



The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers of Gumaca, Quezon and Its Implication to the Implementation of K-to-12 Curriculum

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***The Level of Teaching Effectiveness of Grade Seven Mathematics
Teachers of Gumaca, Quezon and Its Implication to the
Implementation of K-to-12 Curriculum***

A Seminar Paper
Presented to the College of Graduate Studies
and Teacher Education Research
Philippine Normal University
The National Center for Teacher Education

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Teaching Mathematics

JULIETA OMAÑA PORTADES

APPROVAL SHEET

This seminar paper entitled “*The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers of Gumaca, Quezon and Its Implication to the Implementation of the K-to-12 Curriculum*” prepared and submitted by **JULIETA O.PORTADES** in partial fulfillment of the requirements for the degree of **Master of Arts in Teaching Mathematics** is hereby recommended for approval and acceptance.

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DEDICATION

To my ever beloved and supportive mother,
to my generous sisters and brothers
and to my loving and caring husband,
who all gave me full support to finish my study.

To my kids,
Paulo Rae, Keith Gabriel, Jan Vincent, and Sophia Adelle

This humble fruit of labor is for you!

jop

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ABSTRACT

Name : Julieta O. Portades

Title : The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers of Gumaca, Quezon and Its Implication to the Implementation of K to 12 Curriculum

Key Concepts : Teaching Effectiveness

Degree : Master of Arts in Teaching

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This study appraised the teaching effectiveness of Grade Seven mathematics teachers in public secondary schools in the District of Gumaca, Quezon, SY 2013-2014. The appraisal focused on the teachers' behaviors in terms of mastery of subject matter, techniques on delivery system, classroom management and organization, and teacher-students rapport. Literature review was conducted with emphasis on those major areas believed to be significant to teachers' effectiveness. Each of the major areas that are relevant to the effectiveness of teachers was examined for key concepts that would strengthen the study.

The descriptive method of research was used with the questionnaire as the primary tool in gathering the needed data. The data gathered from the questionnaire

were subjected to the following statistical analyses: percentage, weighted mean, and Spearman Rank order and Correlation Coefficient.

The study came out with these significant findings: Majority of the teachers was of middle age, mostly female, married, and were bachelor's degree holder with masteral units. It was found out that most of the variables affected the effectiveness of the Grade Seven mathematics teachers in a less degree.

On the behaviors of teachers in the classroom frequently observed by the students and often observed by the administration, *methods and techniques of teaching used* got the highest weighted average mean of 3.72, followed by *teacher-students rapport*. *Mastery of the subject matter* got the lowest weighted average mean of 3.58.

The effectiveness ratings given by the administrators to the teachers using the revised Teachers Behavior Inventory (TBI) were consistent with their ratings in the Content-Based Performance Appraisal for Teachers (CB-PAST). However, the results of the Fourth Quarter Examination showed otherwise; the teachers were much less effective.

Overall, the effectiveness of the teachers in the four areas of teaching may result in the success of the implementation of the K-to-12 Curriculum. Effective teachers will produce holistically developed learners who have 21st century skills and are prepared for higher education, middle-level skills development, employment, and entrepreneurship. With these findings, a program of action was developed to enhance more the skills of the mathematics teachers.

A parallel study on the effectiveness of mathematics teachers in private schools is recommended to validate the high to very high ratings obtained using the revised Teachers Behavior Inventory (TBI). Likewise, a similar study to confirm the moderate correlation coefficient between the Teachers Behavior Inventory (TBI) ratings and the CB-PAST ratings may be done.

CHAPTER I

THE PROBLEM AND ITS BACKGROUND

INTRODUCTION

“Education is the key to the long-term problems of the country. If we fix basic education, we fix the long-term problems of the country. And if we fix the country’s problems, we will build a truly strong society we want to proudly call the Philippines.”

President Benigno Aquino III

Enhancing the quality of basic education in the Philippines is urgent and critical. It is the foundation for sustained economic growth. As educators of the Filipino youth, the future of our great nation, we have the moral duty to ensure that our youth are given quality education they deserve, the education that will make them truly productive in the future.

The poor quality of basic education is reflected in the low achievement scores of Filipino students in the National Achievement Test and international tests like the Trends in International Mathematics and Science Study (TIMSS). This goes to show that many students who finished basic education do not possess sufficient mastery of basic competencies.

Effective instruction could help improve achievement (Santrock, 2004). Teacher effectiveness impacts on students’ performance. Thus, it is on the teacher that the

greatest strength of education lies. But, time and again, through past and recent more surveys, teacher factor has always come out as the most serious problem in our system. Because of the complexity of teaching and individual variation among students, two ingredients are to be flexible: 1) professional knowledge and skills; and 2) commitment and motivation (Woolfolk, 2004).

In the study of Itniong (1998), four components of an effective teacher are characterized according to: 1) Personal Qualities; 2) Professional Qualities; 3) Social Qualities; and 4) Instructional Skills. The researcher is aware that all these qualities of a teacher are to be measured for major decisions about the future. These decisions have an impact on the quality of the teachers' professional life.

Teaching effectiveness may be assessed through various sources of evidences like student ratings, peer ratings, administrator ratings, and learning outcome measures. In this study, the level of effectiveness of the Grade Seven mathematics teachers were evaluated based on the ratings of the students and administrators using the questionnaire and the CB-PAST. The evaluation focused on the teachers' behavior, mastery of subject matter, methods and techniques used, classroom management and organization, and teacher-students relationship. Also, the study determined the relationship between the level of effectiveness of the Grade Seven mathematics teachers and the test results and CB-PAST.

It is hoped that this study further authenticate existing theories and generalizations on the subject.

Conceptual Framework

This section explains the concept of the researcher on how to measure the effectiveness of the Grade Seven Mathematics teachers based on the test results and the administrators' and students' ratings.

This concept is based on the ideas of Campbell (2004) and Mohanty (2004) . Campbell (2004) states that teacher effectiveness is the impact that classroom factors, such as teaching methods, teacher's expectations, classroom organization, and the use of classroom resources, have effects on students' performance. Like Campbell, Mohanty (2004) states that the teacher should be an expert and proficient in improving the classroom. He should develop and practice a good number of techniques and strategies of improving the classes .

Based on the above ideas, the researcher defined teaching effectiveness as an important evidence, summing up the overall performance or status of teachers handling Grade Seven students to come up with major decisions about the future of education. Below is the conceptual paradigm and the discussion of the relationship of variables to the implementation of of K to 12 curriculum

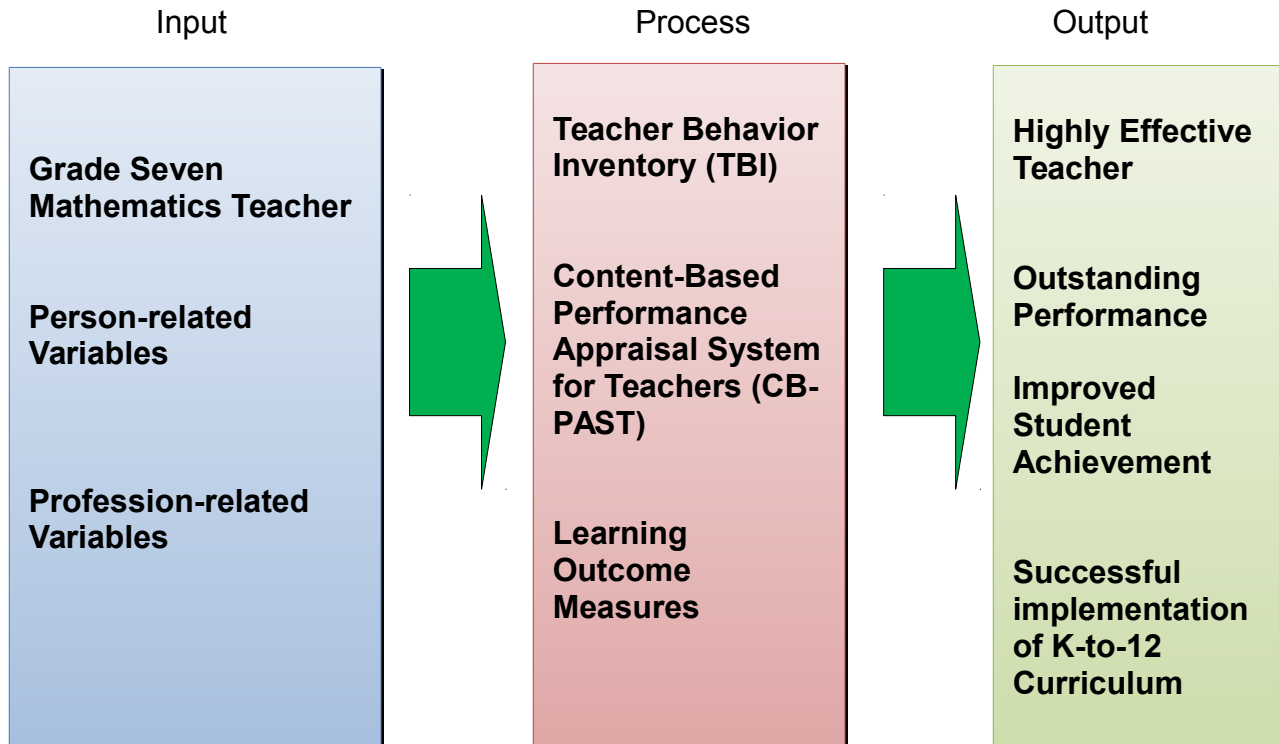


Figure 1. Conceptual Paradigm

In the input, Grade Seven mathematics teachers' personal- and professional-related variables are given emphasis. Personal variables consist of teachers' age, sex, and civil status while professional-related variables refer to the teachers' educational qualification, tenure of service, training and seminars attended, and recognitions received in the service.

The researcher believes that these two aspects of a teacher in different manners composed an ideal one. She focused on the behaviors and characteristics that should be organized to comprise the activities and instructions while in the field or during the

teaching-learning process. These must be the fundamental of teachers in setting goals smartly. In time, effectiveness would be measured.

In connection to the aforementioned ideas, all aspects of a teacher will be effective if he/she applies his/her instructional competence. They were measured through the revised Teachers' Behavior Inventory (TBI) by the school administrators and Grade Seven students. The TBI deals with the teachers' mastery of the subject matter, methods and techniques, classroom management as well as teacher-students relationship. The Learning Outcome Measure, specifically the average Mean Percentage Score (MPS) in the Fourth Quarterly Examination in Mathematics given to the Grade Seven students in the school year 2013-2014 gives evidence to how the mathematics teachers exerted effort in teaching.

Therefore, the expected output if done faithfully and effectively would produce a highly effective teacher who has an outstanding performance that will lead to the improvement of students' achievement and to the successful implementation of the K-to-12 Curriculum. Our youth will be ready to face the outside world and they will become globally competitive individuals. The spiral design of K to 12 curriculum will lead to mastery of skills needed by the students in the field of work. The basic skills that will help them are provided by a competent and effective teacher. It means that after the twelve years in school students are equipped with learning that will enable them to face more challenges in the future particularly in the field of work.

Statement of the Problem

This study aimed to determine the level of teaching effectiveness of Grade Seven Mathematics Teachers in Gumaca, Quezon and its implication to the implementation of K to 12 curriculum, school year 2013-2014, as assessed by school administrators and Grade Seven students. Specifically, this study shed light to the following questions:

1. What is the profile of the Grade Seven mathematics teachers in reference to:

A. Person-related Variables

1. sex
2. age
3. civil status

B. Profession-related Variables

1. educational qualification
2. tenure of service
3. in-service training/seminars attended
4. recognitions received in the teaching service ?

2. Is there a significant effect of some of the variables in the demographic profile on the teaching effectiveness of Grade Seven mathematics teachers?

3. How effective are the Grade Seven mathematics teachers as perceived by the respondents in terms of:

1. mastery of subject matter;
2. techniques of delivery system;
3. instructional management and organization; and

4. teacher-student rapport?

4. Is there a significant difference between the administrators' and students' ratings regarding Grade Seven mathematics teachers' teaching effectiveness reflected in the revised Teachers Behavior Inventory (TBI)?

5. Is there a significant difference between the administrators' ratings in TBI and in the Content-Based Performance Appraisal System (CB-PAST)?

6. What is the extent of relationship between the student-respondents' ratings in TBI and their average Mean Percentage Score (MPS) in the Fourth Quarter examination, SY 2013-2014?

Significance of the Study

Because the Department of Education, particularly the Division of Quezon, faced low performance/achievement of students for the past few years and wanted to raise that performance, they tried several strategies to solve the problem. Administrators observed the teaching styles of their respective teachers. A rigid monitoring of teacher effectiveness and series of training and seminars were made. Yet, the Mean Percentage Score (MPS) in Mathematics is still below the passing grade. For this reason, it is essential that school administrators, particularly those involved in recommending, hiring as well as in the promotion of teachers, be guided by some defensible criteria which relate to the characteristics and behaviors of teachers found to have positive effects on the students. Thus, whatever available and useful information

that may be gathered about the effectiveness of Mathematics teachers would be of help.

