyping (judgments of one self and others leading into a social category of a gender), feminists' movement, for example, tries to debunk gender stereotypes and offers several proposals to meet equality between women and men.

One of the campaign to eradicate gender-biased language, a language that, "either in grammatical use or direct statement, omits women or men and/or enforces masculine and feminine stereotypes" (www.suu.edu), is to employ non-sexist language or politically correct language (although this movement in particular is all encompassing with a wide coverage not only gender but includes race, age, abilities etc.). For instance, instead of using businessman, use a word like businessperson and instead of fireman use firefighter (Zinaida, n.d.).

Hence, this paper would like to know if there is any new impression that can be observed

from the use of generic reference terms.

Furthermore, this study aims at knowing the young learners' perceptions of generic reference terms. Specifically, it sought to answer the following questions: How do young learners determine gendered terms? And which domains help the young learners to interpret generic terms?

Theoretical framework

The study was both anchored on Social Learning Theory and Gender Schema Theory. Social learning theory believes that learning occurs in a social context and transpires through observation or direct instruction (Bandura, 1963) from significant others such as family members, peers, school, and media. Instruction comes in any form of modeling – live model, wherein a significant other demonstrates the desired behavior; verbal instruction, wherein a significant other is actually describing the expected behavior and instructing the learner to execute the behavior accordingly; and symbolic, wherein modeling takes place through media. On other hand, Gender schema theory explains how someone is gendered in society and how his/her gender characteristics are sustained and transferred to other members of a culture (Bem, 1981) which are all possible through schemata. As this theory illustrates, assigning gender characteristics (known as sex-typing) are heavily influenced by family member, media, school, and other vehicles of cultural transmission. Gender schema theory also shares light how gender stereotyping attaches itself in every fiber of an individual's society.

All of the variables mentioned under these theories are considered in the paradigm of this study. These variables are deemed significant in this research, since they constitute perceptions on the mind of individuals before or while they use their language. Thus, the language used presently by people is an influence of factors categorized under Social learning theory and Gender schema theory.

METHODOLOGY

To realize the purpose of the study, the research design of this paper was a qualitative research using a descriptive approach in the analysis of data. The data came from randomly selected grade six pupils, whose average is 11.8, in a public school in Southern Manila. Survey questionnaire form was the instrument utilized in this research. The survey consisted of a 13-multiple choice-item-question with sub-questions each. It chiefly exhausted data from the respondents' knowledge on different ungendered and gendered job titles. In gathering the data, the researcher randomly selected his respondents and asked their permission if they were willing to participate in the study. Once the consent was on hand, general instruction was read and survey questionnaires immediately followed after. To analyze the data, responses were soon tabulated and generic terms were identified according to their weighted frequency.

RESULTS AND DISCUSSION

Table 1 presents the learners' way of determining generic reference terms. It reveals that cluster one, two, three, four, six, seven and eight show young learners determine gendered terms according to their morphological structure. For instance, all respondents perceive fisherman as a man who does fishing for livelihood. Most of them believe that an overt gender marking is a hint indicating the gender of a person performing a job. Meanwhile, generic reference words with overt marking –woman is a clue for the respondents to identify job roles with this marking exclusively performed by females, example, *saleswoman* (Cluster nine) and *waitress* (Cluster 10).

However, there are generic terms, although no overt markings attached to them are generally referred to specific gender. The term *stylist* (Cluster five), which is a neutral word, is perceived by respondents an occupational term for females doing fashion design.

The results of the study further tell us that a term without over marking may too express both genders, for instance the term *reporter* (Cluster 12) and *people* (Cluster 13). A best explanation why these terms carry two genders being perceived by respondents is both of them are highly frequently used reference term.

An interesting discovery of the study is the unawareness of respondents to some generic reference terms such as *fisher* (Cluster one), *trash collector* (Cluster), *meteorologist* (Cluster four), *hairdresser* (Cluster five), and *postal worker* (Cluster 11). Aside for the fact that the data call our attention that respondents do not know these words, they also unsure of the gender it may represent.

Table 2 shows several domains which help young learners discriminate generic terms. As seen in Table 2, leading terms such as *garbage man* (Cluster 2), *policeman* (Cluster 3), *stylist* (Cluster 5), *fireman* (Cluster 7), *salesman/ saleswoman* (Cluster 9), *waiter/waitress* (Cluster

Learners' determining gendered term

Table 1 *Frequency of young learners' perception on generic reference term*

Generic Reference Term	Gender			Unfamiliar
	Male	Female	Both	
Cluster 1				
Fisherman	5	0	0	0
Fisher	0	0	0	0
Both	0	0	0	0
Cluster 2				
Trash collector	0	0	0	0
Garbage man	3	0	1	0
Both	0	0	0	1
Cluster 3				
Police officer	0	1	0	0
Policeman	4	0	0	0
Both	0	0	0	0
Cluster 4				
Meteorologist	0	0	0	0
Weatherman	5	0	0	0
Both	0	0	0	0
Cluster 5				
Hair dresser	0	0	0	0
Stylist	0	3	0	0
Both	0	0	2	0
Cluster 6				
Chair/chairperson	1	0	0	0
Chairman	2	0	0	0
Both	0	0	2	0
Cluster 7				
Firefighter	0	0	1	0
Fireman	4	0	0	0
Both	0	0	0	0
Cluster 8				
Steward/ Stewardess	0	4	0	0
Flight attendant	1	0	0	0
Both	0	0	0	0
Cluster 9				
Sales worker/ Sales associate	0	1	1	0
Salesman/ Saleswoman	0	0	3	0
Both	0	0	0	0
Cluster 10				
Server/ Waitstaff/ Waitperson	0	0	0	0
Waiter/ waitress	0	1	4	0
Both	0	0	0	0
Cluster 11				
Mailman/ Postman	2	0	2	0
Postal worker	0	0	0	0
Both	1	0	0	0
Cluster 12				
Newsman	1	0	0	0
Reporter	0	0	3	0
Both	0	0	1	0
Cluster 13				
Mankind	0	0	1	0
People	0	0	3	0
Both	0	0	1	0

Table 2 *Frequency of domains as a source of interpreting generic terms*

Generic Reference Term	Gender			Unfamiliar	Domain			
	Male	Female	Both		Family	Peers	School	Media
Cluster 1								
Fisherman	5	0	0	0	2	1	2	0
Fisher	0	0	0	0	0	0	0	0
Both	0	0	0	0	0	0	0	0
Cluster 2								
Trash collector	0	0	0	0	0	0	0	0
Garbage man	3	0	1	0	3	0	0	1
Both	0	0	0	1	0	0	0	0
Cluster 3								
Police officer	0	1	0	0	1	0	0	0
Policeman	4	0	0	0	2	0	1	1
Both	0	0	0	0	0	0	0	0
Cluster 4								
Meteorologist	0	0	0	0	0	0	0	0
Weatherman	5	0	0	0	0	0	0	5
Both	0	0	0	0	0	0	0	0
Cluster 5								
Hair dresser	0	0	0	0	0	0	0	0
Stylist	0	3	0	0	2	1	0	0
Both	0	0	2	0	1	0	0	1
Cluster 6								
Chair/chairperson	1	0	0	0	1	0	0	0
Chairman	2	0	0	0	0	0	2	0
Both	0	0	2	0	1	0	1	0
Cluster 7								
Firefighter	0	0	1	0	1	0	0	0
Fireman	4	0	0	0	2	0	1	1
Both	0	0	0	0	0	0	0	0
Cluster 8								
Steward/ Stewardess	0	4	0	0	2	0	2	0
Flight attendant	1	0	0	0	0	1	0	0
Both	0	0	0	0	0	0	0	0
Cluster 9								
Sales worker	0	1	1	0	1	0	1	0
Salesman/ Saleswoman	0	0	3	0	3	0	0	0
Both	0	0	0	0	0	0	0	0
Cluster 10								
Server/ Waitstaff/	0	0	0	0	0	0	0	0
Waiter/ Waitress	0	1	4	0	3	1	1	0
Both	0	0	0	0	0	0	0	0
Cluster 11								
Mailman/ Postman	2	0	2	0	3	0	1	0
Postal worker	0	0	0	0	0	0	0	0
Both	1	0	0	0	0	0	1	0
Cluster 12								
Newsman	1	0	0	0	0	0	0	1
Reporter	0	0	3	0	0	0	0	3
Both	0	0	1	0	0	0	0	1
Cluster 13								
Mankind	0	0	1	0	0	0	0	1
People	0	0	3	0	1	0	2	0
Both	0	0	1	0	1	0	0	0

Domains which help young learners to interpret generic terms

10), and *mailman/postman* (Cluster 11) are all introduced and experienced among the family members of the respondents. Schools, on the other hand, strongly influenced the respondents' notion of the words *chairman* (Cluster 6) and *people* (Cluster 13). Moreover, media apparently had a powerful impact on young learners developing perception of words, specifically, *weatherman* (Cluster 4) and *reporter* (Cluster 12).

With all the lists provided by each domain, another interesting result in this study is the leading impression that the strong foundation of most generic reference terms is shaped up by the families of the respondents compared to school and media which only have minimal terms imparted to them.

CONCLUSION AND RECOMMENDATION

The interpretation of generic reference terms of young learners are generally based on the morphological structure of the term, specifically the overt gender marking 'man.' Nevertheless, terms without overt gender marking (considered to be gender neutral) still carry a particular impression associated to female gender role; example is *stylist*. In effect, learners may be presently on the verge of traditional gender role orientation. The divergent occupational paths of adults, seen by young learners might have been influenced their interpretation on generic terms. Learners might have associated a pattern of behavior to men and women and believed that these are exclusive for them, despite their individual differences which could not be classified only by gender. The family, school, peers, and media may one way or another provided an impression among the minds of the learners of the social roles of each gender, either modeling done through live model, verbal instruction, or symbolic modeling. These impressions are characterized as traditional gender orientation; thus, provide us a realization that learners need to be informed of keeping away from establishing concepts of women and men's social categories of gender as a consequence of stereotyping.

It is found out in this study the great impact of family in the interpretation of generic terms of young learners. At young age and being inexperienced, learners' perception might have been limited so other generic terms such as *waitperson*, *wait staff*, and *server* could be new to them. Interestingly, school is one of the two domains with least influence on the perception of occupation gendered terms introduced to respondents.

Nonetheless, based on the results, the school might be a contributing source of stereotyping gender roles, for instance, the term *chairman* and *chairperson* are viewed as male. Likewise, the media has a strong effect on the consciousness of respondents when they encounter the work title *weatherman*. Aside from the overt gender marking *man*, this term created a generalization among learners because of its high frequency in the daily experience of young learners. Apparently, news media present the weather forecast daily with most of their reporters are men.

However, the findings of this paper are conclusive only with its number of participants. It is recommended to replicate this study with more respondents to participate into the survey. Further, the methodology of this study did not include personal interviews which could have been used to verify the learners' responses.

As a final remark, the results suggest that teachers have to increase their effort to enlighten their young learners with modern gender role orientation as this influence their perception on generic reference terms.

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THE USE OF SELF-MONITORING APPROACH TO READING AND THINKING (SMART) STRATEGY TO IMPROVE THE READING SKILL OF SELECTED GRADE 8 STUDENTS

Jasper B. Angeles
Teacher I - English
Sitero Francisco Memorial National High School
Schools Division Office- Valenzuela City

ABSTRACT

With the plummeting reading performance of Grade 8 students in Sitero Francisco Memorial National High School as supported by its quarterly reading assessment program, it is timely to conduct a study on the use of a recognized reading strategy to improve the reading skill of students. According to Buehl (2001), success in reading depends on the ability of the students to monitor themselves. Self-monitoring as a key component of Self-monitoring Approach to Reading and Thinking (SMART) Strategy is therefore relevant for the current situation. With this premise in mind, the researcher chose SMART as basis for the intervention joined by twenty Grade 8 students under the struggling reader category. Similarly, the control group was composed of twenty Grade 8 students under same category who attended regular classes which feature traditional way of teaching reading. The results showed that the use of SMART Strategy in teaching reading improved the reading skill of the experimental group. Specifically, the outcome of the study confirmed that there is a significant difference in the pretest-posttest of the experimental group after the intervention. On the other hand, it showed that there is no significant difference in the pretest-posttest of the control group even after the regular English class. Furthermore, a significant difference was observed in the posttest scores of the control and experimental group.

Keywords: SMART, Reading Strategy, Teaching Reading

I.INTRODUCTION

Background of the Study

The quarterly reading assessment program of Sitero Francisco Memorial National High School for School Year 2015-2016 showed that 36% of Grade 8 students are struggling readers. This report only suggests that reading interventions are necessary. Furthermore, a study on the use of a recognized reading strategy to improve the reading skill of these learners is timely. This study is expected to help the students and English teachers in alleviating the reading performance of the school.

Statement of the Problem

Aimed at determining if SMART Strategy in teaching reading improves the reading skill of the respondents, the study seeks to answer the following questions:

1. Is there a significant difference between the pretest and posttest of the two groups, and
2. Is there a significant difference between the posttest of the control group and the experimental group?

Hypotheses

1. There is no significant difference between the pretest and posttest of the two groups.
2. There is no significant difference between the posttest of the control group and the experimental group.

Conceptual Framework

The study is established on the concept of Buehl (2001) that reading comprehension starts with the awareness of "what is understood" and "what is not understood". He explained that SMART strategy aids in reading comprehension through self-monitoring. Underwood (1997) supports this concept by citing SMART strategy as a tool in improving the reading skill of students.

Literature Review

Self-monitoring, a major component of SMART Strategy confirmed a positive effect to English as a Second Language (ESL) students in the study of Chellamani (2013) wherein it was concluded that the teaching of a reading strategy which involves self-monitoring improves the reading skill of ESL

learners. The researcher utilized a reading intervention that included the use of "advance organizers, directed attention, functional planning, selective attention, self-management, self-monitoring, regulating, orchestrating, evaluating and self-evaluation."

Unlike the preceding study, Farrell (2001) conducted a case study on a teacher's attempt to incorporate the teaching of reading strategies in a Singaporean public middle school. This study featured students who were used to the traditional approach to the teaching of reading wherein the primary concerns are to focus on important vocabulary, to read the material, and to test their comprehension. The teacher-respondent believed that the "traditional approach to the teaching of reading" is not effective and that teachers nowadays focus more on testing rather than on teaching.

Focused on assessing reading pedagogy, Valencia (2014) argued that self-monitoring in reading is a crucial factor in understanding a text. Furthermore, she stated that teachers should allow the students to establish their purpose for reading and check their comprehension by asking questions and by highlighting important details in the text.

II.METHODOLOGY

Research Design

The researcher used the pretest-posttest control group design. In this design, the control and experimental groups both underwent a pretest on the dependent variable and a posttest on the same variable after the intervention.

Respondents

The study covered forty Grade 8 students of Sitero Francisco Memorial National High School who were under the struggling reading level for the past two grading periods during the school year 2015-2016.

Sampling Plan

The researcher determined forty respondents through simple random sampling technique provided by the Random Number Generator from Stat Trek Web site.

Instrument Used

The researcher administered the modified Free Practice TOEFL Junior Standard Test in the pretest-posttest to determine if SMART strategy improved the reading skill of the experimental group. The test is suitable for ages 11 to 15. The researcher asked the participants to answer 36 questions for 41 minutes only.

Data Collection Process

After obtaining the list of struggling readers in the Grade 8 level, simple random sampling was employed to get 20 respondents for the experimental group, and another 20 for the control group. Next, the pretest was administered to both groups. Then, the researcher began the two-week reading intervention using SMART Strategy. At the end of the intervention, both groups took the posttest. Finally, the obtained data were interpreted using appropriate statistical tests.

Statistical Tests

The researcher used the mean statistic to get the average score of the two groups in the pretest-posttest. These data were used in comparing the reading skill of the control and experimental group.

To see if there is a significant difference in the pretest-posttest of the two groups, the researcher tested the mean scores using paired sample t-test statistic.

Lastly, the researcher compared the posttest mean scores of the control group and of the experimental group using the Independent t-test. This was employed to see if there is a significant difference between the posttest of the experimental and of the control group.

III.RESULTS AND DISCUSSION

Comparison Between the Pretest and Posttest of the Two Groups

The control group garnered a 17.25 pretest mean score while the experimental group obtained 18.1. Meanwhile, the control group's posttest mean score is 17.85 while the experimental group garnered 25.05.

Using a descriptive table based on the standards of TOEFL Junior® Standard Test Score Descriptors, it was revealed that both groups are under Approaching Proficiency Level.

The result may be attributed to the inappropriate teaching strategies that teachers employ in reading instruction (Farrell, 2001). Also, according to Valencia (2014), reading frustration occurs when the teacher fails to (1) establish reason for reading and (2) identify information that students need to highlight while reading.

Through paired sample t-test, the researcher found out that there is no significant difference in the pretest-posttest of the control group. This means that even after the regular English class, the respondents' reading skill did not improve and remained in the Approaching

Table 1 Significant Difference Between the Pretest Posttest of the Two Groups

Group	Mean Score		P-Value	Decision	Remark
	Pretest	Posttest			
Control	17.25	17.85	0.276	Accept Null Hypothesis	Not Significant
Experimental	18.1	25.05	0.000	Reject Null Hypothesis	Significant

Proficiency Level. Contrariwise, a significant difference in the pretest-posttest was observed in the experimental group. This means that the experimental group is now in the Proficient Level.

The findings confirmed the study of Farrell (2001) where it was said that the "traditional approach to teaching of reading" which is characterized by passive reading and testing and is usually seen in a normal English class is not effective. On the other hand, it strengthened the study of Chellemani (2013) where a reading intervention which involves self-monitoring improved the reading skill of ESL learners. Moreover, the current study affirmed Farrell (2001) by concluding that awareness of the reading strategy like SMART indeed makes the reading instruction effective.

Comparison Between the Posttest of the Control

Table 2 Significant Difference Between the Posttest of the Control and of the Experimental Group

Group	Posttest Mean Score	P-value	Decision	Remarks
Control	17.85	0.000	Reject Null Hypothesis	Significant
Experimental	25.05			

Group and the Experimental Group

The p-value obtained from the independent t-test revealed that there is a significant difference between the posttest of the control and of the experimental group. Therefore, the use of Self-monitoring Approach to Reading and Thinking (SMART) Strategy improved the reading skill of the experimental group.

This result supported the study of Rambe, Supardi, and Husin (2014) wherein an improvement in the reading skill of the respondents after an intervention using SMART was observed.

CONCLUSION AND RECOMMENDATIONS

Based on the results of the study, it was concluded that the use of SMART Strategy in teaching reading improved the reading skill of the respondents. Specifically, the outcome of the study confirmed that there is a significant difference in the pretest-posttest of the experimental group after the intervention. On the other hand, it showed that there is no significant difference in the pretest-posttest of the control group even after the regular English class. Moreover, a significant difference was observed in the posttest scores of the control and of the experimental group.

Based on the conclusion, teachers should teach the students to self-monitor for understanding. Also, they should teach reading strategies instead of testing reading. For the future researchers, it would be better to research on the strategies that students commonly use in order to decode a confusing sentence or an unfamiliar word in the text.

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TEACHER-PARENT COLLABORATIVE EFFORTS IN FACILITATING STUDENTS' HOMEWORK

Frosyl F. Miguel
frosylmiguel@yahoo.com
Ramon Magsaysay High School
Schools Division Office– Manila

ABSTRACT

This study focuses on the essential role of teachers in initiating collaborative efforts with parents in doing homeworks of their children. To establish teacher-parents' partnership in doing homework, four (4) engaging interventions such as focus group discussion (FGD), home visitation, follow up by texting and homework logs were utilized in this action research. An intact Grade 8 Science class in one of the pilot secondary schools in the City of Manila was involved in the study. Results showed that the collaborative efforts between parents and teachers apparently contributed to students' class performance. Home visitation was seen as a means of rekindling commitment of the parents to monitor their children's progress in school. In the same way, it was found out that homework logs and texting are strategies that could enhance parental involvement leading to close supervision in doing assignments at home.

Key words– *collaborative efforts, homework, parental involvement, role of teachers, students' achievement*

INTRODUCTION

In the Philippines, it is observed by the Department of Education (DepED) that for every one hundred (100) cohorts of students that enter Grade I only seventy four (74) of them will make it to Grade 4 and sixty six (66) of these will graduate elementary. Sixty five among these populations will enter high school and forty six will make it to graduation. This decline continues until college where sixteen (16) will graduate out of twenty (20) entrants. Reasons behind these statistics of dropped outs ranges from malnutrition, bullying, child labor, family problem and few accounts of lack of interest to go to school.

More than the political will of the government to put the said rate down, education of the child is rooted at home where his/her parents in particular plays a vital role in child education. According to Drake (2000), the challenges cannot be solved by the government alone nor can these be solved by parents or families alone. More collaboration between the school and home will need to be focused on dealing with this problem.

Here in the Philippines, active participation of parents in her child schooling are often observe in attending Parents Teachers Association (PTA) meetings, joining fieldtrips and or taking part in any school physical facility project. This research attempted to engage parents through collaboration with teachers in doing homework as a measure to commit and motivate stakeholders in the schooling of the child. To be more specific this also aims to engage teachers and parents into collaborative partnership geared towards commitment to do homework that will result into improved school performance.

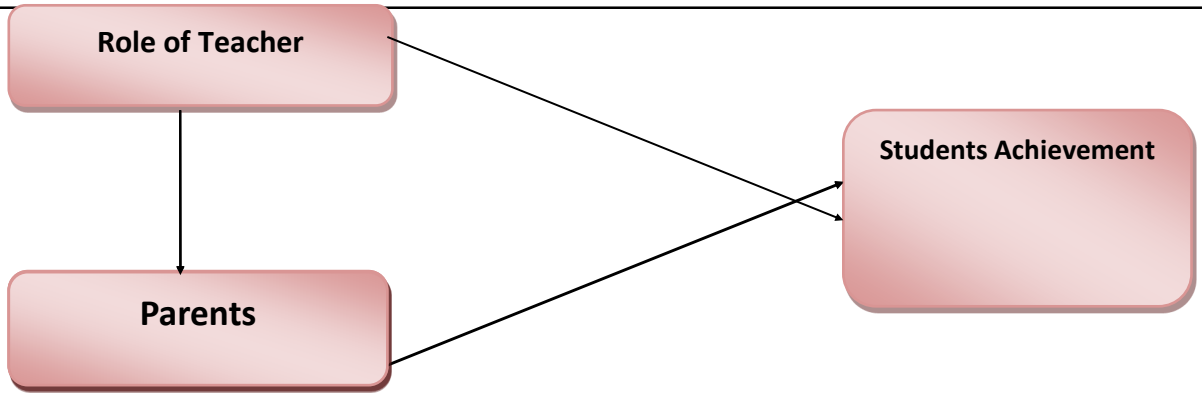
FRAMEWORK OF THE STUDY

The research study makes used of four (4) engaging interventions such as focus group discussion (FGD), home visitation, follow ups via texting and homework logs to involve the parents in doing homework through teachers encouragement and supervision. The effectiveness of the said interventions was validated through student achievement test.

The research paradigm illustrates the possible contribution of the four interventions given by the teachers through the collaborative activities in doing homework geared towards students' achievement in Science Grade 8.

OBJECTIVE OF THE STUDY

The purpose of the study is to contribute to an increasing understanding of the relationship between the role of teachers and a collaborative



effort with parents in doing homework. Specifically it aims to answer the question on how effective are the following teacher-parent partnership activities in monitoring parental involvement in students' homework that contributes to enhance students' achievement?

- Focus group discussion
- Home Visit
- *Follow up by texting*
- Homework Logs

MATERIALS AND METHODS

The main focus of this study is the collaboration of the teachers and the parents in facilitating student homework and its effect on student achievement. This study utilized a one group before and after research design.

O□ X□ X□ O□

Where:

O□ - Pre Test

X□ -Treatment from Teacher (FGD, Texting, Home visit)

X□-Treatment from Parents (Homework logs)

O□ - Post Test

The dependent variable in the study is the result of the achievement test of the students which is used for pre and post test and to measure the learning achievement of the students. The mean value is utilized as data. The collaborative efforts of the teacher and the parents are considered as collective but separate treatment in nature.

PARTICIPANTS

The use of intact group was utilized in determining the respondents of the study. The study involves the advisory class of the researcher which compose of thirty nine (39) learners enrolled in Grade VIII Science. These students were classified based on their academic ranking. Prior to the conduct of the study the parents were asked to sign an informed consent form for the participation of their children in the study.

INSTRUMENTS

There were four (4) instruments utilized in the study. First is the validated Division Achievement Test for Grade 8 for the First Quarter used for the pre-test and post-testing that yielded the quantitative data, the varied interview questionnaires for the home visitation, the homework log and the text messages.

Achievement Test

The Achievement Test is a 60 item multiple choice adopted from the Division Office City Schools Natural Science Instruction and Supervision Section sets of validated test. Each item in the test is composed of a stem and four (4) choices as possible answer. The test serves as the pre and post test which difference is used as the basis of the learning achievement of the students.

Focus Group Discussion (FGD) and Home Visitation

The formulated Focus Group Discussion (FGD) and Interview Questionnaires for home visitation was developed by the researcher and underwent expert validation. Comments and suggestions were integrated in the revisions. The said questionnaires served as interview guide in the conduct of FGD. Data were collected, tabulated and treated on how thematic analysis was done.

Homework Logs

One way to measure monitoring of parents' involvement in students homework completion is through the homework logs. Homework log is filled out based on the accounted parents' signatures found in the students' notebooks. The number of signatures was tallied, and the frequency was recorded.

The parents were informed during the FGD that they need to affix their signature on the provided space in their children notebook in order to indicate their awareness and their assistance to their children with their homework. Homework should be signed spontaneously but not limited to allow students to ask their parents to have it signed during that particular day.

Texting

Texting was done to follow up, remind and notify the parents on their duty to check their children's homework. During FGD parents were informed that they would received text from the subject teacher of their children every Friday of the week. They were required to text back and answer the question given. Data retrieved through text were transcribed, tabulated and subjected to quantitative and qualitative analysis.

DATA COLLECTION

Pre-Intervention

Teacher and parents collaboration in facilitating students' homework was initially done through a permit to conduct a study from the Office of the Principal which was eventually forwarded to the Division Office. Upon approval, parental consent forms were distributed to the parents for their permission to allow their children to participate in the study. Parents were asked to submit a photocopy of their identification card for signature validation purposes in the homework logs. Letter of invitation for the FGD was sent to the parents through the students.

Intervention and Post Intervention

At the onset of the school year, the parents were invited to a focus group discussion (FGD) for the purpose of sharing how the parents have been involved in the studies of their children. Specific focus of the discussion was on how the parents help their children in doing their homework. The FGD was conducted on June 13 and July 8 of School Year 2015.

A class in Grade 8 Science is conducted one (1) hour a day. The study lasted the whole first quarter of the school year. Initial steps done during the intervention was the administration of the achievement test to obtain students pre-test scores. Instruction was done in a daily and regular basis. Whenever there was a homework, the teacher would asked the students to let their parents affix their signature on the "Parent Signature" potion the students has place at the end part of his/her assignment. The following day, the signed assignment would be checked, tabulated and recorded.

In the duration of the conduct of the study the subject teacher texted the parents to follow up if the parents help, in what way they helped and how long they help their children in doing his/her homework. The parents were required to send back their answer. This was done to ensure that there was a follow up and there was consistency of the method employed in monitoring parental involvement when students do their work.

Home visitation is done to students with the least number of monitored homework log, with parents who cannot be reached through text, with misbehavior reports and with absences and truancy

Effectiveness of the conduct of FGD

Table 1. Generated themes on how parents help the child work on homework from the FGD

Generated Themes	Theme Definition	Frequency	Percentage
Direct interaction with the child	This pertains to the assistance from parents wherein they make sure they do the work together	11	26%
Providing other means to assist the child	This includes providing money for internet access, to ask other siblings to help the child, borrowing books	15	37%
Promote independence	This refers to the parents' leeway of letting the child discover his/her own strategy/ies to accomplish home works	7	17%
Other means of giving attention to the child	This term refers to parents, way of compensating for their not being able to help the child in doing home-work	8	19%

Problem Encountered	Collaborative Efforts of Teacher and Parent	Values
-Death of a Parent -Conflict among parents -Lack of interest to go to school -Truancy and absenteeism -Separated parents -Child Labor -Unmotivated to study -Sickness and accident -Stressed and depressed child	-build a positive relationship with the child -adoption from other family members -aid from the community and the barangay -collaboration with the classmates -peer tutorial -follow up through phone call and text -attending meeting and talking to teachers -initiating small talk with the child -providing means to answer homework -Accompanying the child going to school -transfer and enrolment to ALS - rewards	- perseverance - love of family - openness - love - commitment to family and work -respect -empathy

RESULTS AND DISCUSSIONS

All the data gathered were subsequently analyzed and interpreted based on the results of statistical treatment.

Parental involvement can take in many forms, from involvement in the life of a child in school to individual support at home like reading, and/or assistance in homework (The Impact of Parental Involvement on Children's Education, 2008). Table 1 shows various practices on how parents assist or help their children in doing homework, from the specific measure they do like personally looking after their needs to any alternatives a member of the family can give to coaching them or any means to promote independence.

Twenty six percent (26%) of the parents has a direct interaction with the child wherein they personally sits or attend to the needs of the child to accomplish their homework. These are also the parents who give their ample time to talk about their day in school. Thirty six percent (37%) or majority of the parents provide other means to assist the children in their homework. They assign older siblings to follow up and monitor the accomplishment of homework. They provide books, internet access or money for renting computer for their research. The seventeen percent (17%) of the parents promote independence to the children by allowing them to work on their own chosen time and with allowances. However, the parents with full trust and confidence with their children set goals and limitation then follow up them after a while. The remaining sixteen percent (16%) show support to by simple asking them or their children's classmates if they have homework.

Table 2 shows generated themes on home visit among the top six (6) students who needs follow up at home because their parents failed to sign their homework logs for a few times or they have never signed at all and they cannot be reaches through phone texting as well. be reach out through phone texting, signed homework logs few times or never signed at all and they cannot be reached through phone texting as well. The parents of these students failed to attend FGD or any regular meetings of parents in school like the card giving.

Home visits connects school and family. Every teacher has a goal in home visitation and that is to aid the students in his/her schooling by mitigating problems encountered at home or in school. A home visit is usually done in a surprise manner to parents who are hardly reached. In this case meeting the parents or the guardian is only by chance. However, based on experience the neighbor around is always helpful to relay, and to provide information needed on the situation of the student. Most parents of guardians perceive home visitation as a serious indication on the condition of their children schooling but some parents choose to ignore it. Home visitation is supposed to remind the parents that the school expects them to do something and be involved with their children's education. The teacher here empathize, motivate and find ways to bring back students to school. It is teacher goal to engage parents and guardians in doing their role as adults who guide the children in the best way that they know.

The case of a child Dianne who was always absent due to her job as front liner lay out artist in Recto, Manila; home visitation was done with the help of classmates in her workplace. The teacher was surprise to find out that both the parents were also present in the place. Parents of the child were aware of their child absences in

classes. There was a difficulty to ask both of her parents to sit down together for a small talk. There was an existing marital problem based on the information given by the child herself. Prior to home visit, the child was the one who always explained to the teacher and discussed of her absences and lack of homework logs in assignment. The child herself suggested to drop out her from school because she could not attend classes and she wishes to help her parents to send her three other siblings to school. The explanation of the concept behind Alternative Learning System and with further encouragement and explanation the child was persuade to attend ALS classes on regular basis after some series of follow ups.

Jester lost her mother this school year and the father brought them to Ilocos Sur to seek for child custody and rearing together with his two other siblings under the grandparents of his father side. This gives him a three week long absence in the classes aside from his absences during the time her mother was sick. Home visitation was able to encourage the students on how to go back and adjust to meet the requirements needed. There was a concerted effort from the other member be of the family on how the financial needs of schooling can be met. His classmates volunteered to help with the numerous outputs and assignments. After a series of text to the guardian, he was able to manage to catch up with schooling and be positive about things around him.

Accidents do happen. This was the story behind the arm cast of Mark Henry. He was given enough understanding of his situation. However, after he recuperated and his cast was removed, another accident occurred when he played basketball and the same arm was accidentally hit and was given the same type of casting. This gave him a total withdrawal in class and schooling. He was reached out through home visitation wherein outputs and worksheets were given to him. However after the second time his cast were removed he became sensitive and his self confidence was low. He easily get into an arguments and most of the time ended up crying for just simple reasons and sometimes for no reasons at all. For some reasons during that, his parents separated and he was left in the care of his grandmother in Quezon City. He was eventually transferred to other school near his grandmothers place and met new friends and classmates in a new environment.

Angelika is the usual students in class, what makes her unique is she is too shy and has few friends. Whenever you delegate or ask her to do something she will always say "yes" and it seems it will always be okay. Whenever it is time to check the assignment, if not all of the time, most of the time she does not have any. Home visitation gives a clear view of what is going on at home. Both of her parents are working and she is the only child. Her father has high expectation on her school achievement and whenever there is an assignment or project in school the father expect the child to do things with aces. The procedure in doing her homework is the child will text her mother to research and print the assignment. The kid will spent her study time after class in the internet. Homework log is not signed because she has the concept of hiding everything because of her fear that his father might spank her. The concept of spanking was address and after some follow up with parents through texting Angelika is counted as one successful story.

Not all stories were a happy one. Christian has seven (7) siblings. His mom is a plain housewife and his father is a tricycle driver. Before the school year starts their mother left them to live with a lesbian and the siblings were divided into two groups, the first four (4) which were mostly teens of ages thirteen to seventeen were left on the place where they live and the remaining three (3) children with ages ranging from two (2) to seven (7) years old were taken by their father to live with the grandmother in Quezon City. Christian among with the other siblings was left for survival on their own. They are the one responsible to attend to their need from food, soap, laundry, cleanliness and maintenance of their very small place. They are living within the area of extended family. The help and understanding was given at the beginning of the school year but as days precedes the support decline because according to them *"kinakapos din po kami", "wala rin po kami", or "hindi rin po naming kaya"*. During home visitation you'll be talking to either the brother or sister which you cannot account for parental guidance because they are still young. The effort to reach out for the father and mother was hard, traces were difficult, and phone calls are being ignored. The chance to home visit the grandmother leads you to the long story of her everyday challenges and hopes of raising the younger kids' every day. Christian eventually slept outside the house, in a tricycle in particular because the electricity was cut down and the house was too dark, he find ways to look for his meal at least once a day then eventually land any job around the community as helpers to anyone. The last home visitation was a call to the attention of the barangay Chairman and some more encouragement on how the community can be of help. A possible invitation to live in the house of

 Table 3. Frequency of Homework Logs by Month

Month	Frequency		Total	Rank
	M	F		
July	28	60	88	3
August	72	112	184	2
September	93	132	275	1

Table 4. Generated themes on how parents get involved in the completion of assignment elicited from texting

Generated Themes	Theme Definition	Frequency	Percentage
Oftentimes	Repeated coaching and constant of follow up with the child everyday.	30	41%
Seldom	Parent follows up and coaches the child in few instances within a week.	26	36%
Never	Not at anytime within the week	16	22%

the teacher for a while was decline by the kid. Christian was one of the numbers listed as school drop outs.

Abigail grows up with her grandmother ever since she was a baby. Her father, mother and three other siblings are living in a house next to them. When her grandmother died in the beginning of the school year, she remains to live within the area of her grandmother and she started giving excuses about her assignment and is always absent in classes for endless reasons of fever and pain (tooth, head, stomach etc.). Her parents was encourage to be involved on the everyday routine of the child so she was able to cope up. The texting as a method of intervention was a good follow up for the parents until Abigail was able to be motivated in her schooling.

The total experience of home visitation was not about the grades, it was an attempt to involved stakeholders and the community in child schooling, which is one of the goals of this action research. As a teacher the method is more than keeping and sending them back to school to avoid drop outs or making their parents conscious on helping their children in their homework. This intervention is a story of hope, understanding the children and realizing they are stress too. Believing the role of the community is integral to child schooling.

Table 3 shows the frequency of homework logs of students by month. It was observed that the monitoring of parents through their signature in homework logs increases as time precedes. Signature in homework logs are check in the class. This gives the child a reason to invite their parents and update them and vice versa. Homework logs as an intervention makes a positive reinforcement for parents to be involved through monitoring. Hover et al, (1995, 1997) stressed that one reason why parents involve themselves in their children homework for they perceive invitation from their child or child's teachers suggesting that their homework involvement is wanted and expected.

It was evident in the table above that majority of the students with highest frequency of homework logs were the girls. Table in Appendix C shows the individual data of homework logs frequency, the highest tabulated was thirty five (29) followed by twenty nine (29) then twenty four (24). Lowest frequency for a student were six (6), nine (9) and eleven (11).