It is hoped that this study will contribute to the definition and formulation of such criteria which could be used in the recruitment of teachers, supervision of instruction, and evaluation of this particular group of teachers as members of the overall educational organization.

This study expects to discover the strengths and weaknesses of mathematics teachers and motivate them to improve their teaching effectiveness and overall performance.

The results of this study can help school administrators appraise training needs of mathematics teachers and plan and implement in-service training programs.

Lastly, it is hoped that this study will provide significant information to prospective teachers and teacher training institutions on which aspect or aspects of pre-service training they should concentrate or put more weight on.

On a personal note, the researcher, a classroom teacher for 19 years and attended several training, seminars, and workshops in mathematics, believes that this study would help her learn more about the qualities of a highly effective teacher. She aspires to be a master teacher, so this study would equip her with skills to meet the challenges of being a master teacher not in the mold of the many so-called classroom teacher of the past and present but of the teacher of this millennium and the future.

Scope and Delimitation of the Study

This study was delimited to the town of Gumaca, Quezon which comprised 59 barangays on the southeastern part of the province and has six public secondary schools. It only covered the Grade Seven mathematics teachers in the public secondary schools.

Moreover, performance in terms of teaching effectiveness of the concerned teachers during the school year 2013-2014 was the focus of the study, and the respondents were the school administrators, students, and Grade Seven mathematics teachers.

Definition of Terms

With a regard to better understanding of the aspects of the present study, the following terms are defined:

Teaching effectiveness involves the quality of behavior shown by the teacher with respect to mastery of subject matter, methods and techniques of teaching used, classroom management and organization, and teacher-students relationship insofar as they affect the learning process as perceived by the teacher's school administrators and students as well as reflected in students' achievement in the standardized tests.

Mathematics is one subject that pervades life at any age, in any circumstances. It is one of the core subjects in secondary education.

K-to-12 Curriculum refers to the new curriculum implemented by the Department of Education that 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]).

Grade Seven students refer to the students who are entering high school level.

Person-related variables refer to variables which are directly related to the teacher as a person: age, sex, civil status, and family income.

Profession-related variables are variables that are directly related to the position of a mathematics teacher. In this study, highest educational attainment, major, civil service eligibility, status of appointment, length of years in teaching, in-service training/seminars attended, and awards received in the teaching service were considered.

Teacher characteristics refer to the teacher qualities and attributes or variables traditionally related to teaching, directly or indirectly. In this study, teacher characteristics include person-related variables such as age, civil status, and family income as well as the profession-related variables in terms of status of appointment, highest educational attainment, civil service eligibility, length of teaching experience, and awards received in the teaching service.

Teacher behavior describes the complex but organized set of behavior variables that interact and combine to comprise the activities of teachers while in the act of teaching. In this study, teacher behavior refers to specific and observable act of teacher while orchestrating the learning process as reflected in the revised Teacher Behavior Inventory (TBI).

Teacher Behavior Inventory (TBI) is the instrument used to measure the degree of teaching effectiveness of teachers in terms of four dimensions or factors such as mastery of subject matter, methods and technique of delivery, classroom management and organization and student rapport. A revised TBI has to be employed in this study to reflect latest findings from research on teaching effectiveness and to make it more applicable to the Grade Seven of Mathematics Education.

Mastery of subject matter, as used in this study, refers to the dimension of teaching effectiveness reflecting expert knowledge of the subject taught by the teacher. It means that the teacher has a grasp or control of the cognitive organizations of the subject matter he/she is trying to teach as demonstrated by such behaviors as fluent, smooth, and clear explanation, expert handling or answering of students' questions, confidence, organization/structuring of content, among others.

Instructional management and organization describes the cluster of teaching behaviors that focus on the students' conduct or behavior inside the classroom during the teaching-learning period. Some behaviors in this category include securing student attentiveness, provision and clarification of direction for classroom procedure and/or routines, classroom time management, consistent and fair application of rules, and others.

Teacher-student rapport pertains to teacher acts that promote students achievement through effective behaviors. Behaviors included in this category are expressing positive, pleasant, optimistic attitudes and feelings; requesting rather than

commanding, encouraging slow and shy students, demonstrating positive non-verbal (body) communication, showing warmth and affection, use of praises, etc.

Student rating refers to the rating given by the students to their teachers in order to assess the teaching effectiveness.

Grade Seven mathematics teachers are the secondary school teachers who are holders of Bachelor of Science in Education teaching Grade Seven mathematics.

School administrators are the principal, teachers-in-charge, and the department heads of Mathematics who are directly responsible for the supervision of instruction in mathematics.

Teacher performance refers to the behavior of the teacher while teaching a class. The performance of teachers, as used in this study, pertains to the overall performance of the Grade Seven mathematics teachers as reflected in the Content-Based Performance Appraisal System for Teachers (CB-PAST) form used by the Department of Education.

CB-PAST- Content-Based Performance Appraisal System for Teachers, an instrument used by the administrators to assess their teachers.

Cooperative Learning is one of the strategies used in mathematics that enable students with different abilities and interests to work together in small groups and to learn from one another

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents the reviewed related literature and studies, both local and foreign, which the researcher believed were significant to this study.

Related Literature

“Without good teachers, even best systems is bound to fail. With good teachers even defects of a system can be largely overcome.” S. Gupta and J.C. Aggarwal (2007)

To make this study a comprehensive one, the above statement became the guiding principle of the researcher in searching for related literature and studies about the qualities of an effective teacher and their relationships to student performance.

Ornstein (2004) analyzed some 42 correlational studies as they often quoted review of process-product research. According to them, there were 11 processes (behaviors or variables) strongly and consistently related to student products (outcomes or student achievement). The first five teacher processes which showed the strongest correlation to positive outcomes are, to wit:

1. Clarity of teacher's presentation and ability to organized classroom activities;
2. Variability of media, materials, and activities used by the teacher;
3. Enthusiasm, defined in terms of teacher's movement, voice inflection;

4. Task orientation or businesslike teacher's behavior, structured routines, and an academic focus; and

5. Student opportunity to learn, that is the teacher's coverage of the material or content in class on which students are later tested.

According to Sergiovanni and Starratt (2000) , the six characteristics of teachers who are successful in teaching to national discipline-based standards are the following:

1. The use of integrative units particularly in organizing the curriculum around larger themes;

2. The use of small group activities like helping students work collaboratively;

3. The capacity to help the students represent the ideas in order to learn by using Venn diagram and other representations to help students explore ideas;

4. The use of classroom workshops in organizing time to ensure that students have some one-on-one time with teacher to explore ideas;

5. The use of authentic ideas by providing opportunities for students to think in "real-world" terms about classroom concepts; and

6. The use of reflective assessment in finding ways for students to show that they have learned and to reflect on its quality.

Based on the analysis of the 49 process-product studies, Gage (1978) identified four clusters of behaviors that show a strong relationship to student outcomes. First, teacher indirectness, the willingness to accept students' ideas and feelings, and the ability to provide a healthy emotional climate; second, teacher praise, support and encouragement, use of humor to release tensions (but not in the expense of others),

and attention to students' needs; third, teacher acceptance, clarifying building, and developing students' ideas; and last, teacher criticism, reprimanding students, and justifying authority. It was found out that the relationship between the last cluster and

outcome was negative - when criticism occurred, students' achievement was low (Ornstein, 2004).

Furthermore, there were six identified teaching functions based on the research on effective instruction of Rosenshine (Santrock, 2004):

1. Review and check the previous day's work;
2. Present new material;
3. Provide guided practice;
4. Give feedback and correctives based on student answers;
5. Provide independent practice; and
6. Review weekly and monthly to consolidate learning.

These six functions are not steps to be followed in a particular order, but all of them are elements of effective instruction that could help improve achievement.

Because of the complexity of teaching and individual variation among students, effective teaching is not like the "one-size-fits-all" sock (Diaz, 1997). The teacher must master a variety of perspective and strategies, and be flexible in their application. This requires two key ingredients: (1) professional knowledge and skills; and (2) commitment and motivation (Woolfolk, 2004).

Professional Knowledge and Skills. Effective teachers have good command of their subject matter and a solid core of teaching skills. They have excellent instructional strategies supported by methods of goal setting, instructional planning, and classroom management.

Commitment and Motivation. Being an effective teacher also requires commitment and motivation. This includes having a good attitude and caring about students. In a National survey of almost a thousand students 13 to 17 years of age, having a good sense of humor, making the class interesting, and teacher's knowledge of subject matter were the characteristics students listed as the most important for teachers to have.

Everston and Emmer Model state that teacher effectiveness is associated with specific teaching principles and methods. It also stressed the need of organization and management of instructional activities.

According to Campbell (2004), Teacher effectiveness is the impact that classroom factors, such as teaching methods, teacher's expectations, classroom organization, and the use of classroom resources, have on students' performance.

The Education Commission, 1964-1966, in the opening sentence of its report rightly says, *"The destiny of India is being shaped in her classrooms."* In fact, classrooms are the places where the future citizens of the country are trained, educated, and enabled to meet the new challenges and to face the changing situations in their life. Classrooms are the pupils where the pupils get knowledge, develop

understanding and insight, acquire new skills and interests, and form their attitude and values. Improving the classroom is an important function of the teacher. It is one of his/her major responsibilities. It is a pre-condition for his/her performance.

An effective teacher is not only the master of his/her subject but also the master of his/her classroom situations (Mohanty (2004). He mentioned that a teacher knows how to manage the class for effective teaching and learning of students. Adequate skills for organizing the classroom activities in a planned and disciplined manner should be practiced by a teacher.

Mohanty (2004) also added that the teacher should be an expert and proficient in improving the classroom. He should develop and practice a good number of techniques and strategies of improving the classes. A technique found effective in one situation may not be effective in another situation to the same extent.

Some strategies and techniques generally used by effective teachers are the following: (a) Knowledge about Him/Herself; (b) Knowledge about the students; (c) Class Control; (d) Class Discipline; (e) Mastery of Subject Matter; (f) Suitable Methods of Teaching; (g) Teacher Attention; (h) Classroom Interaction; and (i) Inter-Human Relation.

It is rightly said that *“ordinary teachers speak, average teachers explain, good teachers demonstrate, and outstanding teachers inspire.”* Teachers to be effective should not merely be the source of knowledge; they ought to be the source of inspiration and motivation to the young people in realizing their potentialities and achieving the objective of education.

In one study of the qualities and the qualifications of excellent teachers, school administrators and supervisors were asked to give reasons why they thought some teachers were outstanding. The majority of them agreed that an excellent teacher “is a person who: 1) has those personal qualities of agreeableness, consideration for others, sincerity, and the like, which, all will agree, make one a desirable associate; 2) is professionally interested and competent; 3) has, among other qualities, scholarship and culture; and 4) respects children and is respected by children and establishes wholesome pupil-teacher relationship.

Mehl and her associates (2004) ranked the personal traits that make a successful teaching.

1. Magnetism: approachability, cheerfulness, optimism, humor, sociability, pleasing voice
2. cooperation and helpfulness
3. Leadership, initiative, self-confidence
4. Self-control: calmness, dignity, poise, reserve
5. Breadth of interest
6. Good disposition: appreciativeness, courtesy, tact, sympathy, kindness, consideration.

Shipley and associates (1964) gave the idea that personality has an incalculable impact on the pupils. It is within the teacher’s power to inspire her pupils, to encourage and to challenge them, to implant a sense of responsibility and perseverance, and to develop their imagination.

Thus, a teacher should have a developed Emotional Stability and Sound Mental Health, Physical Health and Dynamic personality, Above-average Intelligence, Creativity, Imagination and Resourcefulness, Good Grooming, Poise and Refinement in Voice and Action, Patience, Sincerity and Honesty, Firmness, Promptness, Efficiency

and Ability to Organize, Positive and Encouraging Attitude, Democratic Leadership, and Professional Status.

Enduring insights on the foundations of good relationships are provided by the work of Rogers (1961, 1969, 1980) on counseling. He suggests that three basic qualities are required if a warm, 'person-centered' relationship is to be established – acceptance, genuineness, and empathy. If we apply this to teaching, it might suggest that acceptance involves acknowledging and receiving children as they are: genuineness that such acceptance is real and heart-felt; whilst empathy suggests that a teacher is able to appreciate what classroom events feel like to children.

Rogers introduced the challenging idea of providing “unconditional positive regard” for his clients, and perhaps this can also provide an ideal for what teachers should offer children. Good relationships are, according to Rogers, founded on understanding and on “giving”.

Teaching can only be regarded as successful if the learners are learning. Generally speaking, for this to be achieved, the learners have to be motivated and achieved a sense of self- fulfillment through their classroom activities. They have to be

involved in the process of learning, and they have to appreciate that the effort which is required of them is worthwhile.

Pollard's study (2005) showed that children like teachers who are kind, consistent, efficient at organizing and teaching, patient, fair, and have a sense of humor. They dislike teachers who are domineering, boring, unkind, unpredictable, and unfair.

A recent report on secondary education in England shows steady improvements in both

the quality of education and the standards achieved by pupils. Improvements in teaching have gone hand in hand with rising standards in pupils' attainment at all levels of education, including improvements in those aspects of schooling less easily measured. An evaluation of the KS3 Strategy identified many important features of good teaching across several subjects.

These features include: clear lesson objectives; the use of variety of activities in a lesson or over several lessons, each with a clear purpose; the greater involvement of pupils in their own learning, such as small-group collaborative activities, interactive teacher-class engagement, pupils explaining strategies to the rest of the class, use of white boards by pupils to display responses; the importance of pacing lessons to ensure, e.g. that an end-of-lesson review of learning took place.

A mark of effective teaching (Capel, 2004) is a lesson that provides motivation and interest to the pupils through a choice of activities leading to better learning. Teachers need to review the evidence for learning by asking themselves questions such as:

- What assessment strategies do I have in place?
- Are assessment strategies built into my lesson plan?
- Have I shared the assessment findings with my pupils?
- Does the information from my assessment feed into planning future lesson?

In the context of science education in Australian schools, Rickards and Fisher (1996) found that students' achievement and attitude to class were significantly and positively correlated with teachers' classroom leadership as defined in the Questionnaire on Teachers' Interaction. Similarly, in the UK context, the Hay McBer

Report (2000) on teaching effectiveness in schools identified the following three factors that significantly influenced pupil progress: teaching skills, professional characteristics, and classroom climate (Pounder, 2006).

Furthermore, some of the earliest research on effective teaching focused on the personal qualities of the teacher themselves (Medley, 1979). Results revealed about three teacher characteristics: knowledge, clarity, and warmth.

Teachers Knowledge - Teachers who know more facts about their subject do not necessarily have students who learn more, but teachers who know more may make clearer presentations and recognize students' difficulties more readily.

Clarity and Organization - Teachers who provide clear presentation and explanation tend to have students who learn more and who rate their teachers more positively.

Warmth and Enthusiasm - Some studies found that ratings of teachers' enthusiasm for their subject are correlated with student attitudes. Warmth, friendliness,

and understanding seem to be the teacher traits most strongly related to student attitude (Santrock, 2007).

Teacher effectiveness, as defined by Campbell (2004), is the impact that classroom factors, such as teaching methods, teacher expectations, classroom organization, and use of classroom resources, have on students' performance. It is acknowledged that teaching effectiveness is a highly dynamic, complex, and multi-dimensional concept.

Five basic aspects on teaching effectiveness reviewed by Ornstein (2004) were teacher style, teacher interactions, teacher characteristics, teacher competencies, and teacher effects. It is in these aspects of teaching that the art of teaching becomes evident - knowledge alone does not make one effective; effectiveness comes in how that knowledge is used. So, he also identified the characteristics of effective teachers as desirable on the basis of correlational or experimental evidence of their relationship with desirable outcomes or aspects of teaching: warmth, cognitive, organization, orderliness, indirectness, and ability to solve instructional problems.

Support for specific aspects related to teaching effectiveness of a teacher can be found in reviewing research on teacher effectiveness. Mohanty (2004) says that the quality of learning depends on the quality of teaching which, in turn, depends on the quality of teachers. The quality of teachers is dependent on their qualification and personality in a great measure, that is the qualities of *head*, *heart*, and *hand* (3 Hs) determine the effectiveness of teaching.

Everston and Emmer Model is similar to the Good and Brophy model. They presented the models as similar in three ways: (1) teacher effectiveness is associated with specific teaching principles and methods; (2) organization and management of instructional activities are stressed; (3) findings and conclusions are based heavily on process-product studies.

Ryans (1969) went on to develop a bipolar list of 18 teacher characteristics. He defined those characteristics in detail and further grouped into three “patterns”. The three patterns related to effectiveness identified are:

1. *Pattern X*: understanding, friendly, and responsive; 2. *Pattern Y*: responsible, businesslike, and systematic; 3. *Pattern Z*: stimulating, imaginative, and original.

A similar but more recent list of teacher characteristics was compiled by Tuckman (1995). The 30 characteristics cluster into four teachers’ dimensions similar to Ryan’s patterns: 1. Creative; 2. Dynamic; 3. Organized; and 4. Warm (Ornstein & Lasley, 2004).

Characteristics of exemplary teachers as described by the participants in a study made by Greg Kearsley(1996) are the following: He or she must be a very knowledgeable and enthusiastic about their subject matter; have charisma, good presentation skills, and good sense of humor; be able to get students engaged/excited about the subject taught; presentable material so that it can be understood easily; be student-centered and “tuned in” to students’ concerns; adopt different roles (expert, counselor, facilitator, moderator, etc).

On teaching strategies/techniques, Kearsley (1996), believed that the more general ones include: asking a lot of questions to get students involved in class discussion and engaged in the content (start with easy ones to get things started). Having students do assignments or projects to be discussed in class particularly in groups or teams was important too. Experimenting with different methods to find ones that work for you and the particular students you are teaching and telling stories relevant to the content to make the class more interesting are of great help. Conveying the idea of cooperation rather than competition to foster creativity in student work would be a good technique or strategy to achieve high level of performance.

Stronge (2002) in his article “Qualities of Effective Teachers”, the positive and negative behaviors exhibited by teachers determine, to a great extent, their effectiveness in the classroom and, ultimately, the impact they have on student achievement. Several specific characteristics of teacher responsibilities and behaviors that contribute directly to effective teaching are listed for each of the following categories:

- The teacher as a person
- Classroom management and organization
- Organizing and orienting for instruction
- Implementing instruction
- Monitoring student progress and potential
- Professionalism

Partly, in assessing teaching effectiveness, participants in the study were very concerned about monitoring their teaching techniques. They relied heavily on student evaluation and course critiques to assess how well they were doing. Accordingly, participants said they consider student performance on class assignments and projects to be a measure of their own effectiveness. The study mentioned also that if students have problems with their work, they take this as an indication of their own failure teaching the material. Thus, one of the clear-cut results of this study is that while there were a number of commonalities across the participants, there were many different ways to be an exemplary teacher. Some teachers were outstanding because of extensive preparation of their classes; others were popular with students because of their charisma or entertaining personalities, but almost all teachers exhibited the following critical characteristics:

- Deep knowledge and enthusiasm for the subject matter being taught;
- Genuine concern for students and their interests/problems;
- Major efforts to get students engaged in content and class participation;
- Well-defined expectations for what is to be learned in their classes; and
- A strong desire to teach and excel at it.

Besides these core characteristics, outstanding teachers added their own *idiosyncratic* personality and teaching strategies/techniques to make their classes worthwhile and enjoyable to students.

Based on the Educational Leadership of Intrator (2004), the teachers who successfully held the attention of students used a variety of approaches and techniques.

Generally, they practiced anti-boredom pedagogy and were relentlessly attuned to the attention-escape of their classroom. When attention waned, they intervened. For them, manipulative classroom pace feeds the need to create, share their personal presence, know students as people, connect content to teen questionings, and Hearts and Minds were approaches applied.

Arcos (2006) cites in his article that teachers' methods may vary as widely as their characters, but perhaps we can point out some general principles to make their teaching more effective. First, whatever you are teaching, make it clear, Second, have a lot of patience. Third, have responsibility.

Haberman (2004), in his article "*Can Star Teachers Create Learning Communities?*", enumerates some attributes of Star Teachers (teachers who are so effective) that set them apart: their persistence, their physical and emotional stamina, their caring relationships with students, their commitment to acknowledging and appreciating student effort, their willingness to admit mistakes, their focus on deep learning, their commitment to inclusion and their organization skills. They also protect student learning, translate theory and research into practice, cope with the bureaucracy, create student ownership, engage parents and caregivers as partners in student learning, and support accountability for at-risk students.

Haberman summarized the undergirding attribution of the common ideology of star teachers such as: tend to be nonjudgmental; not moralistic; respond as professionals and are not easily shocked; do not see themselves as saviors; do not

work in isolation; view themselves as successful professionals rescuing students; derive energy and well-being from their interactions with students; see themselves as teachers of children as well as of content; are learners; have no need for power; recognize the imperative of student success.

Rickards and Fisher (1996), in their article entitled "*Transformational Classroom Leadership*", examined the effect of students' perceptions of interpersonal teacher behavior on student achievement and attitude to class, and they found out that students' achievement and attitude to class were significantly and positively correlated with teachers' classroom leadership. Teachers' helpful/friendly and understanding behaviors were also positively correlated with students' attitude and achievement (Pounder, 2006).

Honheras (2006) cites that effective interpersonal skills are prerequisite for becoming an effective teacher. The quality of the personal interactions in the classroom can be seen as a measure of the climate of the classroom. The teacher is the key person in determining the quality of the personal interactions that shapes the climate of the classroom. Positive relationship is an important part of classroom management. Some of the suggestions are the following:

1. Be fair to all students;
2. Be consistent;
3. Have a sense of humor;
4. Respect students;
5. Share feelings;
6. Don't take negative behavior personally; and

7. Listen.

Disimulacion (2007) evidently gave the realms of research published on the teacher. The greatest amount concerns teacher characteristics important for successful teaching such as resourcefulness, intelligence, emotional stability, consideration, buoyancy, objectivity, drive, dominance, attractiveness, refinement, and reliability.

The author cited the 11 categories on teachers' competencies recommended by Medley, Coker and Sow (1980), namely task-oriented, enthusiasm and interest, direct instruction, pacing, feedback, management, questioning, instructional time, variability, structuring, and opportunity to learn criterion material.

Arellano (2006) states that handling classroom management effectively is the teacher's contribution to the learners. Good classroom management and practices contribute most to better teaching-learning and to the improvement of classroom instruction. Teacher should be aware of the three aspects of classroom management - physical conditions, systematic procedures, and pupils behavior.

The effectiveness of class management can be judged by the effectiveness of the teaching-learning process done by the teacher. Thus, the effectiveness of this process depends on the efficiency and competency with which it has been organized and the quantity and quality of learning that has taken place in the learners.

Borich (1996) gives a summary of teacher factors that may be necessary to attain high achievement gains in classrooms in two different social settings, those low socio-economic status and middle/high socio-economic status. He supported that

effective practices within low-socio-economic status contexts involve the teacher behaviors of generating a warm and supportive affect by letting children know help is available; getting a response, any response, before moving on to the next bit of material; presenting material in small bits, with a chance to practice before moving on; showing how bits fit together before moving on; emphasizing knowledge and applications before abstraction, putting the concrete first; giving immediate help; the use of individually differentiated material; and the use of the experiences of pupils. In a middle socio-economic status context, Borich summarizes the teacher behaviors of requiring extended reasoning; posing questions that require associations and generalizations; giving difficult material; the use of projects that require independent judgment, discovery, problem-solving, and the use of original information; encouraging learners to take responsibility for their own learning; and very rich verbalizing.

Leblanc (1998), in his article which appeared in *The Teaching Professor* after Professor Leblanc won a Seymour Schulich Award for Teaching Excellence, identified the top ten requirements in good teaching.

One. Good teaching is as much about passion as it is about reason.

Two. Good teaching is about substance and treating students as consumers of knowledge.

Three. Good teaching is about listening, questioning, being responsive, and remembering that each student and class is different.

Four. Good teaching is about not always having a fixed agenda and being rigid but being flexible, fluid, experimenting, and having the confidence to react and adjust to changing circumstances.

Five. Good teaching is also about style.

Six. This is very important -- good teaching is about humor.

Seven. Good teaching is about caring, nurturing, and developing minds and talents. It's about devoting time, often invisible, to every student.

Eight. Good teaching is supported by strong and visionary leadership, and very tangible institutional support -- resources, personnel, and funds.

Nine. Good teaching is about mentoring between senior and junior faculty, teamwork, and being recognized and promoted by one's peers.