Effectiveness of the interventions on students' achievement in Science

Table 5. T-TEST RESULTS FOR THE PERFORMANCE IN SCIENCE BASED ON PRE-TEST AND POST TEST

	MEAN	STANDARD DEVIATION	T- VALUE	LEVEL OF SIGNIFICANCE	INTERPRETATION
PRE-TEST	37.00	7.8170	22.603	0.005	There is significant difference
POST TEST	65.33	9.4321			

Table 4 shows the data generated through texting on how parents get involved on their children's completion of an assignment. Majority or forty one percent (41%) of the parents oftentimes if not always give time to follow their children to do the homework at home. This assistance ranges from assisting them in completion of a project or assignment or personally coaching them. The thirty six percent (36%) of the parent texters assumed that at their age they were able to develop a good study habits that is why they allow their children to work on their own and in most instances they resort on other sources like the internet. The remaining twenty two percent (22%) comprise parents who cannot find ways to assist their children to do their homework due to time constraints, employment, or distance from home.

Based on the study conducted by Peters, M., et al, 2008, on parental involvement in homework and reading, nearly 60% of parents said that they frequently helped their children with their homework ('every time' and 'most of the time'); approximately one third did so occasionally. They also added that parents of younger children helped more frequently than those in the later years.

It was observed from this particular intervention that even they were informed during the FGD that they would be receiving text messages every Friday for follow up on their assistance to their children's homework, majority of the parents get easily surprise of receiving text messages from the teacher. They received the text message with some sense of anxiety that might concern their children's performance or their children having problem in school. There were parents do have the tendency not to text back in some times because of the repeated questions sent to them every weekend. However, they always make sure that they checked the homework logs.

Since texting is handy and accessible, there are numerous cases of inquiries from parents mostly on updates of class suspension, whereabouts of students' practice for class performance, excuses of their children's absence in class, follow ups on school cases, and etc. the researcher finds these as a proactive involvement of parents in varied purposes.

The mean difference between the scores in pre-test from the post –test in achievement test in lesson in Science is use to measure knowledge gained. Table 5 shows the mean gain in pre-test and post-test with the computed value of 37.00 and 65.33 respectively. The computed t-value is 22.60 at the p value <0.05. The computed t value means that the collaboration of the parents and the teacher in engaging parents in students homework is significant.

Studies conducted for secondary school students show there is a positive relationship between time spent on homework and achievement (Sharp, C., Keys, W. & Benefield, P., 2001). This result coincides with the various researches on parental involvement in children's schooling affirmed a positive effect in child performance including increase academic achievement (McNeal, 1999; Scribner, Young & Pedroza, 1999; Sui-Chu & Willms, 1996; Trusty, 1998; Yan & Lin, 2002). This also holds true with parental involvement outside of home, such as participation in extracurricular activities relates to their reading, general knowledge, and mathematics knowledge and skills (Reaney, Denton, and West 2002). The Children's Plan published by the Department for Children, Schools and Families (DCSF) in 2007 included the parental involvement in children's education making a positive difference to students achievement and highlighting the importance of partnership between parents and school to support children in their learning, and the greater support provided for parents to involve them in their child's education.

CONCLUSION

This research gives evidence that parental involvement in doing homework contributed to academic achievement of a child. The collaborative efforts between educators and parents such as focus group discussion, follow-ups via texting, homework logs and home visits when simultaneously undertaken are found to be effective in enhancing performance in school. This study also proves that constant monitoring of parents to students can give positive effect to child academic performance. Parents are always willing to participate in assisting their children in doing their homework. On the same manner students perceive the involvement of their parents in their assignment positively. It is further proven that the teachers can always involve and influence parents to take part in academic activity particularly in doing homework.

RECOMMENDATION

The importance of parental involvement in education of children, in homework in particular, needs a continuous effort to further maximize and reach out students in need. It is further recommended that a parent portal in the internet should be established in a school, whether it is in a year level or classroom level wherein

parents and teachers can update and inquire concern about the child education. Stakeholders in the school level should develop a program that engages parents in school activities more than the usual parent teacher meeting. Self monitoring on the part of the parents should be done to qualify the assistance they are giving to the children in doing homework. Home visitation is an integral part of a job of a teacher but it would be best if it would be conducted on a regular basis. It is also the same way on how can texting is utilized to encourage parental involvement. This study can be enhance further if replication of this action research in other schools can be done to compare results.

PERSONAL STATEMENT

Action research is a way of life of a teacher. It is a proactive measure that I do every day to address concern of a child in class. What makes it unique is I write my observation and make anecdotal notes, then make use of these notes as data to be tabulated and interpreted. In between I compare and differentiate my findings to the past experiences of educators who were able to share their experience through unpublished and published literature.

In doing an action research, I realized that there is nothing to complain about everyday struggle as a classroom teacher because eventual application of action research problems or concern get resolved. This experience commits me once more into teaching. It struck me, that the pain, agony, stress and concern I do have at home can also be the concern of my students at a very young age and for that as a teacher I should be more empathetic and compassionate.

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USE OF *5-5-5 QUIZ*^{plus} IN IMPROVING THE MATHEMATICS PERFORMANCE OF SELECTED GRADE 10 STUDENTS AT SIGNAL VILLAGE NATIONAL HIGH SCHOOL

Lambert G. Quesada
Naumi G. Ligutan
Joseph C. Lagasca
Vivian C. De Luna
Signal Village National High School
Schools Division Office– TAPAT

ABSTRACT

This action research study discovered the significance of using 5-5-5 Quizplus in improving the Mathematics performance of the selected grade 10 students. Employing a quantitative research design, this study was conducted for 1 quarter period in the experimental group of students in Grade 10. The researchers implemented the above – mentioned intervention in one class, while the other class will have the regular routines in Math. Through the data collection, the researchers learned that there was an improvement in the Mathematics performance of the treated group. Data collection in the study included pre- assessment and post – assessments of the students. The t-test was used to treat the collected data. The results of this research proved that Math teachers should continue to implement the 5-5-5 Quizplus as one of the basic but effective strategy in retaining Math concept and skill to students .

Keywords: 5-5-5 QUIZ^{plus}*, mathematics performance*

INTRODUCTION

The first few years of teaching of the researchers was very challenging. They encountered students having problems with signed numbers, fractions, factoring, special products and solving equations. One of the common reasons they got from the low scored students in quizzes was they forgot the formula. Another reason was students could not perform the basic Math skills they should have learned from the lower grade level which can be used in the present lesson. Thus, the students' performance was low.

Since, K-12 Curriculum is spiral in form, students must have the mastery or at least retention of the skills they learned for them to be fully equipped for the next level of learning in Mathematics. In its 4th year of implementation, the researchers noticed the consistent low level of performance of students. Thus, the need to find strategies to retain the needed skills for students is very important, especially the follow up in the present to better perform in class.

Due to this continuous low of performance of the students in Mathematics, the researchers find this as a serious problem. One of the researchers shared what he learned in one of the seminars he attended to with his colleagues. The seminar was conducted by Ateneo De Manila University where he learned that 5-5-5 Quiz can be used to improve the performance of the students in Math. He modified the intervention to conform to the needs of the students. Since the original 5-5-5 Quiz was more on the review of past lessons or drills, he added *plus* to its name.

5-5-5 Quiz^{plus} is a 5-item quiz for 5 minutes for 5 points and the plus is for the bonus item which is a question in preparation for the future lesson or a difficult question for the present lesson.

After all these past experiences and learning, the researchers agreed to find out if using the 5-5-5 Quiz^{plus} can improve the Mathematics performance of selected grade 10 students at Signal Village National High School.

The strategy 5-5-5 Quiz^{plus} was attributed to the original strategy shared by the Ateneo de

Manila High School Department headed by the school principal, Dr. Carmela C. Oracion.

Definition of Term

5-5-5 QUIZ*plus* means 5 questions for 5 minutes for 5 points plus a bonus item (*bonus item is not given always*).

Statement of the Problem

This study aims to improve the Mathematics performance of the selected students in Signal Village National High School through the use of 5-5-5 Quiz^{plus}. It aims to answer the following questions:

1) What is the effect of using 5-5-5 Quiz^{plus} in the Mathematics performance of the students?

2) Is there a significant difference in the achievement level in Mathematics between selected Grade 10 students who are using 5-5-5 Quiz^{plus} strategy and selected students who aren't use the strategy?

Review of Related Literature

In order to successfully improve the Mathematics performance of the students, they must be able to recognize and use mathematical terms correctly (Maccini 2000). Moreover, in order for the students to solve problems, knowledge on how to perform basic mathematical operations is required (Maccini 2000). According to MacMeekin in her Four Step Method for Improving Learning Retention, after the content has been thoroughly discussed, questioned and expanded, it is time for the learners to apply it by giving a challenge through an exercise or case study in a multi-day in nature (if possible).

In the Ten Strategies for Improving Retention and Retrieval of Learning (*Promote practice at retrieval*) prepared by the Office of Educational Enhancement, UTCVM (2003), they emphasize the need to ask questions periodically to check understanding.

The earlier study (Sweller & Cooper, 1985) mentioned about problems were more easily solved by using worked examples as a way to develop mental schema which were required to categorize. The results showed that students in the worked example group spent less time in the acquisition phase and made fewer errors than the conventional group.

These required knowledge and skills must be retained to the students, and the researchers claimed that the 5-5-5 Quiz^{plus} was one of the useful interventions in retaining Math concepts to students and later on will improve their Math performance.

METHODOLOGY

This research is a quasi-experimental research which began right after the first quarterly assessment was given.

The researchers used pre – test and post – test assessments which are both teacher – made tests; and survey questionnaires as instruments.

The researchers chose two classes which have almost equal number of students. They were given pre – test and the scores were recorded. Out of the two classes, the researchers were able to get 30 students from each class who have the same performance level as shown in fig.3. The mean score of each group were obtained to show that the two groups have the same performance level. Group A was assigned as the controlled group and Group B was assigned as the experimental group.

The researchers began giving the 5-5-5 Quiz^{plus} to the experimental group from the start of Second Quarter and until before the Second Periodic Test. It was given to students at least two times a week.

In statistical analysis, paired *t* – test was used to see if there is a significant difference between the pre-test and post-test of each group and if there is a significant difference between the performance of the experimental group and controlled group.

The research design is shown below.

Conceptual Framework

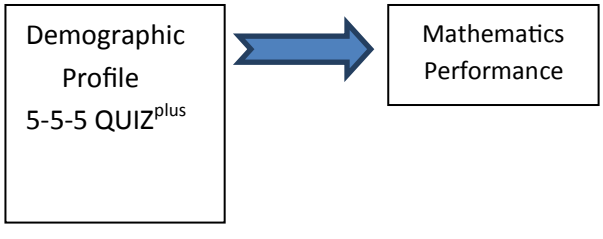
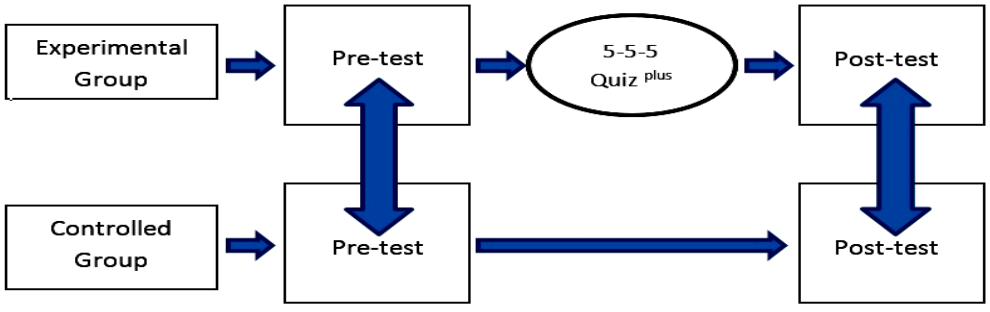


Fig. 2

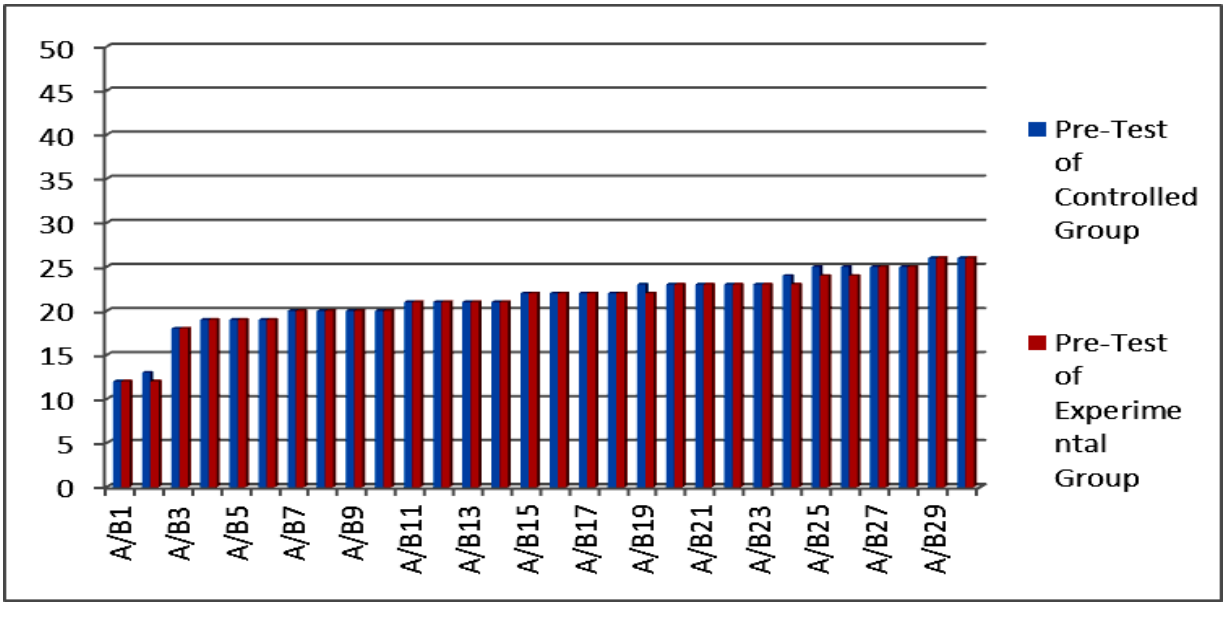


RESULTS AND DISCUSSION

Table 1. Number of Respondents

Controlled Group		
Male	Female	Total
13	17	30
Experimental Group		
Male	Female	Total
9	21	30

Table 1 presents the number of respondents. There are 30 respondents in controlled group that is composed of 13 males and 17 females and there are also 30 respondents in experimental group that is composed of 9 males and 21 females.



As could be gleaned from the above figure, the two samples have equal level of performance before the treatment.

Table 2. Result of the Pre-Tests of the Two Groups

Table 2. presents the result of the pre-test and post-test, the table shows that all results show increase in post – test over pre – test.

Controlled Group				
Subject	Sex	Pre-test	Post-test	Inc/Dec
A1	M	12	30	18
A2	F	13	35	22
A3	F	18	31	13
A4	M	19	33	14
A5	F	19	38	19
A6	F	19	31	12
A7	M	20	34	14
A8	M	20	34	14
A9	M	20	25	5
A10	F	20	30	10
A11	F	21	38	17
A12	M	21	34	13
A13	M	21	31	10
A14	F	21	33	12
A15	F	22	39	17
A16	M	22	36	14
A17	F	22	32	10
A18	M	22	37	15
A19	F	23	40	17
A20	M	23	38	15
A21	M	23	39	16
A22	F	23	25	2
A23	F	23	32	9
A24	M	24	34	10
A25	F	25	37	12
A26	F	25	32	7
A27	F	25	38	13
A28	M	25	35	10
A29	F	26	37	11
A30	F	26	39	13

Experimental Group				
Subject	Sex	Pre-test	Post-test	Inc/Dec
B1	F	12	39	27
B2	F	12	35	23
B3	F	18	33	15
B4	F	19	39	20
B5	M	19	45	26
B6	M	19	40	21
B7	F	20	39	19
B8	F	20	38	18
B9	F	20	39	19
B10	F	20	45	25
B11	F	21	38	17
B12	M	21	35	14
B13	F	21	38	17
B14	F	21	39	18
B15	M	22	40	18
B16	F	22	44	22
B17	F	22	42	20
B18	M	22	44	22
B19	F	22	38	16
B20	F	23	44	21
B21	F	23	38	15
B22	F	23	39	16
B23	F	23	42	19
B24	M	23	44	21
B25	M	24	38	14
B26	F	24	39	15
B27	F	25	42	17
B28	F	25	43	18
B29	M	26	40	14
B30	M	26	47	21

Table 3. Paired t-test for Controlled Group using the Microsoft Excel

	Post-test	Pre-Test
Mean	34.23333333	21.43
Variance	15.21954023	10.74
Observations	30	30
Hypothesized Mean Difference	0	
Df	56	
t Stat	13.76096917	
P(T<=t) one-tail	6.50869E-20	
t Critical one-tail	1.672522303	
P(T<=t) two-tail	1.30174E-19	
t Critical two-tail	2.003240719	

With the **t Stat of 13.76** and a **t Critical of 2.00**, table 3 shows that there is an improvement in post-test over the pre-test of the controlled group.

Table 4. Paired t-test for Experimental Group using the Microsoft Excel

	Post-test	Pre-test
Mean	40.2	21.27
Variance	10.78620690	10.69
Observations	30	30
Hypothesized Mean Difference	0	
Df	58	
t Stat	22.379939 01	
P(T<=t) one-tail	1.61387E-30	
t Critical one-tail	1.671552762	
P(T<=t) two-tail	3.22775E-30	
t Critical two-tail	2.001717484	

With the **t Stat of 22.38** and a **t Critical of 2.00**, table 4 shows that there is an improvement in post-test over the pre-test of the experimental group .

Table 5. Independent t-test using Microsoft Excel

	Post-Test (E)	Post-Test (C)
Mean	40.2	34.23
Variance	10.7862069	15.22
Observations	30	30
Hypothesized Mean Difference	0	
Df	56	
t Stat	6.408519882	
P(T<=t) one-tail	1.63292E-08	
t Critical one-tail	1.672522303	
P(T<=t) two-tail	3.26584E-08	
t Critical two-tail	2.003240719	

With the **t Stat of 6.40** and a **t Critical of 2.00**, table 5 shows that there is a significant difference in the post-test of the experimental group (Post-Test (E)) over the controlled group (Post-Test (C)).

Findings

Based on the data gathered and results of the treated data, the researchers found out that:

1. using 5-5-5 Quiz^{plus} can improve the Mathematics Performance of the students; and

2. there was a significant difference in the level of achievement in Mathematics of the selected Grade 10 students when 5-5-5 Quiz^{plus} was implemented in their classes.