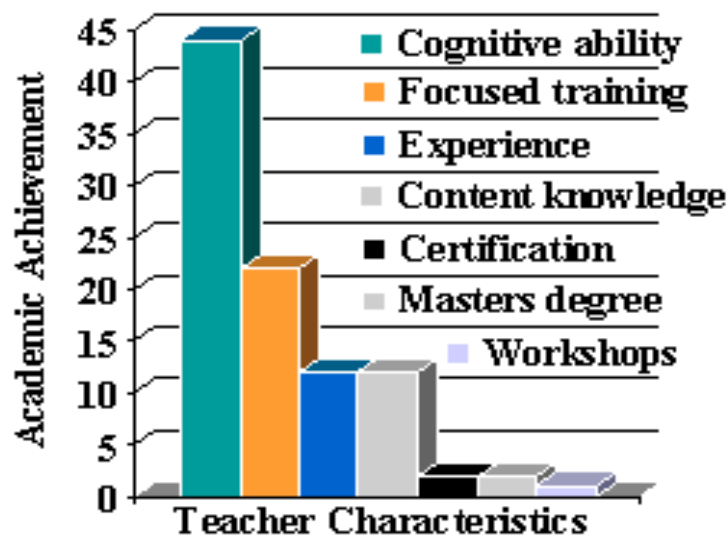
Ten. At the end of the day, good teaching is about having fun, experiencing pleasure and intrinsic rewards ... like locking eyes with a student in the back row and seeing the synapses and neurons connecting thoughts being formed, the person becoming better, and a smile cracking across a face as learning all of a sudden happens.

Nolasco (2006) cites in his article the 10 suggested ways by Schimmels (1975) on how to become effective professional teachers. They are as follows:

1. Good Teachers read and hand back homework assignment.
2. Good Teachers give worthwhile assignments.
3. Good teachers stay in the classroom.
4. Good teachers decorate their rooms.

5. Good teachers are organized.
6. Good teachers communicate with parents.
7. Good teachers do not lose control of themselves.
8. Good teachers do not lose control of the classroom.
9. Good teachers give students a sense that the material is important.
10. Good teachers do not abuse their right to academic freedom.

Try to study the summary of the effects of teacher characteristics on student achievement presented by the Institutes of Education Science in New Jersey, U.S.A. The figure attempts to summarize the relative strength of each of the dimensions of teacher quality reviewed.



Another study related to this was made by Kingdon (2007). She tried to uncover the teacher characteristics and teaching practices that matter most to pupil achievement. Her findings show that teaching `process` variables matter significantly to student achievement. She also recommended that improving weak teaching may be one of the most effective means of raising pupil achievement. However, teachers' classroom practices and the teaching `process` may matter more to student learning than teachers'` observed resume characteristics (such as certification and experience).

Another study related to the teaching effectiveness was made by Berk (2006). He critically reviewed 12 potential sources of evidence to measure teaching effectiveness, and these are: (1) student rating, (2) peer ratings, (3) self- evaluation, (4) videos, (5) student interviews, (6) alumni ratings, (7) employer ratings, (8) administrator ratings, (9) teaching scholarship, (10) teaching awards, (11) learning outcome measures, and (12)

teaching portfolios. These various sources of evidence for teaching effectiveness may be employed for either formative or summative decisions or both.

To be an effective teacher, according to Antiquina (2006), one must be intellectually qualified, have a good sense of humor, show love for children, set example of clean, simple, and honest living as worthy models for the learners and the community, perform duties thoroughly and earnestly, and demonstrate a high sense of responsibility.

Another study that revealed the importance of teachers' attitude was made by Quilang (2008), entitled *"Personalogical, Characteristics, Attitudes, Beliefs and Practice*

of Instruction of Teachers from H & L Elementary Schools in the Division of City Schools, Manila: A Comparison", found out that the attitude of teachers toward mathematics has significant effects on the performance of the students.

Rasay (2001). on her findings with regard to attitude, traits, and ethics, the respondents agreed on the statement that says quality teachers are punctual and regular in attendance. On physical and mental ability, quality teachers have mastery of subject matter to be taught. On planning, the respondents

avored that quality teachers see to it that their lesson plan is flexible enough to achieve learning and set goals which are specific and easy to realize. With regards to the procedure in executing the lesson, the respondents believed that quality teachers should know how to ask questions that arouse pupils' interest to think, answer, and participate in the learning situation. Her study also pointed out the importance of modern technology like computer, video, etc. to facilitate learning.

Timbreza (2006), in her study entitled "*The Effect of Using Geometric Board on the Achievement and Attitudes of the Students toward Mathematics*", stressed that the primary tool of being effective is his/her unique and individual self. It is important for the teachers to have positive unique helping attitudes towards their students.

Soler (2006), in her study entitled "*Factors Related to Mathematics Performance of the First Year Student*", identified the multifaceted role of teachers and what makes them effective. She enumerated that the academic preparation is the first requirement, and aside from knowing the content, a teacher should also have the right attitudes, character, and commitment to serve because teaching is basically service-oriented.

Rabonza (1994), in her study, states that it is through teaching by the results that lasts which a learner actually utilizes on the various situations he/she encounters in his/her life. These results of teaching may be affected by the personal and professional qualities of teachers which are inspiring on the personality of the learner, shape his/her mental development, affect his/her thinking, and influence his/her actions. The development of students as persons may likewise be influenced by the teacher aptitude and teachers' relating behavior.

Cuevas (2006) stated in her findings that the teacher variables that are significantly related to the academic achievement are: number of children, number of training/seminar attended; and length of service and membership in professional organization.

Villanueva (1997), in her study, reported that academic achievement was slightly and significantly correlated with teacher's creativity; light-positive, very slight significant correlations with teachers' emotional stability. This was the reason why she recommended that the evaluation of teacher performance should always be done in the spirit of sincerity, honesty, objectivity, and fairness. She also concluded that teachers believed that the competence and evaluative measures were part of their task that should not be taken for granted.

Madrid (1999), in her study, concluded that some factors related to the academic achievement of the pupils were teachers' instructional instrument and evaluative instruments administered and environment. She recommended that the teacher should continually improve and employ a variety of teaching methods/strategies and

techniques that help pupil master their lessons. They should always be present and punctual in their classes. She also added that effectiveness can be achieved by always motivating and arousing the interest of children and giving the best periods.

Velena (1989) stated that learning is facilitated in an atmosphere where there is less teacher domination and talk, instead there is more faith that people can find solutions satisfying to themselves. The teacher helps the learners to discover the personal meaning of ideas and events for them. She also revealed that the greatest effect perceived by the pupil is the teacher's ability to explain the lesson well, and the factor that ranked the least is the checking of test papers and homework. In her study, she also found out that teachers failed to attend summer and Saturday classes because of no offered subjects.

Calabazaron (2000), in her validation of teacher effectiveness Inventory, gave way to nine components, namely:

- Teaching learning skills
- Personal management
- Knowledge of the subject matter
- Classroom management
- Remedial/guidance skills
- Relation with parents and significant others
- Curriculum development skills
- Action research development skills

- Awareness of current issues

Itiniong (1998), in her study, identified four components of teachers characteristics. These are: (a) Personal Qualities; (b) Professional Qualities; (c) Social Qualities; and (d) Instructional Skills. She also found out that the teachers' classroom characteristics, behaviors, attitudes, beliefs, and other forms of verbal and non-verbal expressions served as stimuli in the learning process. She also gave emphasis on Dr. Jose Rizal's statement about the essential requisites for good teaching..... "the ideal teacher should be professionally trained, should be able to pass the required examination, should be a master of the subject matter he/she is going to teach, continue to grow and love his/her profession, should be kind and sympathetic to the pupils and should possess initiative and resourcefulness (Aquino, et al. 1976:319).

The literature also states that most of the behavior research has shown that teacher behaviors, as well as specific teaching principles and methods, make difference in students achievement. King (2003) stated in her article that good teachers produce good students. A teacher's most important task is contributing to and enhancing the learning and achievements of his/her students.

Friensen (2009) provides five core principles of Effective Teaching Practices:

1. Effective teaching practice begins with the thoughtful and intentional design of learning that engages students intellectually and academically.
2. The work that students are asked to undertake is worthy of their time and attention, is personally relevant, and deeply connected to the world in which they live.

3. Assessment practices are clearly focused on improving student learning and guiding teaching decisions and actions.
4. Teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning.
5. Teachers improve their practice in the company of peers.

Surrounding these five core principles and infused into each of them is the effective use of the technologies of our time for both teaching and learning.

McGraw (1984) in her article published in <http://www.eduguide.org> “What Qualities Make a Good Teacher in K-12 Grades?” stated the following:

1. Good Teachers Help Students Achieve Dreams. Good teachers need a special, strong-as-steel constitution for this job that demands much and offers no real chance for advancement and pays less well than other professions. They need fortitude,

persistence, and patience to keep them motivated when political interests rule in their school, parents and administrators criticize and demand, kids disrespect them and paperwork abounds. Good teachers are caring, empathetic people whose work is

respected by good supervisors, their peers, sincere parents, and students alike. They may not have the highest G.P.A. from the most impressive college, but they work hard and gear their teaching to getting their message through to most of their students, most of the time. Good teachers have a sense of humor and the patience of Job. They

contact parents, sometimes at night, and return phone calls promptly. They are willing to try new ideas, no matter who suggests them (even parents and students).

2. Good Teachers Cater to All Learning Types. They make the time to sit down with a frustrated student and carefully explain the solution to a difficult math problem and stay after school to allow kids to do make-up work. They love their subject and want their students to love it, too. Good teachers are mentors who "stand on their heads" to discover ways to get kids to feel good about themselves and about learning. They try many approaches, including meaningful group tasks, that help slower students gain self-esteem and quicker students learn leadership skills and reinforce concepts. They are positive and flexible.
3. Good Teachers Administer Positive Discipline in Schools. They establish classroom rules and see that they are enforced consistently with everyone. They never humiliate a child in front of his/her peers but address his/her problems privately, with respect and dignity for the child. They are fair and objective and don't hold grudges. They never intimidate or control or make meaningless threats. They have a smile and a hug available for any kid who really needs nurturing because they value the individual more than they value the subject matter. They sit in their rooms with the door open at the end of a long day. These are the teachers that shine. There are many of them in

every school district in America, and responsible parents owe it to their children to find them and then to make sure their children are taught by the real pros. Remember, *your* child's future is your *primary* concern.

In the 16th Congress of the Senate of the Philippines, press release dated January 11, 2012, Senator Edgardo J. Angara urged the Department of Education (DepEd) to improve its programs aimed at enhancing the teaching and professional competencies of teachers to ensure the successful implementation of the K-to-12 basic education curriculum (BEC) plan.

"The DepEd surely has to act decisively on the chronic shortages it faces in terms of classrooms, seats, books, and even hygiene facilities. Yet, it must also focus on scaling up its teacher training programs to meet the imminent demands of the proposed curriculum," stressed Angara. "Not only will we need more qualified teachers, we will need to make sure our current teachers continue to improve as well."

He continued, "We ought to find novel ways for widening the scope of our teacher training programs, such as through high-speed ICT connectivity and social media where teachers in far-flung areas can collaborate with their counterparts in major cities or even with other educators in the world's top institutions. This is something we should not lose track of while we undertake a comprehensive revamp of our educational system."

Preparing teachers for the 21st century requires a close look at what it means to teach and learn in increasingly networked, technology-rich, digital classrooms. Schools and teachers need to thoughtfully and intentionally design learning environments and tasks in which teachers can explore issues that are relevant and develop pedagogies that are effective for a knowledge era. They need to develop new images and acquire new expertise to design and facilitate meaningful learning with technology. Given this shift in our world and the new research from the learning sciences, one can see the complexity that teachers face in working with learners in the 21st century. Based on a selective examination of the research literature, this paper presents a set of principles and strategies about effective teaching and learning in light of these new conditions.

SREB Goals for Education (2002) states that “ *Each student needs a quality teacher. That means someone who knows how to teach — and can show it. It also means someone who knows the subject matter well — and can prove it. Most of all, it means someone who is successful in raising student achievement.*”

The K-to-12 curriculum requires teachers knowledge in the application of modern technology, particularly the internet. Online instruction is one way to apply what the students know in computer. The teacher uses online resources effectively to deliver instruction.

Online instruction often is called “anytime, anyplace” instruction. Students have access to Web-based courses every day of the week and every hour of the day. This flexibility requires teachers as well as students to have excellent time-management

skills. Online teachers need to respond to students' questions and provide them with feedback on their work in a timely manner.

Online teachers in SREB states reported that they know their online students better than they knew their students in traditional classrooms. High-quality online

teachers know that they constantly must be in touch with their students to ensure the students' success. While many traditional classrooms emphasize teachers' and students' physical presence, online instruction emphasizes active participation by frequent interaction among teachers and students.

To sum up the above mentioned researches and studies teacher effectiveness lie into four components of characteristics illustrated by Itniong (1998) such as: (1) personal qualities, (2) professional qualities, (3) social qualities, and (4) instructional skills. Teachers qualities were proven measurable and that it could be a basis to discover the strength and weaknesses of a teacher and when discovered, the need for appraisal and improvement is held with them. In Although the related studies and researches focused on the qualities of a teacher in general, this qualities involve in the assessing the level of teaching effectiveness of grade seven Mathematics Teachers so that appropriate action by the authorities will be done to ensure the successful implementation of K to 12 curriculum.

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents some theories and models on which the current study is anchored, and the methods and techniques employed by the researcher to gather data and information necessary for the development of the study. Specifically, this includes the theoretical framework, research design, research locale, population and sample, data gathering instrument, data gathering procedures, and statistical treatment of data.

The Research Design

In assessing the level of effectiveness of Grade Seven mathematics teachers teaching Grade Seven students in the selected public secondary schools in Gumaca, Quezon, the descriptive-correlational method was used. The researcher chose this method for this study primarily because of its usefulness to gather important data concerning the existing person-related and profession-related variables affecting the effectiveness of mathematics teachers. This research method was also employed to determine the extent of relationships between students' rating of teaching effectiveness and the Mathematics Average Mean Percentage Score in the Fourth Quarterly Examination as well as between administrators' ratings and the CB-PAST performance ratings of the teacher-respondents. Significance of relationships of the variables

involved were examined and described in terms of values of the correlation coefficients obtained.

Descriptions were made about the profile of Grade Seven mathematics teachers in so far as they affect their teaching effectiveness. Perceptions of the school administrators and students were described in terms of the degree of teaching effectiveness as measured by the instrument used.

The Research Environment

The research environment for this study was the selected public secondary schools in Gumaca, Quezon. This municipality is located at the Southern part of Quezon facing the Lamon Bay with a total land area of 189.6 km² divided into 59 barangays.

Only the barangays with formal secondary education were the focused of the study.

Population and Sample

The population covered in this study consisted of the 11 mathematics teachers teaching Grade Seven, six school heads, and 344 students of the public secondary schools of Gumaca, Quezon during the school year 2013-2014. The sampled schools were chosen by purposive sampling method. Simple random sampling method was utilized in selecting the respondents.

Instrumentation

To evaluate the degree of teaching effectiveness of the Grade Seven mathematics teachers, the researcher carefully modified a Teacher Behavior Inventory (TBI) based on the MECORS rating scale and the QAIT rating scale found in the book of Muijs et al. (2001). Also, ideas expounded by the different authors were used in modifying the TBI but they were reworded or rephrased. Current terms used in teaching Mathematics were likewise included. Thus, the questionnaire was a combination of modified and original items purposely designed to elicit the needed data.

The researcher also consulted knowledgeable people about the content of the instrument. Some revisions were made based on their suggestions which were written in simply-worded items that can easily be understood by the student-respondents in this study.

The first part of the Teachers Behavior Inventory (TBI) deals with the criterion mastery of the subject matter. It consists 15 items. The second part contains another 15 items pertaining to the techniques of delivery system. Ten (10) criteria about instructional management and organization are the content of part three, and another 10 criteria on teacher-students rapport are listed in the last part of the questionnaire. The researcher also prepared a Teacher's Data Questionnaire (TDQ) that dealt with the profile of the teacher-respondents. It contains some of the basic variables like

gender, age, civil status, educational qualification, length of teaching experience, and recognitions received in the teaching services needed to determine the relationship of person and profession factors to the achievement of the students.

To establish the validity of the questionnaire, a pilot test was conducted. The instrument was administered to selected Grade Seven students and mathematics teachers in the Gumaca National High School. These students were not the actual participants of the study. The mean ratings obtained were computed, converted into ranks, and subsequently correlated with the ranking made by the department head of the same teachers based on their classroom observation.

The computed rank-order correlation coefficient using Spearman Rho formula between the students' ranking and that of the administrators indicated moderate concurrent validity for the instrument.

From the first administration of the revised TBI, the same students randomly selected for one teacher were retested about two weeks after to determine the reliability of the instrument. Using Pearson's product-moment formula, the correlation coefficient indicated a fairly high reliability for the modified Teachers Behavior Inventory.

The Content-Based Performance Appraisal System for Teachers (CB-PAST) was also used by the researcher. The CB-PAST is the widely used instrument of the administrators in rating their subordinates. The ratings were examined for the relationship to the respondents' teaching effectiveness.

The average Mean Percentage Score in the Fourth Quarterly Examination of the student-respondents were likewise examined and used by the researcher to support

the ratings obtained by the teachers on the TBI given by the school administrators and students.

Administration of the Instrument

Data Processing Procedures

After obtaining the necessary papers to conduct the study, gathering of pertinent data ensued personally done by the researcher. Each school head, teacher, and student-respondents were asked to fill out the questionnaire.

To avoid possible problems in interpretation of the teachers' behavior listed in TBI, the researcher personally administered the questionnaire to the student-respondents in the schools. In some schools, the researcher had to translate the statements into the vernacular for better understanding.

Statistical Treatment of Data

Statistical measures used in this study were the mean, standard deviation (s), and Pearson's product-moment correlation coefficient.

1. The profile of the teacher-respondents in terms of personal-related variables (gender, age, and civil status) and professional-related variables (educational qualification, tenure of service, length of service, training/seminar attended, and awards received in the service) were computed in percentage as:

$$P = \frac{X}{N} \times 100 \%$$

N

Where:

P=Percentage
N= Number of subject respondents, and
X= Frequency

The mean scores or ratings for each category of teaching effectiveness measured by the revised TBI were computed for each teacher-respondent and were converted to weighted mean ratings to arrive at the total weighted mean rating which determined the degree of teaching effectiveness of the mathematics teachers teaching Grade Seven in terms of mastery of subject matter, techniques of delivery system, instructional management and organization, and teacher-students rapport. Weighted frequencies 5, 4, 3, 2, and 1 were designated. The following formula was applied:

$$W m = \frac{\sum fw}{N} \times 100\%$$

Where:

Wm = weighted mean

$\sum fw$ =summation of the weighted frequency

f = frequency for each part

N = sample population

Weights assigned to each category are:

5 - consistently observed (CO)

4 - frequently observed (FO)

3 - often observed (OO)

2 - occasionally observed (OcO)

1- rarely observed (RO)

The Spearman Rank-Order Correlation was used to compare the ratings given by the students and administrators on the level of effectiveness of the teacher-respondents.

$$\rho = 1 - \frac{6\sum d^2}{N(N^2-1)}$$

Where:

ρ - Spearman rank-order correlation

$\sum d^2$ – sum of the squared deviation of the two rankings

N - Number of Respondents

Interpretations of computed means are as follows:

.80 – above - high correlation

.60 -.79 - moderate high correlation

.40 -.59 - moderate correlation

.30 -.39 - low correlation

.29 – below - negligible correlation

CHAPTER IV

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter deals with the results of data gathered, and analyses of individual and collective responses provided by the six school heads, 11 Grade Seven mathematics teachers, and 344 Grade Seven students of Gumaca, Quezon on the level of teaching effectiveness of Grade Seven mathematics teachers and its implication to the implementation of the K-to-12 Curriculum. Quantitative and qualitative descriptions were used to analyze and interpret the data of the study.

The first part presented the profile of the Grade Seven mathematics teachers and their person-related variables like age, gender, and civil status. Likewise, their profession-related variables such as educational qualification, area of specialization, present rank, tenure of service, in-service training/seminar attended, and recognitions received in the teaching service were also described. They were shown in Graphs1 to 4.

The second part presented the theories of the different authors concerning the significant effect of the variables in the demographic profile on the teaching effectiveness of Grade Seven mathematics teachers.

The third part showed the level of teaching effectiveness of Grade Seven teachers teaching Grade Seven Mathematics as evaluated by the students and school administrators relative to the mastery of the subject matter and was presented in Table 1 while the level of teaching effectiveness in terms of techniques and delivery system used was presented in Table 2. Table 3 reveals the responses of the respondents on

the effectiveness of the teachers in instructional management and organization, and Table 4 showed the perceptions of the students and administrators on the teacher-students rapport.

The fourth part presented the significant difference between the administrators' and students' ratings regarding the teachers' teaching effectiveness as gathered through the revised Teachers Behavior Inventory (TBI). The significant difference between the administrators' ratings in the TBI and in the Competency-Based Performance Appraisal System (CB PAST) was also included in this part. They were presented in Table 5, 6, 7, 8, and 9.

Table 1

Distribution of Grade Seven Mathematics Teacher-respondent by Gender

Gender	Frequency (f)	Percentage (P)
Male	2	18.18%
Female	9	81.82%
Total	11	100%

Table 1 shows that most of the teachers (9 or 81.82%) teaching Grade Seven Mathematics in Gumaca, Quezon were female. Only two respondents (or 18.18%) were male.

Table 2

Distribution of Grade Seven Mathematics Teacher-respondents by Age

Age	Frequency (f)	Percentage (P)
20-25	2	18.18
26-30	0	0
31-35	1	9.09
36-40	1	9.09
41-45	5	45.45
46-50	1	9.09
51-55	0	0
56-60	0	0
60-up	1	9.09
Total	11	100.00

It can be gleaned in Table 2 that the highest percentage (5 or 45.45%) of the Grade Seven mathematics teachers had ages of 41-45 years. Two (2) or 18.18% of the respondents were 20-25 years old while one (1) or 9.09% of the respondents was noted for each of the age brackets 31-35, 36-40, 46-50, and 60 above. There was no respondent aged 51-55 and 56-60.

Table 3

Distribution of Grade Seven Mathematics Teacher-respondents by Civil Status

Civil status	Frequency (f)	Percentage (P)
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Single	2	18.18
Married	7	63.64
Widow	1	9.09
Annulled/ Legally Separated	1	9.09
Total	11	100.00

Table 3 shows that seven (7) out of 11 or 63.64% of the teachers teaching Grade Seven Mathematics in the selected secondary schools in Gumaca, Quezon were married. Two or 18.18% were single, one or 9.09% was separated, and another one, widowed.

The findings described above seem to reinforce the suggestion that the teaching profession is female-dominated (Chung et al., 2004) as men who, according to Kremer-Hayton and Golstein (1990), attach greater importance to their career than women have rejected a teaching career because of its low status. Moreover, the findings strengthen the determinist idea that women are always bound to be caring and nurturing and that men are naturally aggressive. As emphasized by Leblanc (1998), caring, nurturing, and developing minds and talents are some of the top ten requirements of good teaching. Thus, it can be inferred that majority of the teacher-respondents have enough experience on how to deal with the young ones because they have child/children themselves to take care of. Married persons are caring and nurturing (Leblanc (1998,).

Table 4

Distribution of Grade Seven Mathematics Teacher-Respondents by Educational Qualification

Educational attainment	Frequency (f)	Percentage (P)
Ph. D. / Ed. D.	0	0.00
CARDE	0	0.00
M.A. with Doctoral Units	0	0.00

Master of Arts	0	0.00
CARMA	1	9.09
BS with M. A. Units	7	63.64
BSE	3	27.27
Total	11	100.00

In Table 4, it can be seen that a big majority (7 or 63.64%) of the teachers had M.A. units. Three or 27.27% were bachelor degree holders while one or 9.09% completed the academic requirements for master's degree. There were no respondents with a master's or doctorate degree. These data seem to show that the teacher-respondents are lacking in terms of educational qualification.

Table 5

Distribution of Grade Seven Mathematics Teacher-respondents According to Rank

Present rank	Frequency (f)	Percentage (P)
Teacher I	5	45.45
Teacher II	0	00.00
Teacher III	6	54.55
Master Teacher I	0	0.00
Master Teacher II	0	0.00
Master Teacher III	0	0.00
Total	11	100.00

It can be seen in Table 5 that majority of the teachers (6 or 54.55%) had a rank of Teacher III, followed by respondents with a rank of Teacher I (5 or 45.45%). As the educational qualification of the teacher-respondents are not that high (Table 4), so is their present rank.

Table 6

Distribution of Grade Seven Mathematics Teacher-respondents according to Length of Service in Teaching

Length of years in teaching	Frequency (f)	Percentage (P)
01-05	3	27.27
06-10	1	9.09
11-15	1	9.09
16-20	4	36.36
21-25	1	9.09
26-30	1	9.09
Total	11	100.00

It is

clearly posted in Table 6 that four (36.36%) of the teacher-respondents had 16-20 years of teaching, and three (27.27%) had 1-5 years of teaching. The rest were distributed to the other categories, with one (9.09%) respondent for each category.

Table 7

Distribution of the Grade Seven Mathematics Teacher-respondents according to Recognitions received related to Teaching

RECOGNITION/ AWARDS RECEIVED	FREQUENCY	PERCENTAGE
Outstanding Teacher	0	0.00
Most Efficient Teacher	1	9.09
Winning Coach/Trainor	5	45.45
GSP Awardee	1	9.09
None	4	36.36
Total	11	100.00

As reflected in Table 7, as far as recognitions or award is concerned, five or 45.45% of the respondents were winning coach/trainor awardees while four or 36.36% of the teacher-respondents received no awards. One or 6.67% was awarded as the most efficient teacher, and another one as GSP awardee. Not one of the teacher-respondents was recognized as an outstanding teacher.