CONCLUSIONS

Although teachers should be doing tasks on time, a 5 - minute review of past lessons will not give a negative effect to the performance of students. Moreover, it is more helpful in retaining concepts most especially in Mathematics subject.

The data did not only show that there is a positive effect on the performance of the students in their Mathematics Performance but the Independent T – Test also showed that there is having the t Stat of 6.40 and a t Critical of 1.67 means there is a significant difference in the post – test of the experimental group(Post – Test E) over the controlled group (Post – Test C).

With the aforementioned findings of this study, the researchers are confident to share that using the 5-5-5 Quiz^{plus} can improve the students' Mathematics Performance based on the results shown in the data gathered and treated data. The computation showed that there was a better improvement in the Mathematics Performance of the students after applying the 5-5-5 Quiz^{plus} in the experimental group as compared with the controlled group.

RECOMMENDATIONS

The researchers would like to recommend the use of 5-5-5 Quiz^{plus} to improve the Mathematics Performance of the students. It was also recommended that this intervention can also be tried and used as point of research to other subjects such as, English, Filipino, Science and Araling Panlipunan were subjects included in the NAT (National Assessment Test). Moreover, it was also highly acclaimed that all Math Teachers should include 5-5-5 Quiz^{plus} in their Daily Lesson Plans.

Although the 5-5-5 Quiz^{plus} was found an effective strategy, the researchers strongly recommend to be consistent in using this, to be more effective in teaching Math skills.

The researchers would also like to recommend for further study of the confounding variables (types of family and gender) that may affect the outcome of the research.

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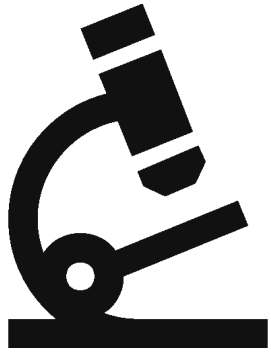


Science Investigatory Project

Neo-ethnic Fiber Products from *Typha latifolia* Leaves

Student: Christian Wilson Joi M. Antalan
Adviser: Lea Punzalan Valenzuela
School: Victorino Mapa High School

Introduction

In order to judiciously utilize the Philippine indigenous fibers which come from agricultural waste products in the manufacture of smart and intelligent textiles and textile-based products, with deliberate effort towards environmentally sound processes , and at the same time infusing indigenous materials and designs to create advanced Filipino eco-friendly technologies, this invention focuses on using the leaves of *Typha latifolia,* an invasive and perennial plant, as a natural source of fiber towards creating high value yarns and fabrics for novelty items like bags, table runners, slippers ,coin purse and many others.

Neo-ethnic Philippine fiber products are made of natural and/ indigenous materials, sourced and/ produced in the Philippines using updated, relevant and green scientific and technological approaches and innovations by spinners, dyers, weavers and artisans while integrating and/ or retaining traditional patterns, designs, icons, motifs and/ or approaches, and thus contribute to livelihood generation and/or in sustaining the local textile heritage.

Methodology

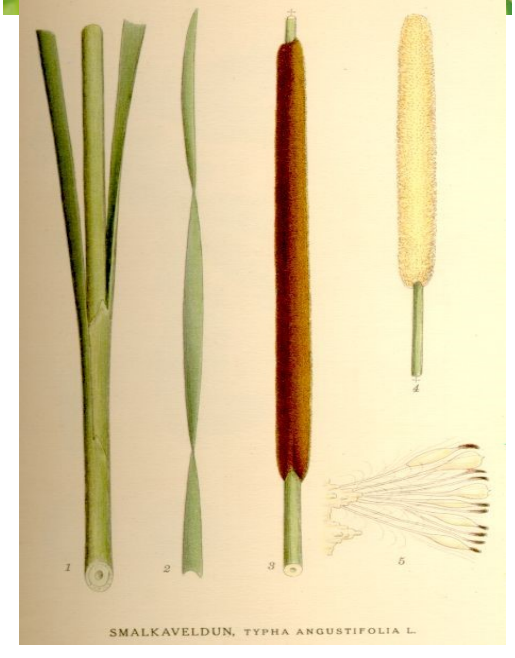
The invention uses *Typha latifolia* leaves as source of indigenous fibers to make yarns and fabrics that can be marketed as high value novelty items. The process involves decortication or fiber extraction of *Typha latifolia* leaves, degumming of the natural fibers, spinning to produce yarns ; hand loom weaving to make fabrics and dyeing the fabrics using indigenous dyes .The fabric blend of 80% polyester and 20% *Typha latifolia* natural fibers were produced . The tensile strength and fiber composition of the samples were tested and evaluated using EN ISO 13934-2:1999 and AATCC 20A methods. Five fabric test specimens were gripped in its center part by jaws of specified dimensions were extended at constant rate until they ruptured (Grab test). The maximum force was recorded using Zwick/Roell Tensile Strength Tester 2005 (CRE). The prototype handloom woven polyester/*Typha latifolia* fabric composite showed the following breaking force: 640 N (Warp) and 830 N (Filling). The percent fiber composition of the dry *Typha latifolia* /polyester fabric using AATCC Test Method 20A-2011: 70% Sulfuric Acid showed 8.4 % *Typha latifolia* natural fiber and 91.6 % polyester. Thus, *Typha latifolia* natural fiber has a promising potential as a filler using polyester as carrier in terms of properties and cost for the textile industry. Novelty high value and functional products like pouch bag, small vest, handy bag, slippers and wallets were made. The neo-ethnic fabric from *Typha latifolia* leaves natural fibers were enhanced using natural dyes from plant parts of mahogany, luyang dilaw (ginger),mayana leaves, tamarind, guava, talisay and other endemic natural dyes in the Philippines.

Results and Discussion

It was proven that *Typha latifolia* natural fibers have a great potential to make yarns and fabrics. Based on the laboratory tests of samples, the best formulation (80-20) is more appropriate to use in making a fabric than the 100% of *Typha latifolia* natural fiber formulation. If the formulation is increased, there will be effect on the machine. The natural fiber from *Typha latifolia* is more compatible to polyester than cotton.

This invention made use of materials indigenous to the country like the natural fibers from *Typha latifolia* leaves to create tropical yarns and novelty fabric items. The technology is novel and simple and can be replicated in the countryside, especially by the backyard/ cottage industries. It has also

Photo courtesy of https://www.google.com.ph



the potential to be used as geotextile for national infrastructure projects, protective clothing to the armed forces and packaging for rice and other food products, apparels, etc. The indigenous fibers from *Typha latifolia* evolved from mere uniform materials into comfortable and fashionable textiles. It has also the potential to be a natural fiber blended fabric which use B-cyclodextrin with citronella oil to impart mosquito repellant functionalities on textiles against deadly dengue mosquitoes.

The technology utilizes a controlled-release system to render the mosquito repellant property on natural fiber-blended fabrics which lasts for seven days and can be recharged. It is disposable and lasts only a maximum of 24-48 hours. It will transform these functional products which translates into livelihood opportunities for micro, small and medium enterprises (MSMEs) and in the process spur economic activity for farmers, and craftsmen towards growth in the countryside.

The expected outcome would be as follows: (a) lessen the solid wastes produce by the *Typha latifolia* leaves; (b) reduced greenhouse gas formation; (c.) pollution would be minimized if not totally eliminated; (d) lower the cost of fabric production; (f) Contribute to step-up rural and urban employment ; (g) supplement the flower shops, markets and government's income ;and (h) mitigate the effects of environmental degradation.

Testimonial on Research Experience

MARIA THERESA A. FEUDO
Master Teacher II
Mataas na Paaralang Neptali A. Gonzales (MPNAG),
Schools Division Office- Mandaluyong

Good morning! Ladies and gentlemen

Indeed, it's an honor to speak before the crowd of regional directors, education supervisors, head teachers, master teachers, distinguished guests, and of course, seasoned researchers from the Department of Education.

Being a school paper adviser and a language teacher, one has to balance between journalistic work, research, and teaching. Every year is a struggle doing all these responsibilities. Every year may not be good, but there's something good in every year.

And last year, I believed, I was able to do something good that was my action research. My journey in writing the research started during the last two weeks of third grading when I introduced research paper to the students. Surprisingly, I found out that many of them have not yet done research paper. So the big question was how I would start teaching them research paper in the easiest way they could understand. Since it is on this level where the theories of research writing is introduced and conceptualized. I felt the need that I should do something about the problem.

In junior high, research paper is only taught in one quarter, therefore I need to carefully plan the lessons and activities so that the students would be more focused and interested. I started evaluating the level of performance of the students in research writing using a pre-test from the Learner's Material in English Grade 10. The test showed that the biggest number of students which is 55 or 59.78 percent has poor level of performance. Since then, every lesson was a challenged on how the students would develop the basic skills in research writing like choosing a problem, formulating questions, APA reference entries, and many more. In every lesson, we used these steps; presentation, discussion, workshop, and critiquing.

In paper critiquing, the students become more aware of the format and content of research paper. In fact, they were really excited on the critiquing part of the lesson maybe because of the learning experience t**o** share helpful comments and suggestions.

I was also enthusiastic to facilitate paper critiquing because the class discussion was alive and interesting. It also made me realized that research paper is best taught with the presence of critiquing because students are given chance to express their viewpoints. Perhaps, my students felt that I was rendering my service dutifully that's why they were also paying attention and studying well the lessons in research writing.

With the student's research work, not only the use of school library, including Library Hub and the city library was maximized but also the use of ICT rooms became more functional for the student's electronic references. During the days, I spent doing the research it gave me a chance to influence my students to compose well-written papers and an organized report. I tried to let them realized that research writing is not pain staking but a significant and interesting task. It also broadened my knowledge on how to encourage students to do research work.

This action research was product of a four-part project for the conduct of action research of English MTs dubbed as *Masters in Action* held last October 2015.

The first draft of the research was submitted to Mrs. Erlinda Cadenas Teague, EPS in English. Then, after putting her suggestions, the paper was submitted for approval to Ms. Nona Verina, SEPS in Charge of Research. And finally, it was submitted to Dr. Nerissa Losaria, OIC Schools Division Superintendent of SDO Mandaluyong for final evaluation.

Research-Capability Building Skills Seminar -Workshop for Master Teachers which was held last June 2016 had set clear direction for MTs to start doing action research. As master teacher, it is our role to support the advocacy of DepEd to intensify the significance of research in the teaching-learning process; thus, this action research entitled, "DEVELOPMENT OF THE BASIC COMPETENCIES OF GRADE 10 LEARNERS IN WRITING RESEARCH PAPER THROUGH THE USE OF PAPER CRITIQUING." was proposed in order to help the students develop their basic competencies in research writing through discussion and critiquing.

Research is the foundation for developing the competencies of the learners in the field of education. With research, we hope to fulfill the mission of DepEd for the teachers to facilitate learning and constantly nurture every learner. And by doing so, will greatly improve the quality of education.

Allow me to end my testimonial with this very special quotation from Mother Teresa which always inspired me in my profession.

We ourselves feel that what we are doing is just a drop in the ocean. But if that drop was not there, I think the ocean would be less by that missing drop.

~Mother Teresa

Mrs. NENITA J. RIVERA
Master Teacher II
Amang Rodriguez Elementary School
Schools Division Office- Malabon City

On June 16 – 17 and 24 – 25, 2015, the Division of Malabon City, conducted a training on Action Research. It was a new thing for me and so I decided to delve myself fully grasping every bit of it.

The launching of the First Malabon Research Festival on July 31, 2015 was grand and exciting where we were awarded our approved titles for research. It was a formal and special occasion and made me realize that action research should be given special attention.

Among the many problems I encountered in my class were absenteeism, tardiness, low achievement level, reading skill and misbehavior of pupils. It was difficult for me to decide which should be given priority and become my topic for research. Being a Reading teacher of Grade Six, helped me make the decision. I know I needed to do something not only on the Word Recognition skills of my pupils but more so in their comprehension skills for I always believe that "Reading without comprehension is not reading at all". But after making that decision, the next steps were not easy. Reading materials were available but I wanted to make sure that my pupils will be reading something that will be according to their grade level, and that which will help them develop the higher order of thinking skills.

After giving the pre-test and identifying the participants of my research, I spent a lot of time preparing the materials to be used by my pupils. I called it the Level Content-Based Reading Materials (LCB-RM). It is a teacher-made reading material which is an output on a Write shop I attended 2014 and passed through various editing and revisions.

- It is composed of selections that passed the Readability Test for Grade 6 level to assure that learners are reading selections according to their grade level. The *Flesch -Kincaid Grade Level readability test* is used for this purpose. Each selection was encoded as a Word document and tested for its grade level readability.

- It includes questions that cater to the development of not only the lower order of thinking skills such as recalling or noting details but the critical level of comprehension questions in finding the main idea, making inferences, recognizing cause and effect among other things.

Action research actually kicked off when these materials were on the hands of the pupils. Reading time became more serious and engaging. I explicitly taught them some techniques on how to identify reading skill challenges and they were made aware of some steps that they needed to employ in answering reading questions.

After three months of having my pupils used the materials and guiding them in their reading quest, post-test was given. I wasn't expecting an impressive result for I know that development of reading skills takes time and a lot of perseverance. I was happy with the 19% increment in the pre-test and post-test from the "less proficient" level, they improved to the "nearing proficiency" level. But what was most impressive with the output was the changed attitude of my pupils in reading. They looked forward to the Reading Day, they talked about what they read from the materials during their break time, comments like *"ah, ganun pala yun" or "ay time na, gusto ko pang magbasa"*. Those simple things made me feel relieved and realized that the difficult times were all worth it.

Then came the tedious part of the action research: the preparation of the research report. It entailed collection of data, analysis, interpretations, conclusions and recommendations. Since Math is my waterloo, I often asked help from my fellow teachers and was blessed to have them always ready and willing to help out although they too have action researches to work on. Editing, proofreading and consultation with my adviser became part of my daily routine then. Beating the deadline for submission was another hurdle to overcome.

The Malabon Research Festival was presented as a challenge because it was a contest. My action research passed through pre oral defence and after being chosen to go to the next level faced the panel for Final Oral defence and was declared 1st place winner in the elementary level. I did the action research having no intention of winning or even being chosen. I just did what I thought was necessary to try to do something to a problem present in my classroom but later on realized that I had a hand in improving the reading habits of my pupils and consequently, improved the lives of the pupils which God has entrusted me for that school year.

Research and action should go hand in hand. As the American historian and archivist, Mary Ritter Beard said "Action without study is fatal. Study without action is futile."

Thank you and good day!

JAY BOY EVANO
Teacher I
Pedro Diaz High School
Schools Division Office- Muntinlupa

"The greater our knowledge increases the more our ignorance unfolds."

This quotation from John F. Kennedy perfectly sums up my realization of the value of research in my teaching practice after taking part in the 1ST Muntinlupa Research Parliament last school year. The parliament is SDO-Muntinlupa's main strategy to create a community of teacher-researchers, an integral component of its program to improve the quality of education in the city.

January 10, 2016, will forever be etched in my mind as a momentous day in my professional life. Dressed in formal attire , City and DepEd officials, teacher-researchers and guests gathered at the Cinema 10 of Festival Supermall to witness the first-ever research gathering in Muntinlupa. The affair's highlight was the announcement of the winners of the Best Researcher and the Best Oral Presenter Awards. Amid the glamor of the red-carpet event, I shared with my fellow research presenters a mixture of excitement, anxiety and pride.

My heart leaped when my name was called as one of the winners. I initially did not know how to react. But I was sure that the beautiful emotion I felt that moment came with the thought of how wonderful the experience of doing the research was.

Allow me to share with you a brief background of my work. Based on the results of the 2015 Reading Inventory, 236 of our 941 students read at the frustration level. In the class covered by the study alone, 48 of the 57 students were frustration readers. This exposed the need to focus on closing reading achievement gaps. To help ensure that the school's reading remedial program would yield positive results, I conducted an action research which sought to determine whether online lessons would result in more effective reading instruction than printed materials.

Two groups were involved in the study: the experimental group underwent online instruction and the control group had lessons via printed materials. It was revealed that the students who underwent online lessons performed better in reading assessments compared to those who were taught using printed materials.

This research enabled me to objectively assess the challenge of reading difficulties among students and discover a new and better way to address it. It boosted my sense of achievement and made me become more confident in dealing with factors that hinder learning.

Its positive impact on my performance could be seen in my students' reading profile and MPS. The number of frustration readers in grade 10 went down from 73 to 25. The Mean Percentage Score (MPS) in English went up from 47 in the first grading period to 69 in the fourth grading period.

My work also served as basis in the development of the School Improvement Plan (SIP) for CY 2016-2018. Specifically, it paved the way for the implementation of Project STAR (Student Training for the Advancement of Reading), a program that aims to prevent and remediate reading difficulties and improve student achievement across learning areas. One of its main components is the conduct of ICT-based remedial reading instruction patterned after my intervention.

This year, we intend to conduct further research in the area. My fellow English teachers and I plan to investigate whether localization makes reading instruction more effective. We will develop localized reading materials and use them for our ICT-based remedial reading classes.

From an act of mere compliance, research is starting to become a part of our professional practice. With its strong commitment to continuous learning, I am confident that SDO-Muntinlupa will succeed in creating a culture of research in our city.

This and many more make me proud to be part of SDO Muntinlupa!

Updates on Research

DepEd-NCR Jump Starts Nationwide Research Caravan

"Be agents of positive change through the utilization of basic research."

These words of inspiration were part of the welcome message delivered by Dr. Ponciano A. Menguito, Director of Department of Education National Capital Region (DepEd- NCR) during the launching of the 1st Nationwide Basic Education Research Agenda caravan of DepEd held on July 11, 2016 at the Benitez Theatre, University of the Philippines, Diliman, Quezon City. The event aimed to provide guidance to DepEd and its stakeholders in the conduct of education research and in the utilization of research results to inform the Department's planning, policy and program development.

Dr. Marie Therese Bustos, Dean of the UP College of Education, also welcomed participants and underscored the importance of "research for the sake of the Filipino learners." She also expressed her continuous support to the educational reforms initiated by DepEd, with the friendly note that they will remain active critics, if deemed necessary.

Among the attendees in the event were DepEd Assistant Secretary for Governance and Operations Jesus Mateo, Southeast Asian Ministers of Education Organization (SEAMEO) Executive Director Ramon Bacani, Philippine Institute of Development Studies President Dr. Gilbert Llanto, UP College of Education Dean Dr. Marie Therese Bustos, Basic Education Sector Transformation (BEST) Team Leader Greg Ryan-Gadsden, and DepEd Planning Service Director Roger Masapol.