Table 8

Distribution of Grade Seven Mathematics Teacher-respondents according In-service training/seminars attended related to teaching

In-service training attended	Frequency (f)	Percentage (P)
District Level	101	45.50
Division Level	82	36.94
Regional Level	32	14.41
National Level	7	3.15
Total	222	100.00

Table 8 shows in-service training attended by the Grade Seven mathematics teachers. The highest number (101 or 45.50%) of the respondents attended training in the district level while 82 or 36.94%, division level. Only seven or 3.15% of them were able to attend training in the national level.

Table 9

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Mastery of Subject Matter

STATEMENTS	STUDENTS								ADMINISTRATOR					
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)
	5	4	3	2	1				5	4	3	2	1	
1. Sets learning goals clearly for the learners	174	97	59	11	3	4.24	FO	1	1	4	1	0	0	4.00
2. Explains subject matter clearly	162	104	49	22	7	4.14	FO	2	0	4	2	0	0	3.67
3. Reviews and checks the previous day's work	136	131	54	15	8	4.08	FO	3	0	2	3	1	0	3.17
4. Develops the lesson in a logical manner	136	114	64	22	8	4.01	FO	5	0	2	3	1	0	3.17
5. Explains the lesson without reading his/her notes	135	112	63	19	15	3.97	FO	7	2	2	2	0	0	4.00
Cites current or relevant information related to the subject matter	108	124	74	32	6	3.86	FO	12	0	1	5	0	0	3.17
7. Emphasizes key points of the lesson	110	132	70	24	8	3.91	FO	9	0	3	3	0	0	3.50
Effectively explains cause- effect relationship	106	119	75	27	17	3.78	FO	15	0	1	3	2	0	2.83
9. Uses textbook only as reference	107	122	71	28	16	3.80	FO	14	0	0	1	5	0	2.17
10. Provides opportunities for free expression of ideas	145	112	55	25	7	4.06	FO	4	0	4	2	0	0	3.67
11. Reads explanations from the book or from his/her notes	126	117	62	27	12	3.92	FO	8	0	0	1	4	1	2.00
12. Presents information in appropriate sequence	115	110	80	25	14	3.83	FO	13	0	4	1	1	0	3.50
13. Organizes content to enable students to arrive at conclusion or generalization	121	113	71	24	15	3.88	FO	11	0	3	3	0	0	3.50
14. Presents information at a rate appropriate to the students' ability to comprehend it	125	125	66	23	5	3.99	FO	6	0	1	3	2	0	2.83
15. Determines the points in the curriculum where enrichment has to be made	122	116	71	21	14	3.90	FO	10	0	0	4	2	0	2.67
AVERAGE WEIGHTED MEAN						3.96	FO		AVERAGE WEIGHTED MEAN					3.19

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean:

4.50 – 5.00 - Consistently Observed (CO)

2.50 – 3.49 - Often Observed (OO)

3.50 – 4.49 - Frequently Observed (FO)

1.50 – 2.49- Occasionally Observed (Oco)

1.00 –

1.49- Rarely Observed (RO)

Table 9 displays the ratings given by the student- and administrator-respondents on the Grade Seven mathematics teachers' level of effectiveness in terms of mastery of the subject matter.

The behaviors that were rated by the students as frequently observed (FO) confirm what Arcos(2006), said. He stated that “whatever you are teaching, make it clear. Make it clear to the people you are teaching. You must think not what you know, not what you find hard, but what you will find hard. You must explain what students need to learn and make sure they understand your words.”

On the administrator-respondents' assessment of the teaching effectiveness of Grade 7 mathematics teachers in terms of mastery of subject matter, the average weighted mean obtained was 3.19, interpreted as often observed (OO).

Among the items, the top three were: *sets learning goals clearly for the learners* and *explains the lesson without reading his/her notes* (weighted mean = 4.00); *explains subject matter clearly* and *provides opportunities for free expression of ideas* (weighted mean = 3.67); *emphasizes key points of the lesson, presents information in appropriate sequence* and *organizes content to enable students to arrive at conclusion or generalization* (weighted mean = 3.50) On the other end, the three items with lowest

rating were: *reads explanations from the book or form his/her notes* (Wm= 2.00); *uses textbook only as reference* (Wm= 2.17); and *determines the points in the curriculum where enrichment has to be made* (Wm= 2.67). Overall, similar to the students' assessment of the teachers' level of effectiveness in terms of mastery of the subject matter, the administrators also rated the teachers positively.

Table 10

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Delivery System Used

STATEMENTS	STUDENTS								ADMINISTRATOR						
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)	
	5	4	3	2	1				5	4	3	2	1		
1. Clearly states objectives/purposes of the lesson	179	100	39	15	11	4.22	FO	2	1	5	0	0	0	4.17	
2. Makes the best use of prime time at the beginning of the lesson	131	128	59	19	7	4.04	FO	6	0	3	3	0	0	3.50	
3. Shows a relation of the subject matter to real life or actual situation	116	113	72	28	15	3.83	FO	12	1	2	2	1	0	3.50	
4. Encourages students to learn by doing things with other	140	106	66	23	9	4.00	FO	7	1	2	3	0	0	3.67	
5. Asks questions that call for higher- order-thinking skills (HOTS)	109	133	64	28	10	3.88	FO	10	0	4	2	0	0	3.67	
6. Modifies instructional activities to accommodates learner needs	133	118	62	18	13	3.99	FO	8.5	0	4	2	0	0	3.67	
7. Communicates within the level of the students understanding	155	110	48	20	11	4.10	FO	5	5	1	0	0	0	4.83	
8. Integrates the application of Information and communication technologies (ICT) where appropriate	114	125	64	28	13	3.87	FO	11	0	0	3	3	0	2.50	
9. Employs non-traditional assessment techniques like portfolio, journals, rubrics , etc.	168	98	54	11	13	4.15	FO	3	1	1	3	1	0	3.33	
10. Gives assignment with clear instructions	187	101	41	11	4	4.33	FO	1	2	3	1	0	0	4.17	
11. Directions are incomplete and vague	91	100	77	42	34	3.50	FO	15	0	0	0	3	3	1.50	
12. Unable to foresee and resolve potential difficulties	97	126	82	21	18	3.76	FO	13	0	0	3	3	0	2.50	
13. Selects and utilizes appropriate instructional materials	125	120	73	22	4	3.99	FO	8.5	0	2	4	0	0	3.33	
14. Presents information clearly and simple	163	101	50	17	13	4.12	FO	4	2	4	0	0	0	4.33	
15. Uses interactive and collaborative approach (Round Robin, Corners, Think-Pair-Share, Jigsaw, Coop, etc..)	95	122	73	38	16	3.70	FO	14	0	2	4	0	0	3.33	
AVERAGE WEIGHTED MEAN						3.97	FO		AVERAGE WEIGHTED MEAN					3.47	

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean:

4.50 – 5.00 - Consistently Observed (CO) 2.50 – 3.49 - Often Observed (OO)

3.50 – 4.49 -Frequently Observed (FO) 1.50 – 2.49- Occasionally Observed (OcO) 1.00 –

1.49- Rarely Observed (RO)

Table 10 shows the ratings given by the student- and administrator-respondents on the Grade Seven mathematics teachers' level of effectiveness in terms of techniques on delivery system used.

The student-respondents rated their teachers highly. All behaviors were rated by the students as frequently observed (FO). *Giving assignment with clear instruction* obtained a weighted mean of 4.33 and ranked 1st. It was followed by *clearly stating objectives/purposes of the lesson*, with a weighted mean of 4.22 while *employing non-traditional assessment techniques like portfolio, journals, rubrics, etc.* got a weighted mean of 4.15 and ranked third.

On the other hand, items which got the lowest ratings were: *unable to foresee and resolve potential difficulties* (weighted mean = 3.76); *uses interactive and collaborative approach (Round Robin, Corners, Think-Pair Share, Jigsaw, Cooperative Learning, etc.)* (weighted mean = 3.70); and *directions are incomplete and vague* (weighted mean = 3.50).

As for the administrator-respondents, they perceived that the teachers were effective in terms of methods and techniques of delivery, as evidenced by a weighted mean of 3.47, interpreted as the behaviors listed being often observed (OO).

Among the behavior/items, *communicates within the level of the students' understanding* got the first rank with a weighted mean of 4.83. *Presents information clearly and simple* ranked second with a weighted mean of 4.33 while *clearly states objectives/purposes of the lesson* and *gives assignment with clear instructions* ranked 3.5th, both with a weighted mean of 4.17.

On the other end, items which were last in the ranking were: *integrates the application of information and communication technologies (ICT) where appropriate* and *unable to foresee and resolve potential difficulties* (weighted mean = 2.50); and *directions are incomplete and vague* (weighted mean = 1.50).

These findings reveal that current trends in teaching Grade Seven mathematics like use of information and communication technologies, use of collaborative and interactive approaches, and use of portfolio, journals, and rubrics in assessment were not consistently observed to be done by the teachers as assessed by the two groups of respondents. It is sad to know that some of the teacher-respondents do not realize the importance of these techniques. According to the *Educator*, a professional magazine for teachers, majority of the teachers do not perform well on the use of different modern technologies that are designed to facilitate students' learning, test their skills, and minimize teachers' work.

Table 11

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Classroom Management and Organization

STATEMENTS	STUDENTS								ADMINISTRATOR						
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)	
	5	4	3	2	1				5	4	3	2	1		
1. Monitors the whole classroom	188	89	37	13	17	4.22	FO	1	2	3	1	0	0	4.17	
2. Starts a lesson on time	158	102	61	16	7	4.13	FO	2	0	2	4	0	0	3.33	
3. Apply rules always and fairly	139	118	59	21	7	4.05	FO	3.5	0	4	2	0	0	3.67	
4. Keeps students on- task	155	87	58	31	13	3.99	FO	5	1	4	1	0	0	4.00	
5. Criticizes students who give incorrect answers	121	111	57	29	26	3.79	FO	9.5	0	0	0	2	4	1.33	
6. Specifies expectations for class behavior	138	110	61	18	17	3.97	FO	6	0	0	3	3	0	2.50	
7. Organizes and plans classroom procedure well	147	106	64	15	12	4.05	FO	3.5	0	1	5	0	0	3.17	
8. Sets realistic expectation in line with student abilities and behaviors	131	115	55	32	11	3.94	FO	7	0	3	3	0	0	3.50	
9. Reinforces desirable behavior thru appropriate ways	116	113	84	21	10	3.88	FO	8	0	3	3	0	0	3.50	
10. Displays students' work in the classroom	138	80	66	37	23	3.79	FO	9.5	0	2	4	0	0	3.33	
AVERAGE WEIGHTED MEAN						3.98	FO		AVERAGE WEIGHTED MEAN					3.25	

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean:

4.50 – 5.00 - Consistently Observed (CO)

2.50 – 3.49 - Often Observed (OO)

3.50 – 4.49 -Frequently Observed (FO)

1.50 – 2.49- Occasionally Observed (OcO) 1.00 –

1.49- Rarely Observed (RO)

As can be gleaned in Table 11, students' ratings on the teachers' effectiveness on classroom management and organization were high, with an average weighted mean of 3.98. On the other hand, the administrators rated this aspect as effective, with an average weighted mean of 3.25.

For the students, the following were the top three items: *monitors the whole classroom* (weighted mean = 4.22); *starts a lesson on time* (weighted mean = 4.13); and *apply rules always and fairly and organizes and plans classroom procedure well* (weighted mean = 4.05). The items which ranked last was *criticizes students who give incorrect answer* and *displays students' work in the classroom* (weighted mean = 3.79).

As for the administrators, they also rated the teachers positively. As posted in Table 11, most of the behaviors were often observed with an average weighted mean of 3.25.

The administrators frequently observed (FO) that their teachers *monitor the whole classroom*. Said behavior ranked first in the list, with a weighted mean of 4.17.

Ranking second was the item, *keep students on-task* second, with a weighted mean of 4.00 while *applies rules always and fairly* ranked third, with a weighted mean of 3.67.

Moreover, the administrator-respondents rarely observed that teachers criticized students who give incorrect answers (weighted mean = 1.33).

Table 12

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Teacher-students Rapport

STATEMENTS	STUDENTS								ADMINISTRATOR					
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					W m
	5	4	3	2	1				5	4	3	2	1	
1. Conveys genuine concern for student	176	104	43	11	10	4.24	FO	2	2	3	1	0	0	4.17
2. Knows and uses student names	189	92	34	17	12	4.25	FO	1	5	1	0	0	0	4.83
3. Guides students through errors	171	85	52	23	13	4.10	FO	4	0	5	1	0	0	3.83
4. Commends effort and gives praise for work well done	139	125	48	25	7	4.06	FO	5	0	5	1	0	0	3.83
5. Gives opportunities to students to participate in decision making	141	111	63	19	10	4.03	FO	7	0	0	0	6	0	2.00
6. Develops students confidence and self-esteem	139	117	59	22	7	4.04	FO	6	0	0	1	5	0	2.17
7. Helps pupils with personal as well as educational problems	136	114	58	24	12	3.98	FO	8	0	0	1	5	0	2.17
8. Establishes an environment of courtesy and respect	164	99	52	20	9	4.13	FO	3	0	0	1	5	0	2.17
9. Calls low achievers less often	103	130	70	23	18	3.81	FO	10	0	0	3	3	0	2.50
10. Express warmth and affection toward the students	136	102	65	27	14	3.93	FO	9	2	4	0	0	0	4.33
AVERAGE WEIGHTED MEAN						4.06	FO		AVERAGE WEIGHTED MEAN					3.20

Legend: (Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean
4.50 – 5.00
3.50 – 4.49 -Frequently Observed (FO)

- Consistently Observed (CO) 2.50 – 3.49 - Often Observed (OO)
1.50 – 2.49- Occasionally Observed (OcO) 1.00 – 1.49- Rarely Observed (RO)

Table 12 shows the perceptions of the students and administrators on the teachers' level of effectiveness in terms of teacher-students rapport. The teacher-respondents were perceived by students as highly effective, as evidenced by an average weighted mean of 4.06 interpreted as frequently observed (FO). The administrators likewise perceived the teachers to be effective. The average weighted mean derived from the administrators' ratings was 3.20, interpreted as often observed (OO).

Knows and uses student names is said to be a teacher behavior frequently observed (FO) by the student-respondents, with weighted mean of 4.25 and ranked first. According to Arellano (2006), *“teacher should call their pupils by their first names. The children appreciate the teachers who call their names, the greater grows their feeling of worth and importance.”*

Conveys genuine concern for students got a weighted mean of 4.24 and ranked second. This clearly show that the teachers know how important this behavior is in developing the attitude of the students.

Gupta (2007) said, “*Love the child and the child will love you; hate the child and the child will hate you*” is a famous maxim. One who does not like children should not stay in teaching. A good teacher feels that some sort of energy is constantly supplied by the young.”

Establish an environment of courtesy and respect ranked third which was rated as frequently observe (FO) with a weighted mean 4.13. Gupta (2007) agreed that a child should not be treated like a dumb, driven cattle. His/Her soul which is purely and

very sensitive requires our most delicate care. He/She has his/her own individuality. His/Her sense of respect should not be injured. Emerson (1988) also states that “*the secret of education lies in respecting the pupils*”. A child wants to be heard, and his/her opinion should not be brushed aside merely because he/she is a child.

Ranking high in the administrators’ assessment were the following items: *knows and uses student names* (weighted mean = 4.83); *expresses warmth and affection toward the students* weighted mean = 4.33); and *conveys genuine concern for students* (weighted mean = 4.17). *Gives opportunities to students to participate in decision making* was last in the ranking, with a weighted mean of 2.00.

In summary, the level of teaching effectiveness of Grade Seven mathematics teachers in terms of mastery of subject matter, according to the student-respondents, is highly effective, with an average weighted mean of 3.96 while from the administrator-

respondents' assessment, an average weighted mean of 3.19 was derived, interpreted as effective (Table 9).

For the teachers' level of teaching effectiveness in terms of methods and techniques of delivery, the average weighted mean derived from the students' ratings is 3.97 (highly effective) while for the administrators, 3.47 (effective) (Table 10). This shows that the two groups of raters rated the teachers' techniques of delivery used consistent to the way they rated the teachers' mastery of subject matter. In fact, on the other two components, that is, classroom management and organization, and teacher-students rapport, the two groups of raters were also consistent, with student-respondents giving higher ratings than the administrator-respondents. To illustrate, on

classroom management and organization, the average weighted mean obtained from the students' ratings was 3.98 while from the administrators, 3.25. On teacher-students rapport, the average weighted means of 4.06 and 3.20 were derived from students' and administrators' assessment, respectively.

To determine the significant difference between the administrators' and students' assessment regarding the Grade Seven mathematics Teachers teaching effectiveness using the revised Teachers Behavior Inventory (TBI), the Spearman Rho Correlation was applied.

Table 13 (see appendix L) shows the rank of each item under Mastery of Subject Matter rated by the student- and administrator-respondents.

Based on the results using the Spearman Rho Correlation, the rankings of items between the students' and administrators' ratings were moderately correlated with computed $\rho=0.50$. However, the difference between the rankings given by the two

groups of respondents is statistically not significant since the computed ρ is greater than the critical value 0.4821 at 0.05 level of significance.

Table 14 (see appendix M) shows the computed Spearman Rho coefficient of 0.72, which is greater than the critical value at 0.05 level of significance (0.4821), the difference between the rankings given by the administrator and student–respondents is statistically not significant.

As shown in Table 15, (see appendix N) the ranking of items on teachers' classroom management and organization as assessed by the student-respondents had significant difference with that of the administer-respondents. The rankings moderately correlated, though; hence, its computed $\rho = 0.48$ is less than the critical value 0.576.

Table 16 (see appendix O) reveals that the computed rho correlation is 0.46, which is interpreted as moderately correlated. It means that some of the rankings given by the student– respondents had significant difference with those of the administrator–respondents. With the computed $\rho = 0.46$ compared to the critical value at 0.05 level of significance, 0.576, a significant difference is arrived at.

Table 17 (see appendix P) shows that the computed Rho Correlation of -0.40 is interpreted as negligible correlation. It indicates that there was a significant difference between the scores in the Teacher Behavior Inventory (TBI) and the ratings in the Competency - Based Performance Appraisal System for Teachers (CB PAST). The computed rho is less than the critical value at 0.05 level of significance. Moreover, as can be seen in Table 17, *methods and techniques of teaching used* ranked first in the TBI and ranked fourth in the CB-PAST. In both TBI and CB-Past, *classroom*

management and organization ranked second. *Mastery of subject matter* ranked fourth and third in the TBI and in the CB-PAST, respectively. Finally, *teacher-student rapport* ranked third in TBI and ranked first in the CB-PAST.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a brief recapitulation of the study, the significant findings based on the gathered data, the corresponding conclusions drawn, and the recommendations offered.

SUMMARY

This research study was undertaken to assess the level of teaching effectiveness of Grade Seven mathematics teachers in public secondary schools in Gumaca, Quezon as perceived by the school administrators and students. Using the revised Teacher Behavior Inventory (TBI), the total weighted means computed were compared, conclusions were drawn, and recommendations were offered.

Data on person-related and profession- related variables were gathered through the Teachers' Data Questionnaire (TDQ) on which descriptions of teacher-respondents' profile were based.

Results of the achievement were collected, the average mean computed and converted into transmuted mean scores and subsequently tested for relation to the student-respondents' TBI ratings on teachers' teaching effectiveness.

Overall performance ratings of the teachers in the Content-Based Performance Appraisal System for Teachers (CB-PAST) for the latest rating period (SY 2013-2014) were also recorded, and the test of relationship for the administrators' TBI ratings of teaching effectiveness was applied.

A total of 11 teachers teaching Grade Seven Mathematics, six school administrators, and 344 students in six (6) public secondary schools composed the sample.

SUMMARY OF FINDINGS

The following are the findings of the study:

1. On person-related and profession-related variables

Generally, the teacher-respondents in the public secondary schools teaching Grade Seven Mathematics in Gumaca, Quezon were between 20-45 years old, mostly female, and married.

When it comes to profession-related variables, a big majority of the teacher-respondents finished BS with MA units; majority of the respondents were Teacher III; had been in the teaching profession for about 16-20 years; attended seminars/training/workshops related to their profession; and most had no award received related to teaching.

2. On the effect of some variables in the demographic profile on the teaching effectiveness of Grade Seven teachers

The positive ratings given by both student- and administrator-respondents to the teachers using the TBI explained that most of the variables in the demographic profile affect the effectiveness of the Grade Seven mathematics teachers in a less degree.

3. On the level of teaching effectiveness as measured in the revised TBI

a) Mastery of the Subject Matter

Most of the behaviors listed under the category of *mastery of subject matter* were rated to be frequently observed (FO) by the student-respondents and got an average weighted mean of 3.96. On the other hand, the administrator-respondents often observed (OO) the behaviors, with an average weighted mean of 3.19.

b) Methods and Techniques of Delivery

The student-respondents rated the items under *methods and techniques of delivery* as frequently observed (FO), with an average weighted mean of 3.97 while

administrators rated them with an average weighted mean of 3.47, interpreted as often observed (OO).

c) Classroom Management and Organization

Classroom management and organization obtained an average weighted mean of 3.98, interpreted as frequently observed (FO), from the student-respondents while from the administrators, it got an average weighted mean of 3.25, often observed (OO).

d) Teacher-Student Rapport

Behaviors of an effective teacher categorized under *teacher-students rapport* were frequently observed (FO) by the students and had an average weighted mean of 4.06. On the other hand, the administrators often observed (OO) the behaviors among the teachers, with an average weighed mean of 3.20. Thus, the teachers were considered effective.

Behaviors under the four categories were frequently observed by the students and administrators. Based on the ratings given by the student and administrator-respondents, *methods and techniques of teaching used* got the highest average weighted mean of 3.72, followed by *teacher-students rapport* with 3.63 average weighted mean, then by *classroom management and organization* with 3.62, and *mastery of subject matter* with the lowest average weighted mean of 3.58.

4. On the significant difference between the administrators' and students' ratings regarding Grade Seven mathematics teachers' teaching effectiveness as reflected in the modified Teachers Behavior Inventory (TBI).

There was no significant difference between the ratings given by the administrators and students to the teachers when it comes to *mastery of the subject matter* (0.50) and *methods and techniques of delivery* (0.72) as the computed p is greater than the critical value of 0.4821 at 0.05 level of significance. On *classroom management and organization* (0.48) and *teacher-students rapport* (0.46), there was a significant difference since the computed p is lower than the critical value of 0.576 at 0.05 level of significance.

5. On the level of teaching effectiveness as rated in the modified TBI and the Content- Based Performance Appraisal System for Teachers (CB-PAST)

The high ratings given by the students to the teachers in the modified TBI got a strong support from the ratings given in the subject using the Content-Based Performance Appraisal System for Teachers (CB-PAST) which were also high.

6. On the level of teaching effectiveness rated using the modified TBI and the result of Fourth Quarter Examination

Based on the Fourth Quarterly Examination results, the average MPS of public secondary schools in Gumaca, Quezon is 51.44. This means that the students who took the test can answer five out of ten questions correctly. Thus, it can be inferred that the teachers were much less effective in this area.

In the TBI, the student-respondents rated their teachers as effective in four (4) categories of the TBI. It shows that the extent of relationship between the student-

respondents' ratings in the TBI and the results of the achievement test measured through the Fourth Quarterly Examination was not in a great extent.

Based on the results of the study, Grade seven Mathematics teachers are effective in four dimension of teaching but need enhancement to ensure the successful implementation of K to 12 curriculum.

CONCLUSIONS

In the light of the above findings, the following conclusions were drawn:

1. On person-related and profession-related variables

Generally, the Grade Seven mathematics teachers in Gumaca, Quezon were mostly female, married, and at their early to middle age. These personal qualities of teacher-respondents have nothing to do on the teaching effectiveness. Possessing an enough experience and educationally qualified, the teachers still need professional upliftment in terms of ranks and educational attainment in order to receive awards and recognitions.

2. On the level of teaching effectiveness as measured in the revised TBI

Mastery of the Subject Matter

Students and school administrators perceived the teachers to be Highly Effective and Very Highly Effective, respectively, when measured in terms of mastery of the subject matter using the modified Teachers Behavior Inventory (TBI).

Methods and Techniques of Delivery

Students and school administrators perceived the teachers to be Highly Effective when measured in terms of methods and techniques on delivery using the modified Teachers Behavior Inventory (TBI).

Classroom Management and Organization

Students and school administrators perceived the teachers to be Highly Effective when measured in terms of classroom management and organization using the revised Teachers Behavior Inventory (TBI).

d.)Teacher-Students Rapport

Students and school administrators perceived the teachers to be Highly Effective when measured in terms of teacher-students rapport using the modified Teachers Behavior Inventory (TBI).

3. On the level of teaching effectiveness rated using the modified TBI and the Content-Based Performance Appraisal System for Teachers (CB-PAST)

School Administrators' TBI ratings and the teachers-respondents' performance ratings using the Content-Based Performance Appraisal System for Teachers (CB-PAST) had negligible correlation.

4. On the level of teaching effectiveness rated using the modified TBI and the results of Fourth Quarter Examination

Students' ratings in the TBI on the teaching effectiveness of Grade Seven mathematics teachers and the results of the Fourth Quarter Examination in terms of Mean Percentage Score (MPS) correlated positively but were not sufficient to support the high teaching effectiveness ratings.

Overall, the behaviors listed in the modified TBI categorized under four aspects were frequently observed by the students while often observed by the administrators and considered as effective. Statistically, there was no significant difference between the rankings of the items when it comes to *mastery of the subject matter* and *classroom management and organization*, while on *techniques on delivery system* and *teacher-students rapport*, there was a significant difference.