In his message, Assistant Secretary Mateo mentioned the accomplishments of former DepEd Secretary Armin Luistro FSC, especially the K to 12 program, and enjoined everyone to contribute to educational reforms by participating in the Department's research agenda. "Let us use our brain power to help develop researches that will move forward this country to greatness," Asec. Mateo remarked in the conclusion of his keynote address.

Mr. Roger B. Masapol gave the participants an overview of the rationale, objectives and priorities of the Basic Education Research Agenda. He discussed its four (4) main themes, namely: teaching and learning, child protection, human resource development, and governance. He stated that the Research Agenda shall build on gains from existing research, generate new knowledge on priority research areas, focus DepEd's attention on relevant education issues, and maximize available resources for research within and outside the Department.

Action research winners Nenita J. Rivera, Ma. Theresa A. Feudo, and Jay Boy Evano gave their testimonies on how research helps address long-term learning problems such as reading comprehension and development.

Stated through DepEd Order No. 39 s. 2016, the adoption of the Basic Education Research Agenda hopes to inspire and guide its external stakeholders to undertake empirical studies to better

3rd Division of Taguig and Pateros Educational Research Symposium

The Division of Taguig City and Pateros pioneered the holding of Educational Research Festival in the Capital National Region and it is now on its 3rd year of implementation. A one-day symposium was conducted to brief the contestant on the mechanics of the contest and give additional inputs from previous winners of this Contest.

The two chief education supervisors, Dr.George P. Tizon and Dr. Isidro C. Aguilar were at the forefront of the activity with Mr. Quinn Norman O. Arreza, OIC, SEPS, Planning and Research ensuring the smooth flow of the activity. The symposium was attended by 137 hopeful contenders, 90 of them from the elementary and 47 from the secondary level. In attendance too were 17 division personnel.

Laying the blueprint of the contender's work was Dr. Isidro C. Aguilar who emphasized in his message the importance of educational action research in addressing classroom problems affecting the teaching- learning process. He further pointed out the benefit of conducting research to advance one's self in terms of promotion.

The first discussant, Marites A. Asuque, Principal V of R.P. Cruz Elementary School and a winner under the Non- Teaching Category last year, unselfishly shared her own entry to give the participants a clear sight of the Introduction part of a research. The methodology of a research was collaboratively discussed by two winners in the initial year of the contest, Ms. Rhona J. Dela Cruz and Ms. Leny A. Manaoat. Two other principals from the elementary level continued to share doing the other parts of a research. The interpretation and analysis of data was explained by Ms. Ester L. Catimon while conclusion and recommendation was expounded in details by Dr. Erlinda O. Butcon.

The sharing's of the discussants turned out to be interactive as evidenced by the questions and answers that emerged during the symposium. The afternoon session became more interesting having speakers who bubbly shared their topics citing their experiences in preparing their learning materials/ assessment tools used in their research. Mr. Alex C. Soro showed the evolution of his learning material used in his research. That creativity is one trait a good researcher must possess is what the participants learned from him. Likewise, Mr. Ryan G. Palamos gave the audience a lesson on ingenuity and persistence through sharing his experience in coming up with the learning material for his research. Although his first attempts of coming up with an instrument to use in his study were singularly unsuccessful, he was persistent in his pursuit that resulted favorably and even had the instrument patented.

Another speaker in the person of Mr. Jose F. Abisado Jr., shared his expertise by giving inputs in manipulating the computer in citing web references and working with ease on the bibliography. Mr. Quinn Arreza in his sharing showed the juxtaposition of an action research and a thesis, making it clearer to the audience how to work on their research.

The venue was quite small for the number of participants since at the last minute, many were interested in joining. The symposium ended as scheduled.

Top Three Winners of Division Research Festival

1st place: Rayand C. Saballe
2nd place: Lambert G. Quesada
Naumi G. Ligutan
Joseph C. Lagasca
Vivian C. De Luna
3rd place: Heidee - Lyn S. Afable

Subject Area Winners	**Name of Researcher/s**
Mathematics	Lambert G. Quesada et. Al.
English	Saturnina L. Gomez
A. P.	Vergil A. Gapac
Filipino	Aileen C. Riego
Science	Regie Ann R. Vejerano
T. L. E.	Sharon T. Nicolas
ALS	Heidee - Lyn S. Afable
E. P.	Marilou M. Magpayo
Mapeh	Rayand C. Saballe

BASIC EDUCATION RESEARCH AGENDA CARAVAN 2016

Opening remarks from Dr. Ponciano A. Menguito, Regional Director

Usec Mateo delivers his keynote address

Research caravan registration...

ROP during registration..

Open forum..

RESEARCH FESTIVAL IN THE DIVISION LEVEL

Research Festival in the Division of Taguig/Pateros

Dr. Benjamin Samson, OIC SDS gives his message to the awardees.

Dr. Isidro Aguilar, Chief, CID emphasizes the importance of conducting action research in classroom teaching

INTERNATIONAL PAPER PRESENTATION AT NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

Dr. Warren Ramos (3rd, extreme left) and Mr. Marco Realista (2nd extreme left) represent the DepEd National Capital Region, Philippines.

COORDINATION MEETING ON THE PREPARATION FOR NATIONAL RESEARCH MANAGEMENT CONFERENCE

NATIONAL PLANNING CONFERENCE 2016 IN CEBU CITY

DEPED-NCR PARTICIPANTS DURING THE INTERNATIONAL CONFERENCE ON TEACHER EDUCATION AT UNIVERSITY OF THE PHILIPPINES IN PARTNERSHIP WITH AUSAID-BASIC EDUCATION SECTOR TRANSFORMATION (BERF)

Teacher participants together with Dr. Warren Ramos

RESEARCH FESTIVAL IN SCHOOL LEVEL

Navotas National High School (NNHS) conducts its first Action Research Festival headed by Dr. Ma. Cristina Robles, Principal NNHS

NNHS Research Festival highlights

THE NET

VERITATIS ET BONITATIS – TRUTH AND EXCELLENCE

The Official Newsletter Publication of Navotas National High School – September, 2016

With the full support of Mayor JRT and SDS Rocena:

1st NNHS Action Research Festival Marks Milestone in Baguio

Left: Mayor John Rey Tiangco gives his inspirational message to teachers of NNHS during the action research festival poster and proposal presentation on August 5, 2016. Upper right: Ribbon cutting led by Mayor JRT and SDS Rocena. Below left: Dr. Robles delivers her welcome remarks. SDS Rocena gives his inspirational speech. Mayor JRT and SDS Rocena receives their plaque of appreciation from NNHS principal, Dr. Robles. 120 teachers participating in the 1st NNHS Action Research Festival.

NAVOTAS NATIONAL HIGH SCHOOL marked a milestone in Baguio as it successfully carried out the proposal and poster presentation of its 1st NNHS Action Research Festival last August 5, 2016 at Teacher's Camp, Baguio City.

Showing support and inspiring the teachers, Mayor John Rey Tiangco and OIC-Schools Division Superintendent Dr. Romulo Rocena lent their time to grace the event.

Mayor Tiangco encouraged the teachers to further think of ways on how to engage students in their education and find means on how to help struggling learners so that no one is left behind.

On the other hand, Dr. Romulo Rocena thanked the teachers and administration staff for spearheading the activity. He was very impressed to the outputs of the teachers and told them to continue improving their research methodologies through constructive peer critiquing.

A total of 120 faculty and admin personnel joined the activity. Thirty two (32) collaborative action researches were presented by teams of teachers per grade level.

This activity is in line with DepEd Order 39 s. 3016, or the Adoption of Basic Education Research Agenda and DepEd Order 43 s. 2016 or the Basic Education Research Fund which aim to promote evidence-based, data-driven and learner-focused practices.

Teachers also saw the advantage of engaging on action research. "Masayang karanasan. Una nakakatakot pero dahil sa maayos na pagpapaliwanag. Yung takot napalitan ng excitement lalo na kapag nakakatapos o nakakabuo kami ng ideya.," said Mrs. Cheryl Estrecho, Grade 8 teacher and Grade level coordinator.

- MDM

Inside this edition...

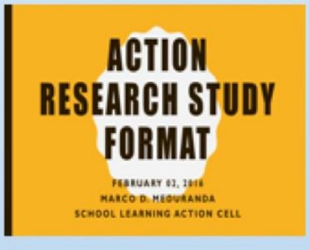
THE NET: The Official Newsletter Publication of Navotas National High School – August, 2016

TIMELINE: 1st NNHS Action Research Festival

December 28, 2015 – Soft launching and initial training for the 1st NNHS Action Research Festival. 32 teachers.

Dr. Robles gives her opening remarks and shared her enthusiasm and support for the 1st NNHSARF, a demonstration of school's commitment to DepEd's Professional Learning Community program. Present at her back are the department heads. 12/28/15

February 02, 2016: Follow-up training on Action Research conducted by Mr. Marco Meduranda



June 28, 2016: Technical Rehearsal for the Poster Presentation in preparation for the August 5-7, Baguio Activity.

August 5-7, 2016: Poster presentation of action research proposals and technical writing training.

June 6-10, 2016: Intensive Training on Action Research for all teachers in NNHS

130 teachers received intensive training on developing an action research project proposal. Thirty two teacher quality circle groups were formed as teachers by area of specialization per year level worked collaboratively to formulate research questions, develop interventions and create work plans that pertain to their chosen research focus.

Activities	Date
• Implementation of the approved action research project proposal	August - November
• Presentation of findings	December 8, 2016
• Grand Culminating Activity • Action Research Conference and Publication of the 1st NNHS Action Research Journal	January 20, 2016

REORIENTATION AND MOA SIGNING OF BASIC EDUCATION RESEARCH FUND GRANTEES CUM RESEARCH JOURNAL VALIDATION AND SCOPING AND NEEDS ASSESSMENT WITH BEST

November 22, 2016

2016 Basic Education Research Fund (BERF) Grantees during the Reorientation and MOA signing at DepEd NCR , Conference Hall

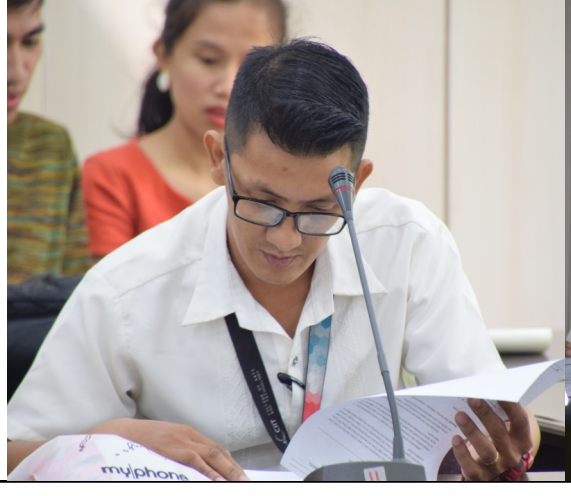
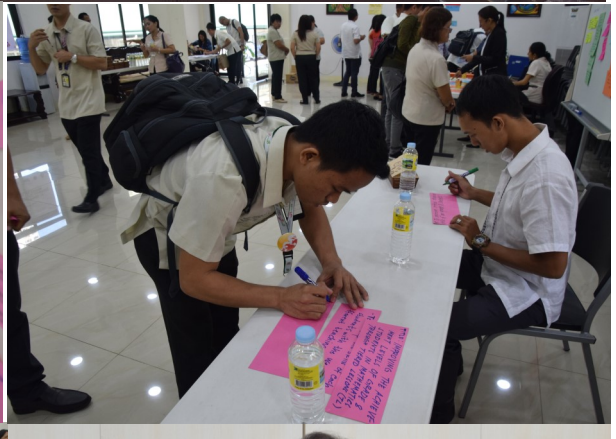
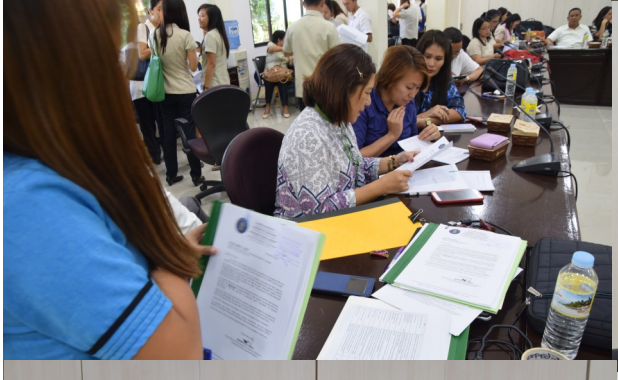


Photo opportunity with the researchers during the research journal validation at DepEd NCR , Conference Hall

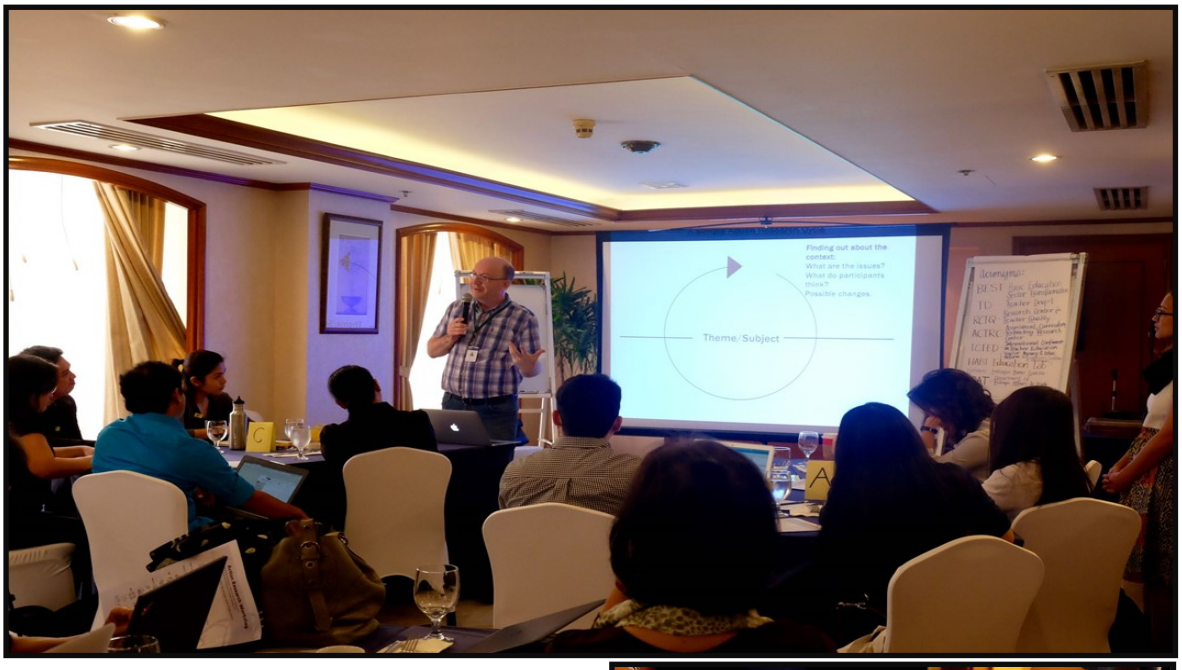
BERF Grantees and Researchers with Dr. Victoria R. Mayo, Chief, PPRD, Dr. Warren A. Ramos Regional Research Coordinator and BEST Teacher Development (TD) Team for the scooping and needs assessment at DepEd NCR Conference Hall.





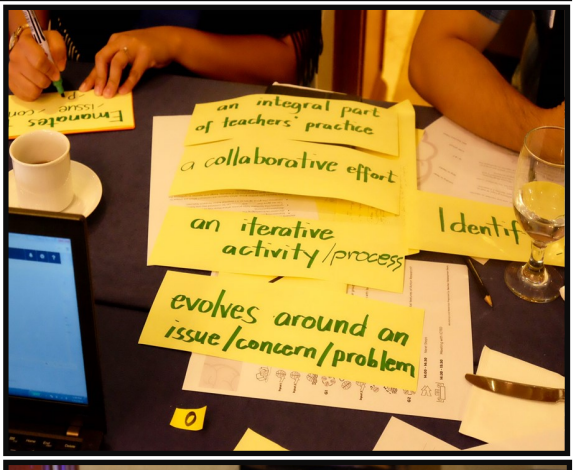
BEST TD Team during the scooping and needs assessment

BEST holds First Action Research Workshop



The first of many Action Research workshops was held at the Richmonde Hotel last January 15, 2016. Key representatives from BEST partner organizations, including the Assessment, Curriculum, and Technology Research Centre (ACTRC), the Research Centre for Teacher Quality (RCTQ), the International Conference for Teacher Education (ICTED), and HABI Education Lab, were in attendance.

Action research is "a process of inquiry undertaken by practitioners in their own workplaces, with the aim of improving practice and understanding through a process of systematic reflection and strategic innovation" (Ainscow, 2002, after Kemmis and McTaggart, 1982). Action research is a dynamic process of inquiry and problem-solving, which teachers, administrators, and school staff can use to achieve greater learning impacts for their students, and more effective professional development for school personnel. The workshop covered discussions on the values needed to facilitate the practice of action research, and how the BEST Program can empower teachers to be researcher-practitioners in their fields.



For collaboration opportunities, and for more information on how action research can be practiced in the context of teacher development, feel free to contact Dr. Peter Grimes, Teacher Development Senior Specialist of the BEST Programme (peter.grimes@best.org.ph).

http://www.best.org.ph/index.php/best-recent-events/92-best-holds-first-action-research-workshop

Research Policies, Guidelines, Memoranda and Advisories

DepEd Order No. 43, s. 2015- Revised Guidelines For Basic Education

Republic of the Philippines
Department of Education

16 SEP 2015

DepEd ORDER
No. 43, s. 2015

REVISED GUIDELINES FOR THE BASIC EDUCATION RESEARCH FUND (BERF)

To: Undersecretaries
Assistant Secretaries
Bureau Directors
Directors of Services, Centers and Heads of Units
Regional Secretary, ARMM
Regional Directors
Schools Division Superintendents
Heads, Public Elementary and Secondary Schools
All Others Concerned

1. The Department of Education is continuing its initiatives towards strengthening evidence-based policy development and decision-making through the provision of research fund to eligible proponents from the national, regional, schools division offices to the public elementary and secondary schools nationwide. Funds shall come from the Fiscal Year (FY) 2015 General Appropriations Act-Basic Education Research Fund (GAA-BERF) and succeeding years thereon.

2. To promote the culture of research, eligible proponents shall utilize the research fund for research projects anchored on the following thematic areas:

   a. Improving Access to Education;
   b. Improving the Quality of Education; and
   c. Improving Governance.

3. The enclosed revised guidelines shall serve as a guide on the application, availment, release, utilization, liquidation, monitoring, and reporting of the BERF.

4. All existing DepEd Orders and DepEd Memoranda, particularly the provisions in DepEd Order No. 24, s. 2010, which are inconsistent with this DepEd Order, are rescinded. These guidelines shall remain in force and in effect, unless sooner repealed, amended, or rescinded.

5. Moreover, this policy shall take effect 15 days after the publication in the Official Gazette and by the Office of the National Administrative Register (ONAR) at the University of the Philippines (UP) Law Center, UP Diliman, Quezon City.

6. For more information, all concerned may contact the **Policy Research and Development Division-Planning Service (PRD-PS)**, Department of Education (DepEd) Central Office (CO), Teodora Alonso Bldg., DepEd Complex, Meralco Avenue, Pasig City at telephone no.: (02) 635-3976 or at telefax no.: (02) 633-7275 or email at ps.ord@deped.gov.ph.

7. Immediate dissemination of and strict compliance with this Order is directed.

BR. ARMIN A. LUISTRO FSC
Secretary

DepEd Complex, Meralco Avenue, Pasig City 1600 633-7208/633-7228/632-1361 636-4876/637-6209 www.deped.gov.ph

DepEd Order No. 4 s. 2016 Amendment to DepEd Order No. 43. s. 2015 (Revised Guidelines for the

Republic of the Philippines
Department of Education

25 JAN 2016

DepEd O R D E R
No. 4, s. 2016

AMENDMENT TO DEPED ORDER NO. 43, SERIES OF 2015
(Revised Guidelines for the Basic Education Research Fund [BERF])

To: Undersecretaries
Assistant Secretaries
Bureau Directors
Directors of Services, Centers and Heads of Units
Regional Secretary, ARMM
Regional Directors
Schools Division/City Superintendents
Heads, Public Elementary and Secondary Schools
All others concerned

1. The provisions stipulated in DepEd Order No. 43, s. 2015 entitled Revised Guidelines for the Basic Education Research Fund (BERF) shall remain in force with some specific amendments to better implement the policy, to wit:

   a. Under Section VI, page 5, Non-Eligible Activities and Expenditures, the Basic Education Research Fund downloaded to regions may also be utilized for the orientation on the use of research funds and meetings of Regional Research Committees.

   b. The following Annexes shall be replaced with an enhanced version to facilitate efficient evaluation of research proposals:

      - 4.a. and 4.b -Criteria and Scoring Template for Research Proposals for the District, Division, Region and National Level; and Action Research, respectively shall be replaced with an enhanced version (**Annexes 1 and 2**)
      - 6 – Format for Approval Letter for Regions, Divisions, Districts and Schools, shall be replaced with **Annex 3.** A format for Letter of Disapproval will also be included as **Annex 4**.

   c. On the release and liquidation of funds, the release of research funds to the researcher based on the approved proposal and cost shall be based on the submission of required deliverables per tranche (output-based tranches) both described in the flow chart in page 7 and Table 2 in page 10.

DepEd Complex, Meralco Avenue, Pasig City 1600 633-7208/633-7228/632-1361 636-4876/637-6209 www.deped.gov.ph

The fund is considered self-liquidating using the submitted and accepted required documents per tranche as basis for liquidation. The submission and acceptance of required documents for the last tranche completes the process in the flow chart and marks the full liquidation upon complete submission of liquidation documents.

d. Under III.1

- Call for proposals. The research proposal should be in PDF format. The mode of submission of schools and divisions may include any of the following: by courier, electronic mail and personal delivery. The cover letter mentioned in 1.2 need not be signed by the immediate supervisor of the proponent.
- Evaluation and approval of proposals
  - Page 8. Delete "with no score below 60% in any of the criteria".
  - Page 9, line 5. The same evaluation criteria and scoring template in Annex 4.a (instead of Annex 5) shall be used. *Note that Annex 4.a is now Annex 1 in the amendment.*
  - Pre-implementation. Delete "This will trigger the release of the first tranche"

e. Under Areas of Research, per level of Governance

- Regions, divisions and district – may include secondary data analysis; review/synthesis of existing research
- Schools – may include intervention study, case study of learners

f. Under Table 2

- Schools (Action Research), initial findings and analysis should be a deliverable under the Last Tranche.

2. A BERF Tracking Mechanism will be used to monitor the progress of BERF implementation. The tracking system will be disseminated to PPRD through official electronic mail.

3. All clarifications and queries on DepEd Order No. 43, s. 2015 shall be directed to Policy Research and Development Division (PRD-PS), Department of Education, 2/F Teodora Alonzo Bldg., DepEd Complex, Meralco Avenue, Pasig City at telephone number (02) 6353976 or at telefax number (02) 633-7275 or email at ps.prd@deped.gov.ph.

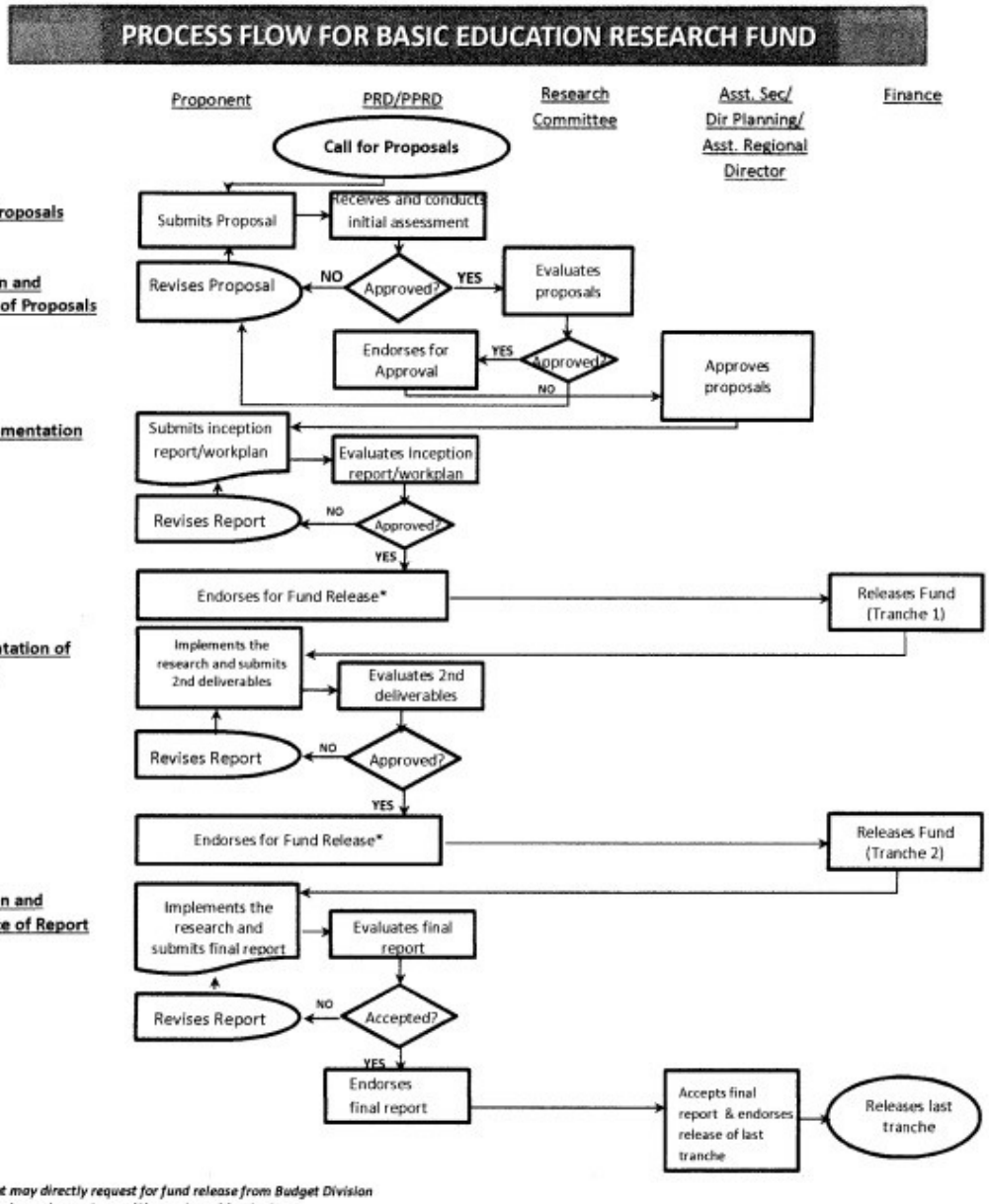
4. Immediate dissemination of and strict compliance with this Order is directed.

BR. ARMIN A. LUISTRO FSC
Secretary

Process Flow for Basic Education Research Fund

III. Procedures

The procedures for the submission, evaluation, and approval of proposals, and release of fund are described in the following flowchart:



Notes:
CO proponent may directly request for fund release from Budget Division
Action research requires only two (2) tranches of fund release
External research institutions will have four (4) tranches of fund release
The timeframe for the approval process is 30 days for PPRD-RO and two months for PRD-CO assuming there are no questions

Format for Approval letter for Basic Education Re-

Republic of the Philippines
Department of Education Regional Office __

Annex 6. FORMAT FOR APPROVAL LETTER FOR REGIONS, DIVISIONS, DISTRICTS AND SCHOOLS

Date

Mr./Ms. _____
_____
_____

Dear Mr./Ms. _____:

This refers to the research proposal you submitted to the Regional Office for possible funding under the Basic Education Research Fund (BERF) Grant Facility.

The Regional Research Committee has carefully evaluated the final research proposal entitled "_____"
based on the criteria prescribed in DepEd Order No. __, dated_____.

The Regional Research Committee is pleased to inform you that the said research proposal was **approved** for implementation. In this regard, we recommend the processing of the first tranche of payment.

Kindly note that in the event that the research proponent failed to complete and submit the deliverables, the research proponent shall be required to return the full amount of research fund through direct payment and/or salary deduction.

Further, strict adherence to provisions of the above DepEd Order is required.

We look forward to the successful implementation of your research. Thank you.

Very truly yours,

ASSISTANT REGIONAL DIRECTOR

DepEd No. 43, s. 2015 Annex 3.b Outline for Action Research Proposal

Annex 3.a. Outline of Research Proposal

1. The research proponent shall use the DepEd prescribed outline below for research proposal. The number of pages of research proposals shall be a maximum of twenty (20) pages, double-spaced, using an Arial font of 11.

2. The research proposal should contain the following:

I. **Introduction of the Research** – includes the rationale for the research and relevant, social, policy, or practice context for the study. The introduction should explain why the research study is being undertaken (e.g. to answer a question about a specified problem in education) and how the results could be used in action planning and/or policy formulation and development.

II. **Literature Review** – focuses on key issues which underlie the research; major findings, problems identified, recommendations, and questions raised in previous research; the main points of view and controversies; critical evaluation of these views, their strengths and weaknesses; general conclusions about the research papers; what research still needs to be done; and what knowledge gaps remain that the study will aim to fill.

III. **Research Questions** - involves investigating or testing an idea; trying out solutions to a problem; exploring and analyzing issues; creating a new procedure or system; explaining a phenomenon; or a combination of any of these.

IV. **Scope and Limitation** –coverage of the research in terms of location, time, respondents , etc. ; inherent design or methodology parameters that can restrict the scope of the research findings and are outside the control of the researcher.

V. **Research Methodology** – contains details of how the research will be conducted

   a. **Sampling** – details should be provided about who will participate in the research: number of people and the characteristics of those who will participate in the research; and how will the sample be selected and recruited.

   b. **Data collection**- the various instruments and procedures for data collection should be outlined and extensively discussed.

   c. **Ethical Issues** –Identification of ethical concerns that could possibly emanate from the conduct of the research, and an elaborate discussion on how to prevent these from taking place. It can include, but not limited to the following: right to conduct a study or investigation to answer a question; securing free prior and informed consent from respondents; issues of confidentiality and anonymity; written approval for use of materials with copyright (e.g. secondary data sets, data collection tools).

   d. **Plan for Data analysis** – indicates how the data will be analyzed and reported; it should specify the qualitative and/or quantitative methods that will be used in analyzing the data gathered for the research.

VI. **Timetable / Gantt chart** – contains the research timelines - when will the project begin and how long will it take for it to be completed; include time estimates for each step in the research process (e.g. 5 days, 2 weeks).

DepEd No. 43, s. 2015 Annex 3.a Outline for Action Research Proposal

VII. **Cost Estimates** – includes detailed research cost, broken down per research task, activity and/or deliverable. It can be further grouped by tranche for easier reference of the Evaluation Committee. Refer to the Availment Process for the activities falling under each tranche.

VIII. **Plans for Dissemination/Advocacy** – Indicate how the results of the research will be cascaded to the intended user of the research findings (i.e. presentation in conferences etc.).

IX. **References** - using APA referencing, provide in text of work and reference list consistently and accurately

DepEd No. 43, s. 2015 Annex 3.b Outline for Action Research

Annex 3.b. Outline for Action Research

1. The research proponent shall use the DepEd prescribed outline for action research described below. The research proposal shall be double-spaced, using an Arial font of 11.

2. The research proposal should contain the following:

I. **Context and Rationale–** includes the description and context of the study and the reason for conducting it; how the results could be used in action planning.

II. **Review of Related Literature–**focuses on key issues which underlie the action research; general conclusions about related action research papers; what research still needs to be done; and what knowledge gaps remain that the study will aim to fill.

III. **Research Questions** – identifies the problem/s which will be addressed by the research in terms of investigating or testing an idea; trying out solutions to a problem; creating a new procedure or system; explaining a phenomenon; or a combination of any of these.

IV. **Scope and Limitation** –coverage of the research in terms of location, time, respondents, etc.; inherent design or methodology parameters that can restrict the scope of the research findings and are outside the control of the researcher.

V. **Methodology** – contains details of how the research will be conducted

   a. **Sampling –** details should be provided about who will participate in the research: number of people and the characteristics of those who will participate in the research; and how will the sample be selected and recruited.

   b. **Data collection**- the various instruments and procedures for data collection should be outlined and extensively discussed.

   c. **Ethical issues** – Identification of ethical concerns that could possibly emanate from the conduct of the research, and discussion on how to prevent these from taking place. It can include, but not limited to the following: right to conduct a study or investigation to answer a question; securing free prior and informed consent from respondents and/or parents and guardians of learners; issues of confidentiality and anonymity;

   d. **Plan for Data analysis** – indicates how the data will be analyzed and reported; it should specify the qualitative and/or quantitative methods that will be used in analyzing the data gathered for the research.

VI. **Workplan** – contains the research timelines - when will the project begin and how long will it take for it to be completed; include time estimates for each step in the research process (e.g. 5 days, 2 weeks).

VII. **Cost Estimates** – includes detailed research cost, broken down per research task, activity and/or deliverable. It can be further grouped by tranche for easier reference of the Evaluation Committee. Refer to the Availment Process for the activities falling under each tranche.

VIII. **Action Plan–** Indicate how the results of the action research will be utilized.

IX. **List of References -** provide in text of work and reference list

DepEd No. 39, s. 2016 Adoption of the Basic Education Research Agenda

Republic of the Philippines
Department of Education

10 JUN 2016

DepEd ORDER
No. 39 s. 2016

ADOPTION OF THE BASIC EDUCATION RESEARCH AGENDA

To: Undersecretaries
Assistant Secretaries
Bureau and Service Directors
Regional Directors
Schools Division Superintendents
Public and Private Elementary and Secondary Schools Heads
All Others Concerned

1. The Department of Education (DepEd) adopts the enclosed **Basic Education Research Agenda** which provides guidance to DepEd and its stakeholders in the conduct of education research and in the utilization of research results to inform the Department's planning, policy, and program development aligned with its vision, mission, and core values.

2. The Research Agenda shall build on gains from existing research, generate new knowledge on priority research areas, focus DepEd's attention on relevant education issues, and maximize available resources for research within and outside the Department.

3. All DepEd Orders and other related issuances, rules and regulations, and provisions which are inconsistent with this policy are hereby repealed, rescinded or modified accordingly.

4. Immediate dissemination of and strict compliance with this Order is directed.

BR. ARMIN A. LUISTRO FSC
Secretary

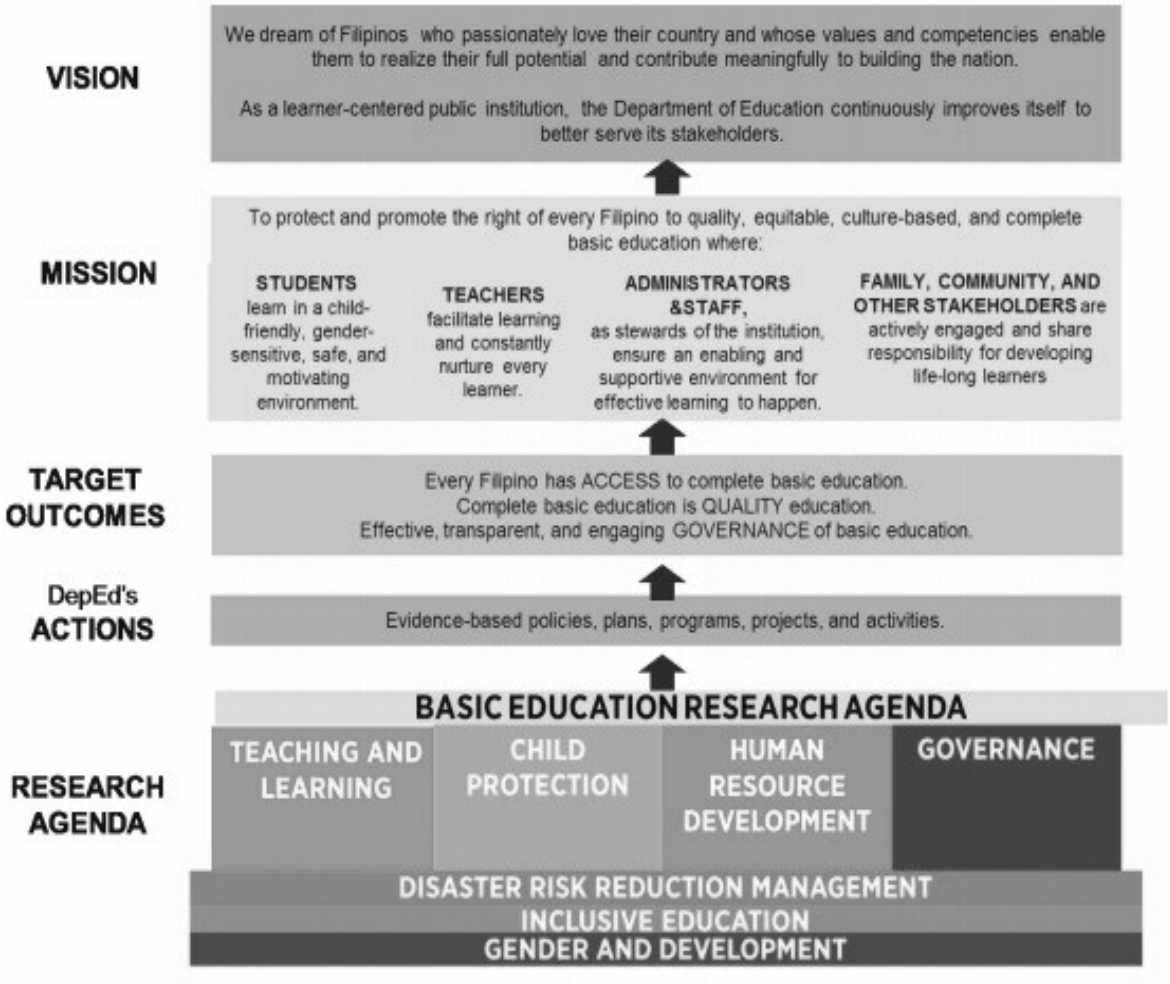
Encl.: As stated
References: DepEd Order Nos.: 4, s. 2016 and 43 and 13, s. 2015
To be indicated in the Perpetual Index under the following subjects:

BASIC EDUCATION
BUREAUS AND OFFICES
POLICY
RESEARCH OR STUDIES
STRAND: Strategic Management

SMA, DO Adoption of the Basic Education Research Agenda
0388, June 1, 2016

DepEd Complex, Meralco Avenue, Pasig City 1600 633-7208/633-7209/633-1261 636-4876/637-6209

DepEd No. 39, s. 2016 Conceptual Framework of Research Agenda



DepEd Regional Memorandum No. 156, s. 2015
Guidelines on the Conduct of Action Research

Republika ng Pilipinas
(Republic of the Philippines)
KAGAWARAN NG EDUKASYON
(DEPARTMENT OF EDUCATION)
PAMBANSANG PUNONG REHIYON
(NATIONAL CAPITAL REGION)
Daang Misamis, Bago Bantay, Lungsod Quezon
(Misamis St., Bago Bantay, Quezon City)

Department of Education
National Capital Region
RECORDS AND PUBLICATION UNIT
RELEASED
By:
Date: September 1, 2015
Time:

MEMORANDUM
No. 156 s. 2015

GUIDELINES IN THE CONDUCT OF ACTION RESEARCH

TO: Schools Division Superintendents
Chiefs, EPS, SEPS, Planning Officers
School Heads, Public Elementary and Secondary Schools
All Others Concerned

1. In ensuring the alignment and uniformity of the regional research standards, the Policy, Planning and Research Division (PPRD) and Regional Research, Innovation and Development Committee (RRIDC) issue the minimum contents of the research to be conducted in the Region, Division and School level.(Please see enclosure No. 1 for the typesetting of the manuscript)

RESEARCH CONTENTS	
QUANTITATIVE	QUALITATIVE
Research Proposal	Research Proposal
Author/s	Author/s
I. Introduction	Introduction
II. Research Methods	Research Methods
III. Work Plan (Financial Requirements)	Work Plan (Financial Requirements)
Final Report	Final Report
Proponent/s, Division, School, Designation	Proponent/s, Division, School, Designation
Abstract	Abstract
I. Introduction	Introduction
II. Research Methods	Research Methods
III. Results and Discussions	Findings and Discussions
IV. Conclusion and Recommendations	Generalization and Reflections
Bibliography	Bibliography
Appendices – Financial Report, Endorsement from SDS/Principal, Research Tool/s, Statistical Matrix, Action Plan (for action research only)	Appendices – Financial Report, Endorsement from SDS/Principal, Research Tool/s, Action Plan (for action research only)

2. Further, research papers must conform with the following specifications:
   a. Page size: 8.5" x 11" (letter size)
   b. Side margins: Top and bottom-1.75; Left and right-2.00
   c. Research title must be (Calibri 14, all caps, centered and inverted triangle, limited to 10-15 words)

d. Abstract Word count (200-230 words,calibri 11, italics, single-space) – refer to the enclosure
e. Keywords- there must be five keywords, discipline of the study, concepts studied, methods, Dimensions of EFA/ MDG/ K-12 –Access, Quality, Efficiency or Governance
f. Introduction section of the research must contain the rationale of the study-trends, issues, statement of the problem, scope and limitations, literature review , theoretical/conceptual framework (limited to 5000 words)
Use calibri 11, normal, and double-spacing.
g. For the research methods, research design must be clearly described such as the participants/ respondents, population and sampling, locale of the study, instrument used, data gathering procedures, ethical considerations and data analysis. The most important part of the methods section is the work plan/action plan that includes pre, proper, and post-implementation.
h. In the results and discussion, presentation, analysis and interpretation must be present and clearly explained. Cross-referencing are highly encouraged.
i. Conclusions must be aligned to the number of statement of the problem.
j. Recommendations must be aligned to the number of beneficiaries in the rationale.
k. Appendices shall include the endorsement letter from SDS/ Principal, Sample Research Instrument, Financial Statement, and Statistical Matrix.
l. For the references, use the American Psychological Association (APA) 5th edition format. (Kindly refer to the enclosure no.1)

3. Please be advised that the deadline for submission of research for publication is extended up to **September 18, 2015**. Manuscript, in MS Word format, must be submitted electronically to planningresearchdivision@gmail.com or profwarrenramos@gmail.com.

4. Should you have any clarifications, need for technical assistance and other concerns, please contact:

MRS. VICTORIA R. MAYO
Chief, RRIDC, PPRD
Tel. No. 928-01-04

DR. WARREN A. RAMOS
Vice-Chairman,RRIDC, PPRD
Mobile Phone No. 09430393897

5. Wide dissemination and compliance of this memorandum is desired.

LUZ S. ALMEDA
Director IV

PONCIANO A. MERGUITO
Director III

Sample Rubric for Research Abstract

Research Stream:_____

Name: _____

CRITERIA	Complied	Not Complied	Not Applicable
A. Title			
1. Number of words (10-15)			
2. Words can be understood by general audience			
3. Impactful (Interesting and catchy)			
4. Scope: Relevant to the DepEd Research agenda			
B. Word count (200-230 words) not too short or exceeding			
C. Key words must contain five components			
1. Discipline of the study (SBM, Curriculum, Policy, etc)			
2. Concepts studied (Research, Grading Practices,			
3. Methods/ process			
4. Dimension/s of EFA/MDG goals (ACCESS, QUALITY, GOVERNANCE)			
D. Content			
1. Topic introduction			
2. Objectives/general problem			
3. Methodology (design and sampling)			
4. Results: Present the salient findings (3-5 sentences only)			
5. Conclusions-Briefly answers the general problem/ most important discovery, innovation and contribution to DepEd			
6. Recommendations: What can be done to apply this in practice?			
7. Uses correct standard English (Grammar, Format and Style)			

Regional Memorandum for Basic Education Research Fund Grantees and Researches

Republika ng Pilipinas
(Republic of the Philippines)
KAGAWARAN NG EDUKASYON
(DEPARTMENT OF EDUCATION)
PAMBANSANG PUNONG REHIYON
(NATIONAL CAPITAL REGION)
Daang Misamis, Bago Bantay, Lungsod Quezon
(Misamis St., Bago Bantay, Quezon City)

Department of Education
National Capital Region
RECORDS AND PUBLICATION UNIT
RELEASED
By: 14 Nov 2016
Date: No.:

MEMORANDUM

To : **SCHOOLS DIVISION SUPERINTENDENTS**

Attention: SEPS for Research

From : **THE REGIONAL DIRECTOR**

Subject : **MOA Signing for Basic Education Research Fund Grantees and Accepted Researches for Publication**

Date : **November 4, 2016**

DepEd NCR expresses its sincerest gratitude to the Schools Division Superintendents and the Division and Schools Research Committees for the submission of Research Papers which qualified for the availment of the Basic Education Research Fund (BERF) compliant with the DepEd Order No. 43, s. 2015 and D.O. N0. 4, s. 2016.

Attached are the titles of the researches for publication, and the list of grantees of BERF

The concerned personnel are requested to report to the Regional Office for MOA signing and briefing on the mechanics of the BERF releases, to be conducted on November 22, 2016, 9:00 AM at the Conference Hall.

For queries, please contact Dr. Warren A. Ramos of the Policy, Planning and Research Division (PPRD) at 928-01-04 or pprd.ncr@deped.gov .ph.

For immediate dissemination and appropriate action.

PONCIANO A. MENGUITO
Director IV

Premier region: home of world-class lifelong education

List of Grantees for Basic Education Research Fund (BERF)

	Name		Division
1	Feudo, Maria Theresa	Development of the Basic Competencies of Grade 10 Learners in Writing Research Paper through the Use of Paper Critiquing	Mandaluyong
2	Verina, Nona B.	The Use of Training Needs Analysis in the Research-Capability Building Seminar-Workshop for School Research Committee	Mandaluyong
3	Ramos, Gary R. & Marie Paz Morales	Advancing Effective Classroom Management and Higher Order Thinking SkillsThrough Combined Strategies	Manila
4	Cruz, Marites B. & Abella, Anna Kristina B.	Effects of Fun in Reading Exercises (FIRE) on the Pupil's Motivation, Creativity ans Skills in Reading	Caloocan
5	Pasion, Christened Arbee C.	An Assessment on Learners' Perceptions and Learning Outcomes of Alternative Learning System Face to Face versus E- Learning Mode of Delivery	Caloocan
6	Santos, Adoracion R. & Bayan, Rocelia Pasco & Aguirre, Janel	Effectivity of Manihanskip in the Mastery of the Four Fundamental Operations in Grade VI	Caloocan
7	Dionisio, Maria Ana A.	Psychosocial Factors of Learning Among Students at Risk of Dropping Out in Horacio De La Costa High School	Caloocan
8	Ventanilla, Lourdes P.	Isang Bata, Isang Balita Project: A Strategy to Improve the Levels of Social Awareness of Grade 9- Dagohoy in Araling Panlipunan	Navotas
9	Matay-On, Susan C.	The Use of Learning Contract to Improve Attendance and Performance of Grade 9 Students from Sectiond Rizal and Bonifacio in the MAPEH Class	Navotas
10	Quijano, Romeo L.	The Use of Collaborative Learning in Improving Critical Thinking of Grade 8- Grahambell Students in Art Class	Navotas
11	Sayo, June Kathleen A.	Improving Reading Comprehension of Selected Grade 7 Students through Project STIR (Science Towards Improvement in Reading)	Navotas
12	Joseph, Debbie Mae Kristine S.	Improving Critical Thinking Skills of Grade 7 Students in Science through Project COLA (Collaborative Learning Approach)	Navotas
13	Magno, Mary Grace C.	Improving Academic Performance in Force, Motion and Energy of Grade 10 Students through Project ASAP (Afterschool Science Academic Program)	Navotas
14	Bonus, Laarni M.	Improving the Speaking Skills of Selected Grade 10 Students through the Integration of Cellphone Dictionary Applications in Daily Oral Reading Exercises (DORE)	Navotas
15	Reyes, Richelle Ann L.	Enhancement of Grade 9 Vocabulary Skills Using Frayer Model	Navotas
16	Habig, Betty, B.	Improving the Pronunciation Skills of Selected Grade 8 Students Through Project ROPE (Routinary Oral Pronunciation Exercises)	Navotas
17	Tongco, Elsa G.	The Use of Group Coaching in the TLE Classroom to enhance Skills in cookery of Grade 10 Students	Navotas
18	Matoguina, Angelita A.	The Use of Intervention Activity Worksheet (IAWs) in Improving the Academic Performance in Mathematics of Grade 10 Students	Navotas
19	Albis, Jelray M.	Improving the Achievement Levels of Grade 8 Students in Mathematics through Tiered Lessons (TL)	Navotas
20	Alcantara, Cloyd Juverson M.	Improving Attendance Rate of Grade 7 Students through Enhanced Reward System	Navotas
21	Penaflor, Elisa	KPAP (Kahusayan sa Pagbasa at Pakikinig) Towards Improved Listening and Comprehension Levels	Navotas

List of Researches
Accepted for Publication (Manyuskrip)

Lea B. Galvez Catherine A. Sevilla Fortunata V. Murcillo Jonna A. Quillopas Jenalyn L. Ocasla	EFFECTIVENESS OF REMEDIAL READING CLASSES USINGSPECIAL METHODS TO NON-READERS IN FILIPINO OF GRADE ONE PUPILS OF GENERAL MAXIMINO HIZON ELEMENTARY SCHOOL	Manila
Hazel May M. Salvador	INTERVENTION FOR STUDENTS WITH READING DISABILITY	Manila
Frosyl F. Miguel	TEACHER-PARENT COLLABORATIVE EFFORTS IN FACILITATING STUDENT'S HOMEWORK	Manila
Winston E. Ebagat Teona L. Marcelino	4P'S AND ITS RELATION TO SCHOOL ATTENDANCE & ACADEMIC PERFORMANCE OF STUDENT RECIPIENTS: A CLOSER LOOK	Quezon City
Lani Generoso De Guia	A SOCIOLINGUISTIC ANALYSIS OF SALUTATIONS: INSIGHTS FOR FORMAL WRITING	Pasay City
Darish Camla M. Gamit	TEACHING THROUGH FLIPPING: THE EFFECTS OF A FLIPPED LESSON ON THE GRADE 10 STUDENTS` IMPROVEMENT AND INDEPENDENCE TOWARD WRITING A PERSUASIVE ESSAY	Makati City
Jayson Ordinario Caraang	PICTURE PROMPTS: ITS EFFECTS ON THE WRITING PERFORMANCE OF GRADE 6 PUPILS IN THE MAKATI ELEMENTARY SCHOOL	Makati City
Rochelle T. Tallud	ENHANCEMENT OF THE WRITTEN EXPRESSION SKILLS THROUGH GUIDED JOURNAL WRITING OF SELECTED GRADE 4 PUPILS IN THE NEMESIO I. YABUT ELEMENTARY SCHOOL	Makati City
Randy Ocenar Salentes	ACADEMIC TRANSPARENCY: ITS EFFECTS TO SCIENCE LEARNING EFFICACY	Makati City
Sonia B. Pilitina	THE EFFECTS OF SCIENCE GAMES IN THE ATTITUDE AND ACADEMIC ACHIEVEMENT OF SELECTED GRADE 7 STUDENTS IN THE MAKATI HIGH SCHOOL	Makati City
Maria Katherine Tarrobal Estrella	LEARNING TOGETHER WITH P2P: THE EFFECTS OF PEER TUTORING TO THE ACADEMIC PERFORMANCE OF BEGINNING-DEVELOPING GRADE 7 LEARNERS IN SOCIAL STUDIES	Makati City
Winefredo B. Ranes	PARTICIPATORY SCHOOL ADMINISTRATION, LEADERSHIP, AND MANAGEMENT, AND SUPERVISION OF SELECTED PUBLIC SECONDARY SCHOOLS IN THE NATIONAL CAPITAL REGION: BASES FOR EFFECTIVE LEADERSHIP	Pasig City
Kenedy M. Cayabyab	EFFECTIVENESS OF DAMATH IN IMPROVING THE BASIC COMPUTATIONAL SKILL IN MATHEMATICS OF AT-RISK GRADE SEVEN HIGH SCHOOL STUDENTS	Pasig City
Charlie O. Fababaer	FLIPPED-DISCOURSE CLASSROOM: EFFECTS ON STUDENT ENGAGEMENT AND CONCEPTUAL UNDERSTANDING	Pasig City
Margarito B. Materum	EXPLORING THE CORE BEHAVIORAL COMPETENCIES OF PUBLIC HIGH SCHOOL HEADS THROUGH CONVERGENT PARALLEL APPROACH	Parañaque City
Darius Daniel J. Villanueva	THE EFFECTIVENESS OF MODULAR INSTRUCTION ON THE ACADEMIC OF GRADE 10 ECONOMICS STUDENTS OF PARAÑAQUE SCIENCE HIGH SCHOOL	Parañaque City
Renier G. Celiz Jr.	IMPROVING STUDENTS' MOLE CONVERSION SKILLS THROUGH THE USE OF ALGORITHM FLOWCHARTS	Valenzuela City
Joan J. Pastrano	POPCORN RECITATION: ITS EFFECT ON THE PERFORMANCE OF GRADE 7 STUDENTS TOWARDS MATHEMATICS	Valenzuela City
Fraille R. Tolentino	THE EFFECT OF CONCEPT-SKILL-VALUE MAPPING IN THE PERFORMANCE OF THE STUDENTS IN ARALING PANLIPUNAN 10	Valenzuela City
Maria Carmela D. Fajardo	THE EFFECT OF LITERATURE CIRCLES METHOD TO STUDENTS' TEST SCORES IN ENGLISH 10	Valenzuela City

2	Jasper B. Angeles	THE USE OF SELF-MONITORING APPROACH TO READING AND THINKING (SMART) STRATEGY TO IMPROVE THE READING SKILL OF SELECTED GRADE 8 STUDENTS	Valenzuela City
3	Maria Lourdes Y. Sayman	USE OF INFORMATION AND COMMUNICATION TECHNOLOGY ENHANCES CLASSROOM INTERVENTION IN THE ACHIEVEMENT OF GRADE 7 STUDENTS IN ARALING PANLIPUNAN	Valenzuela City
4	Charlyn SR. Dela Cruz	UTILIZATION OF CLASSROOM'S CONCEPT BOARD IN THE ACHIEVEMENT OF GRADE 10 STUDENTS IN ECONOMICS AT CANUMAY EAST NATIONAL HIGH SCHOOL	Valenzuela City
5	Elisa B. Sta. Maria	TEACHER DEVELOPED INFOTAINMENT (INFROMATIVE AND ENTERTAINMENT) AND DATABASE QUIZ SOFTWARE	Malabon City
6	Rayand C. Saballe	AN EVALUATION OF BAVOBASE BOARD GAMES MULTI-FUNCTIONAL PORTABLE EQUIPMENT IN TEACHING PHYSICAL EDUCATION	Taguig City and Pateros
7	Lambert G. Quesada Naumi G. Ligutan Joseph C. Lagasa Vivian C. De Luna	USE OF 5-5-5 QUIZplus IN IMPROVING THE MATHEMATICS PERFORMANCE OF SELECTED GRADE 10 STUDENTS AT SIGNAL VILLAGE NATIONAL HIGH SCHOOL	Taguig City and Pateros
8	Dennis Romano	COLLABORATIVE FILIPINO WEBQUEST: ITS RELATIONSHIP ON THE LEARNING ACHIEVEMENT IN SCIENCE OF GRADE VI PUPILS OF CUPANG ES	Muntinlupa City
9	Rhea Janina V. Bohol	CHILDREN'S INSTRUMENTAL MUSIC AND ITS RELATIONSHIP ON THE READING COMPREHENSION OF SLOW LEARNERS IN GRADE VI PASCAL PUPILS OF BAYANAN ELEMENTARY SCHOOL (MAIN)	Muntinlupa City
10	Jaime G. Bautista	SCAFFOLDING: TEACHERS' TEACHING STRATEGY THAT ELEVATES STUDENTS'LEARNING PERFORMANCE	Muntinlupa City
11	Roger V. Madula	THE EFFECTS OF THE MODULAR APPROACH IN THE TEACHING OF ARALING PANLIPUNAN IN THE ACADEMIC PERFORMANCE OF GRADE 10 STUDENTS	Muntinlupa City
12	Jay Boy E. Evano	ENHANCING READING SKILLS OF GRADE 10 SECTION 3 STUDENTS OF PEDRO E. DIAZ HIGH SCHOOL-LAKEVIEW ANNEX THROUGH ONLINE INSTRUCTION	Muntinlupa City
13	Brigida A. Blanco	A SUPPLEMENTAL MODULE TO IMPROVE THE CONCEPTUAL UNDERSTANDING OF HYDROCARBONS OF SELECTED GRADE 9 STUDENTS	Muntinlupa City
14	Jay F. Macasieb	AN ASSESSMENT OF THE DUTIES AND RESPONSIBILITIES OF MASTER TEACHERS IN SAN JUAN NATIONAL HIGH SCHOOL	San Juan City
15	Marvin B.Alambra	SCIENCE INSTRUCTION IN ORGANIZE SET OF STUDY FOR GRADE VII	Navotas City
16	Alberto J. Tiangco	IMPROVING ACADEMIC PERPORMANCE IN MATHEMATICS THROUGH TEAM TEACHING TECHNIQUES (T3)	Navotas City
17	Ma. Fe M. Juibilo	IMPROVING SKILL LITERACY IN ENGLISH THROUGH PROJECT TASA	Navotas City
18	Dr. Maria Cristina A. Robles	CARRYING OUT A School- BSED ACTION RESEARCH PROGRAM: A PRINCIPAL'S PERSPECTIVE	Navotas City
19	Mr. Marco D. Meduranda	LEVELS OF RESEARCH SELF-EFFICACY AND ANXIETY OF PUBLIC HIGH SCHOOL TEACHERS: IMPLICATIONS FOR ENHANCING SCHOOL RESEARCH CULTURE	Navotas City
20	Joey Zorrilla Balsomo	YOUNG LEARNER'S PERCEPTIONS OF GENERIC REFERENCE TERMS IN A SELECTED SCHOOL IN METRO MANILA SOUTH	Las Piñas City
21	Marnelli A. Bautista	TEACHER AGENCY IN THE K TO 12 EDUCATION REFORM: NARRATIVES FROM MINDFUL TEACHERS	

BERF-COMPLIANT ACTION RESEARCH PROPOSAL TEMPLATE

DIVISION OF CITY SCHOOLS, NAVOTAS CITY

NAVOTAS NATIONAL HIGH SCHOOL

BERF-COMPLIANT ACTION RESEARCH PROPOSAL TEMPLATE

TITLE: Improving Fundamental Mathematical Skills of Selected Grade 9 Students through Intensive Remedial Class

Proponent: ***Mrs. Jasmin Antonio Rol***

RATIONALE OF THE ACTION RESEARCH	CONTEXT (Cite school data, classroom data that supports the problem)	For the past two years, the result of National Achievement Test in Mathematics of NNHS students have decreased. Data show that total mean scores have lower down from 78.93 in S.Y. 2012-2013 to 54.00 in S.Y. 2013 – 2014, and 38.90 in S.Y. 2014-2015., The latest NAT results is the lowest since 2010. One factor that was identified for students' low NAT performance in Mathematics is the poor foundation skills or the inadequate basic mathematical competencies of the learners. For instance, students struggle in solving algebraic equation because they do not have solid understanding of the concept of integers and strong skills in basic mathematical operations which are pre-requisites to solve higher algebra problems. Data from the 1999-2001 Amby Duncan-Carr worksheet revealed that fifteen out of forty-five students in Grade 9 still can't perform the basic operations on integers. This is the skills that is usually learned in Grade 6 level. One strategy to address this problem is the Intensive Remedial Class project. This intervention aims to improve student competencies, to have solid understanding of the concept on integers and have strong skills in basic mathematical operations through the use of engaging materials and learning activities (199-2001 Amby Duncan-Carr). The IRC project will cover the 3rd quarter period. It will use the following measures and tools: 1. Pre-test, 2. Post-test, 3.formative test.
	PROPOSED INTERVENTION, INNOVATION, STRATEGY (Explain the intervention and cite literature that supports/ validate the strategy to be used)	
ACTION RESEARCH QUESTION		**How does the Intensive Remedial Class improve the fundamental mathematical skills of selected Grade 9 students in solving quadratic equations and functions?**
ACTION RESEARCH METHODS	PARTICIPANTS SOURCES OF DATA INFORMATION DATA GATHERING METHODS DATA ANALYSIS	Twenty struggling Grade 9 students will be the participants of this study. Data collection includes pretest-posttest of fundamental operations on integers test results, accomplished formative assessment worksheets and responses of students in the focus group discussion. The researchers will do data triangulation using the data sources identified above to validate the effectiveness of the intervention. Descriptive statistics will be used in comparing pretest-posttest accuracy and concept skills as well as in examining the results of the formative assessment worksheets.

ACTION RESEARCH WORK PLAN AND TIMELINES

	ACTIVITIES	TIMELINE
PRE-IMPLEMENTATION	1. Identification of participants through early screening using teacher made general mathematics test. 2. Secure approval from the principal and parent consent. 3. Orientation of identified students. 4. Administration of quadratic equations and functions as pre-test.	1st week of October 2016 2nd week of October 2016 3rd week of October 2016 3rd week of October 2016
IMPLEMENTATION PROPER	5. Meet the participants 1 hour before the class every MWF 6. Every Monday the assigned teacher will give different activities on addition & subtraction of integers from easy to difficult 7. Every Wed. the assigned teacher will give different activities on multiplication of integers from easy to difficult 8. Every Fri. the assigned teacher will give different activities on division of integers from easy to difficult	November 2016 to December 2016
POST-IMPLEMENTATION	9. Administration of quadratic equations and functions as post test 10. Conduct focus group discussion 11. Analysis and evaluation of activity worksheets 12. Writing and sharing of accomplishment report	3rd week of December 2016 January - February, 2017

COST ESTIMATES

Item	Cost Per Unit (P)	Number	Total Cost (P)
Questionnaire forms	——	——	——
Office supplies for the project • long bond paper • ball pen • notebook • manila paper • permanent marker • long brown envelope • scientific calculator	 250 6 11 3 40 5 1432	 1 ream 20 pcs 20 pcs 10 pcs 5 pcs 20 pcs 1 pc	 250 120 220 30 200 100 1432 **2,352**
Test materials • window card • long folder	 5 6	 8 pcs 10 pcs	 40 60 **100**
Report materials and supplies • ink for printer • ink for marker	 1200 65	 1 set 1 bottle	 1200 65 **1265**
Data Storage/ Computer use USB	470	1 (8GB)	470 **470**
Photographic/graphic design • tarpaulin • tarpaulin stand	 300 200	 1 pc 1 pc	 300 200 **500**
Duplication services(reports) • Post and pre-test • Worksheet • Letter for parent consent • Window card	 0.5 0.5 0.5 0.5	 40 pcs 320 pcs 20 pcs 160 pcs	 20 160 10 80 **270**
Field work	——	——	——
Purchase of books	——	——	——
Subject/Research Participants • food and beverages (zest-o, cupcake) • transportation expenses	 20 per head 6 per head	 20 (24 sessions) 20 (24 sessions)	 9,600 2,880 **12,480**

TOTAL: P17, 337.00

REFERENCES

1. 1999-2001 Amby Duncan-Carr; Math Instructions, Reinforcement and Learning Activities
2. Activity-Based Teaching of Integer Concepts and It's Operations by Reylan Jay Rubin, Jubert Marcelino, Royna Mortel and Minie Rose C. Lapinid
3. Improving Basic Math Skills Using Technology files.eric.ed.gov/full text/ED512698.pdf by Siobhan Hudson Sarah Kadan Karen Lavin Tylita Vasquez
4. Improving Math Performance siteresources.worldbank.org/.../Rogers.Public_Primary_Student_Performance_Indone...by FH Rogers -

National Memorandum on the Conduct of the National Research Management Conference

Republic of the Philippines
Department of Education

Tanggapan ng Pangalawang Kalihim
Office of the Undersecretary

MEMORANDUM

TO: DepEd ARMM Regional Secretary
All Regional Directors
All Schools Division Superintendents

ATTN: All RO-PPRD Chiefs
All SDO-SGOD Chiefs

FROM: **JESUS L.R. MATEO**
Undersecretary for Field Operations and Planning

SUBJECT: ***Conduct of the National Research Management Conference***

DATE: October 28, 2016

As DepEd strives to achieve its mission and vision, it continues to promote evidence-based decision-making at all levels of governance. The Department deems the conduct of research, and the dissemination and utilization of research results as crucial to informing education planning, policy, and program development, and has recently issued policies that support this thrust, such as the adoption of the Basic Education Research Agenda (DepEd Order No. 39, s. 2016) and the grants management process for the Basic Education Research Fund (BERF) (DepEd Order No. 43, s. 2015 / DepEd Order No. 4, s. 2016).

To further solidify consensus around evidence-based decision making, the Policy Research and Development Division – Planning Service will be conducting a Research Management Conference. The said activity will be conducted on November 23 – 25, 2016 at a location in Baguio City to be announced in a subsequent advisory. Specifically, the conference aims to:

- Apprise and obtain feedback from research supervisors on recent initiatvies to strengthen the culture of research in DepEd;
- Provide learning opportunities on relevant topics and trends in conducting, managing, disseminating, and utilizing research; and
- Promote closer cooperation among research managers to better support future initiatives that promote the conduct, management, dissemination, and utilization of research.

The following personnel will join the conference:

1. Central Office personnel, mostly from the Planning Service, Bureau of Education Assessment, Bureau of Human Resources and Organizational Development, and Bureau of Learning Delivery;
2. Chiefs of the Regional Office Policy, Planning, and Research Divisions (PPRD);

Office/Surname

DepEd Complex, Meralco Ave., Pasig City 1600 633-7206/636-6549 631-8494 www.deped.gov.ph

Quality Assurance, and Mechanics

Sample Research Competency Assessment Tool

Sample Research Competency Assessment Tool for School Heads and Teachers

RESEARCH COMPETENCY ASSESSMENT TOOL

Name: _____(optional) Office/ Division: _____

Age: _____ Sex: ___ M _____ F Highest Educational Attainment: _____

No. of years of Service in the Current Office:_____ Position Rank: _____

No. of Research/es conducted in the past five years: _____ Specialization: Quali___ Quanti____Mixed _____

I. Direction: Using a four-point scale, (4-Very High, 3-High, 2-Low and 1-Very Low), check the (/) appropriate column to rate your knowledge of, skills in and attitude about RESEARCH.

Your Knowledge about Research

	Indicators	4	3	2	1
1	Scientific principles related to your Key Result Areas, DepEd Vision, M,O				
2	Research Ethics				
3	DepEd Research Guidelines (Central Office, Regional office, Div. School)				
4	Roles and responsibilities as a researcher				
5	Principles of authorship				
6	Plagiarism				
6	Incentives and benefits of a researcher				
7	Research agenda/ priorities in your respective offices/ organization				

Your Skills and Proficiency in Research

	Indicators	4	3	2	1
1	Selecting relevant and related research topic				
2	Formulating research title				
3	Writing the introduction and background f the study				
4	Describing the significance of the study				
5	Limiting the scope of the study				
6	Searching for reliable related literature				
7	Reviewing and summarizing the related literature				
8	Contextualizing appropriate framework				
9	Designing research paradigm				
10	Determining appropriate research design				
11	Sampling design and methodology				
12	Establishing validity and reliability				
13	Data collection and analysis				
14	Use of Statistics in the study				
15	Oral and written presentations				

Your Attitude about Research

	Indicators				
1	Spirit of Inquiry (Habit of asking and verifying information)				
2	Receptiveness to peer review				
3	Academic honesty and integrity				
4	Propriety/ Originality				
5	Productivity				
6	Sense of collaboration				
7	Willingness to be coached/ mentored				
8	Utilization of recommendation				

WRpprd2015

Sample Poster Presentation Format

Figure 1. Relationship between key variables

Effect of Science Learning Modules on Content Mastery and Conceptual Understanding of Grade 9 Students

Roly B. Bayo-Ang, Master Teacher II
BATASAN HILLS NATIONAL HIGH SCHOOL
DIVISION OF QUEZON CITY

ABSTRACT

This quasi-experimental action research study investigated the effect of science intervention modules in Filipino and in English on mastery of content (MOC) and conceptual understanding (CU) of forty nine Grade 9 students.

Analysis of content mastery scores showed significant difference in the mean scores of the control and experimental group, t (46) = -2.14, p<.05. The experimental group achieved an MPS of >75% in three of the five lessons while none in the control group. Analysis of the pretest and posttest scores of the control group in the test for conceptual understanding (TCU) showed no significant difference, t (18), =1.44, p>.05, while pretest and posttest scores of experimental group revealed significant difference, t (29) = -5.08,p<.05. Comparison of posttest scores of control and experimental group revealed no significant difference t (42) =1.67, p>.05. Performance in TCU and MOC of the control group are not significantly correlated, r (17) =.307, p>.05; but significantly correlated, r (27) =.571, p<.05, for the experimental group.

The intervention module in Filipino promotes conceptual understanding and mastery of content than module in English.

Statement of the Problem

This research study investigates whether a module written in Filipino is effective in promoting content mastery and conceptual understanding of Grade 9 students. It also determines the potential of the module as intervention materials to help learners with poor reading comprehension skills in English understand the concepts in chemical bonding.

Research Questions

1. Do students who are exposed to science module written in Filipino performed better than those who use the science module in English?
2. Do students understand the concepts better if they are written in Filipino than in English?
3. Is there a significant difference in the pretest and posttest scores of the experimental and control groups?
4. Are the pretest scores of the control and experimental group significantly correlated with their posttest scores?
5. Is there a relationship between content mastery and conceptual understanding?

Research Design

This research study made use of the randomized pretest-posstest control-group design. Students were randomly selected and assigned to the control and experimental groups. The control group used the science learning module on chemical bonding written in English while the experimental group used a learning module on the same topic written in Filipino. Figure 1 shows the design used in this study. The 'treatment' refers to the use of the science learning module written in Filipino.

Group 1 (Experimental)	O (Pretest)	*X* (Treatment-Filipino Module)	O' Posttest
Group 2 (Control)	O (Pretest)	(English Module)	O'Posttest

Figure 1. Research design

Hypothesis

Students who are exposed to science module written in Filipino perform better that those who use the science module written in English. There is a positive correlation between content mastery and conceptual understanding. The specific hypotheses are:

1. There is a significant difference in the pretest and posttest scores of the control group.
2. There is a significant difference in the pretest and posttest scores of the experimental group.
3. There is a significant difference in the pretest scores of the control and experimental group.
4. There is a significant difference in the posttest scores of the control and experimental group.
5. The pretest and posttest scores of the control group are correlated.
6. The pretest and posttest scores of the experimental group are correlated.

Conceptual Framework

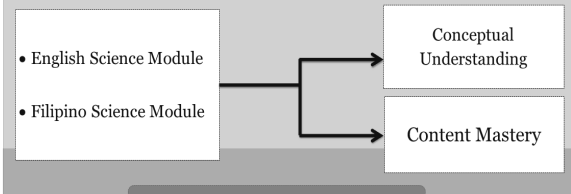


Figure 2. Relationship between key variables

Results

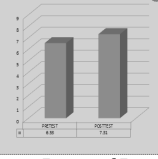


Figure 3. Pretest and Posttest Scores Control Group

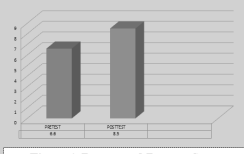


Figure 4. Pretest and Posttest Scores Experimental Group

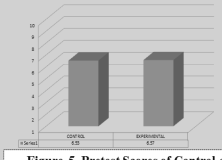


Figure 5. Pretest Scores of Control and Experimental Group

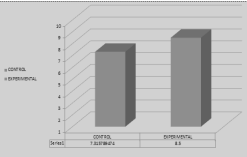


Figure 6 . Posttest Scores of Control and Experimental Group

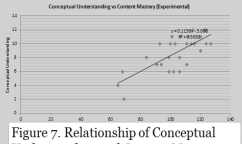


Figure 7. Relationship of Conceptual Understanding and Content Mastery (Experimental Group)

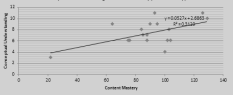


Figure 8. Relationship of Conceptual Understanding and Content Mastery (Experimental Group)

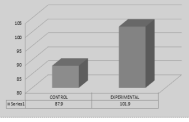


Figure 9. Mean Score of Control and Experimental Groups in Five Lessons

CONCLUSION

Students exposed to science learning module written in Filipino performed better than those who used the module in English. They achieved a higher level of mastery of the contents. In terms of conceptual understanding, exposure to the module in Filipino resulted to improved performance in the test for conceptual understanding. Pretest and posttest scores are positively correlated and mastery of contents is significantly correlated with conceptual understanding.

RECOMMENDATION

This is the most opportune time to focus our attention in producing science learning materials written in Filipino. Our efforts should concentrate in the development and validation of instructional materials in our own language rather than in English.

It is recognized that this study merits further research. Hence, the following recommendations are forwarded. A large sample size should be used next time to increase the generalizability of the results. And, future research should investigate how science learning modules written in Filipino promote conceptual understanding.

Department of Education
NATIONAL CAPITAL REGION
Misamis St., Bago Bantay, Quezon City
ncrdeped.wordpress.com

kdz