On the implications of teaching effectiveness of Grade Seven mathematics teachers to the implementation of the K-to-12 Curriculum, it is noted that the effectiveness of teachers in four areas of teaching may bring success on the implementation of the K-to-12 Curriculum. Effective teachers will produce holistically developed learners who have 21st century skills and are prepared for higher education, middle-level skills development, employment, and entrepreneurship.

RECOMMENDATIONS

Based on the foregoing conclusions, the following recommendations are suggested:

1. A parallel study on the teaching effectiveness of Grade Seven mathematics teachers be conducted to validate the high to very high ratings obtained using the revised TBI. A

related setting, for instance, the private secondary schools in a division or another public schools division, may be selected.

2. A similar study may be conducted to confirm the low correlation coefficients between the TBI ratings and the results of the achievement test as well as between school administrators' TBI ratings and the CB-PAST performance ratings of Grade Seven mathematics teachers.
3. On in-service training and for prospective teachers, mastery of the subject matter should be given priority over methods of techniques of delivery, classroom management, and student-teacher rapport since mastery of the subject matter got the lowest average weighted mean. The four aspects of teaching effectiveness should be considered major determinants of the success of the student-teacher during practice teaching and when he/she gets into professional teaching.
4. Grade Seven mathematics teachers should be versatile. He/she must have an in-depth knowledge on the different topics in mathematics and a broad knowledge not only on classroom management and subject matter but also on techniques on delivery system.
5. School administrators should periodically assess the teaching effectiveness of their mathematics teachers along the four aspects of the modified TBI and should have other observers, particularly the co-teachers of the ratee, to give their independent assessment along with student achievement to improve the teaching-learning outcomes to ensure continuous success of the implementation of K to 12 curriculum .

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Appendix A

A letter of Request for the Administration of the Instrument

Philippine Normal University

National Center for Teacher Education

June, 2014

TOLENTINO G. AQUINO

Schools Division Superintendent

Division of Quezon

Talipan, Pagbilao, Quezon

Sir:

Subject: PERMISSION TO ADMINISTER QUESTIONNAIRES

I am in the process of writing my seminar paper entitled "The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers and Its implication to the Implementation of the K-to-12 Curriculum" in line with my requirement in Master of Arts in Teaching Mathematics at the Philippine Normal University, Manila.

In this connection, please allow me to administer my questionnaire to selected administrators/TIC/OIC, teachers, and Grade Seven teachers and students of public secondary schools in the district of Gumaca, Quezon.

Endorsing the study and encouraging the participation will pave the way towards improving Mathematics instruction.

Rest assured that any information to be shared by the administrators/TIC/OIC, teachers, and students will be held confidential and be used solely for the purpose of the study.

Enclosed is a set of copies of the instruments to be used in the research study.

I will appreciate greatly your prompt and favorable consideration on this matter.

Respectfully yours,

JULIETA O. PORTADES

Researcher

Noted:

MYLA B. ESPERANZA

Adviser

Approved:

TOLENTINO G. AQUINO

Schools Division Superintendent

Appendix B

TOLENTINO G. AQUINO

School Division Superintendent



1st Indorsement
June 3, 2014

Respectfully returned to Ms. Julieta O. Portades, Institute of Graduate Studies and Research, Philippine Normal University interposing no objection to the hereto attached request to conduct a study entitled "The Level of Teaching Effectiveness of Grade 7 Mathematics Teachers and Its implication of k to 12 Curriculum" provided that the researcher should furnish this office a copy of the completed study.

A handwritten signature in black ink is located at the bottom right of the document. The signature is stylized and appears to be the name of the official who provided the indorsement.

Appendix C

Request of Permission to Administer Questionnaires

Philippine Normal University
National Center for Teacher Education

June , 2014

The Principal

Sir/ Madam:

Subject: PERMISSION TO ADMINISTER QUESTIONNAIRES

I am in the process of writing my seminar paper entitled “The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers and Its implication to the Implementation of K-to-12 Curriculum” in line with my requirement in Master of Arts in Teaching Mathematics at the Philippine Normal University, Manila.

May I therefore humbly seek your generous assistance in terms of lending me a fraction of your precious time, that of your teacher/s, and students of Grade Seven Mathematics to input pertinent data by answering the questionnaires.

Endorsing the study and encouraging the participation will pave the way towards improving Mathematics instruction.

Rest assured that any information to be shared by the administrators/TIC/OIC, teachers, and students will be held confidential and be used solely for the purpose of the study.

Enclosed is a set of copies of the instruments to be used in the research study.

I will appreciate greatly your prompt and favorable consideration on this matter.

Respectfully yours,

JULIETA O. PORTADES
Researcher

Approved:

Principal

Request of Permission to Pre-Test the Instrument

Philippine Normal University
National Center for Teacher Education

June , 2014

The Principal
Gumaca National High School
Gumaca, Quezon

Madam:

Subject: PERMISSION TO PRE-TEST THE INSTRUMENT

I am in the process of writing my seminar paper entitled “The Level of Teaching Effectiveness of Grade Seven Mathematics Teachers and Its implication to the Implementation of K-to-12 Curriculum” in line with my requirement in Master of Arts in Teaching Mathematics at the Philippine Normal University, Manila.

May I therefore humbly seek your generous assistance in terms of lending me a fraction of your precious time, that of your teacher/s, and students of Grade Seven Mathematics to input pertinent data by answering the questionnaires.

Endorsing the study and encouraging the participation will pave the way towards improving Mathematics instruction.

Rest assured that any information to be shared by the administrators, teachers and students will be held confidential and be used solely for the purpose of the study.

Enclosed is a set of copies of the instruments to be used in the research study.
I will appreciate greatly your prompt and favorable consideration on this matter.

Respectfully yours,

JULIETA O. PORTADES
Researcher

Approved:

(SGD.) SIONY A. GABOTERO
Principal

Appendix E

TEACHERS' DATA

Part I – Personal Related Factors

- 1.1 Name: _____ (Optional)
- 1.2 Sex: _____ Male _____ Female
- 1.3 Age:
- | | |
|-----------------------|------------------------------|
| _____ 20-25 years old | _____ 46-50 years old |
| _____ 26-30 years old | _____ 51-55 years old |
| _____ 31-35 years old | _____ 56-60 years old |
| _____ 36-40 years old | _____ 60 years old and above |
| _____ 41-45 years old | |
- 1.4 Civil Status:
- _____ Single _____ Married _____ Widow _____ Separated
- 1.5 Educational Attainment:
- | | |
|--------------------------------|--------------------------|
| _____ Ph. D./Ed. D. | _____ CARMA for M.A. |
| _____ CARMA in Doctoral | _____ B.S. w/ M.A. Units |
| _____ M.A w/ Units in Doctoral | _____ B. S |
| _____ Master of Arts | |
- 1.6. Area of specialization:
- _____ Economics _____ History _____ Political Science
- Others(Please specify) _____
- 1.7. Present Rank
- | | |
|-------------------|--------------------------|
| _____ Teacher I | _____ Master Teacher I |
| _____ Teacher II | _____ Master Teacher II |
| _____ Teacher III | _____ Master Teacher III |
- 1.8. Length of Years in Teaching
- | | |
|-------------------|-------------------|
| _____ 01-05 years | _____ 16-20 years |
| _____ 06-10 years | _____ 21-25 years |
| _____ 11-15 years | _____ 26-30 years |
- 1.9. In-Service trainings/ seminars related to Social Studies IV: (Please indicate how many):
- District _____ Division _____ Regional _____ National _____
- 2.0. Recognitions received (related to teaching, if any.)
- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

INVENTORY OF TEACHERS' BEHAVIOR

(For G7 Student and Administrator only)

Name of Teacher _____ (Optional)

Subject: Mathematics

Direction: Please answer every item by checking the box under which the behavior and level of frequency is observed.

5= consistently observed 3= often observed 1= rarely observed
4= frequently observed 2= occasionally observed

CRITERIA	5	4	3	2	1
I. MASTERY OF THE SUBJECT MATTER					
1. Sets learning goals clearly for the learners					
2. Explains subject matter clearly					
3. Reviews and checks the previous day's work					
4. Develops the lesson in a logical manner					
5. Explains the lesson without reading his/her notes					
6. Cites current or relevant information related to the subject matter					
7. Emphasizes key points of the lesson					
8. Effectively explains cause- effect relationship					
9. Uses textbook only as reference					
10. Provides opportunities for free expression of ideas					
11. Reads explanations from the book or from his/her notes					
12. Presents information in appropriate sequence					
13. Organizes content to enable students to arrive at conclusion or generalization					
14. Presents information at a rate appropriate to the students' ability to comprehend it					
15. Determines the points in the curriculum where enrichment has to be made					
II. METHODS AND TECHNIQUES OF TEACHING USED	5	4	3	2	1
1. Clearly states objectives/purposes of the lesson					
2. Makes the best use of prime time at the beginning of the lesson					
3. Shows a relation of the subject matter to real life or actual situation					
4. Encourages students to learn by doing things with other					
5. Asks questions that call for higher- order- thinking skills (HOTS)					
6. Modifies instructional activities to accommodates learner needs					
7. Communicates within the level of the students understanding					

8. Integrates the application of Information and communication technologies (ICT) where appropriate					
--	--	--	--	--	--

9. Employs non-traditional assessment techniques like portfolio, journals, rubrics , etc.					
--	--	--	--	--	--

10. Gives assignment with clear instructions					
11. Directions are incomplete and vague					
12. Unable to foresee and resolve potential difficulties					
13. Selects and utilizes appropriate instructional materials					
14. Presents information clearly and simple					
15. Uses interactive and collaborative approach (Round Robin, Corners, Think-Pair-Share, Jigsaw, Coop, etc..)					
III. CLASSROOM MANAGEMENT AND ORGANIZATION	5	4	3	2	1
1. Monitors the whole classroom					
2. Starts a lesson on time					
3. Apply rules always and fairly					
4. Keeps students on- task					
5. Criticizes students who give incorrect answers					
6. Specifies expectations for class behavior					
7. Organizes and plans classroom procedure well					
8. Sets realistic expectation in line with student abilities and behaviors					
9. Reinforces desirable behavior thru appropriate ways					
10. Displays students' work in the classroom					
IV. TEACHER-STUDENTS RELATIONSHIPS	5	4	3	2	1
1. Conveys genuine concern for students					
2. Knows and uses student names					
3. Guides students through errors					
4. Commends effort and gives praise for work well done					
5. Gives opportunities to students to participate in decision making					
6. Develops students confidence and self-esteem					
7. Helps students with personal as well as educational problems					
8. Establishes an environment of courtesy and respect					
9. Calls low achievers less often					
10. Express warmth and affection toward the students					

Appendix G

Republic of the Philippines Department of Education Region IV-A CALABARZON



CB-PAST Form 1

COMPETENCY-BASED PERFORMANCE APPRAISAL SYSTEM FOR TEACHERS(CB-PAST)

Name : Position Title : Appointment Status:

School :District :

School Year:First Semester:

Second Semester :

To Teachers:

For Part I, use a rating scale with 1 as lowest and 4 as the highest. Rate yourself along the indicators under each performance standard. Encircle the appropriate rating that applies to you in every item. For clearer understanding, refer to the expanded rubrics for the holistic description/interpretation of the rating values.

4 – Highly Proficient (HP)

Teacher performance consistently exceeds expectations. Displays at all time, a consistently high level of performance related skills, abilities, attributes, initiatives and productivity. All assignments/responsibilities are completed beyond the level of expectation. Self-direction of the teacher is evident.

3 – Proficient (P)

Teacher performance often exceeds expectations. Displays a high level of competency related skills, abilities, initiatives and productivity, exceeding requirements in many of the areas.

2 – Basic (B)

Teacher performance meets basic expectations based on standards. Displays basic level of work and performance outputs as required outcomes or expectations of the job.

1 – Below Basic (BB)

Teacher performance on the job and outputs frequently fall below standard. Work outputs consistently low, regularly fails to meet required outcomes needing repetition of duty or by completion of others. The teacher may need immediate instructional support.

Part II, the PLUS FACTOR shall be used for Summative Appraisal at the end of the school year. It is a list of performance beyond the call of duty which are not included in the indicators of Part I. Every Plus Factor item has a value of .04 and a teacher may earn a maximum of .4 point during the summative appraisal period. Check the item being claimed. Duly certified evidences of the plus factor claimed should be found in your Teacher's Portfolio.

PART I- COMPONENTS AND PERFORMANCE STANDARDS

I. INSTRUCTIONAL COMPETENCE

A. Diversity of Learners

<i>Within the appraisal period, I . . .</i>	Appraisal Rating			
	BB	B	P	HP
1. set objectives that are within the experiences and capabilities of learners	1	2	3	4
2. utilized varied designs, techniques and activities suited to the different kinds of learners	1	2	3	4
3. paced lessons appropriate to the needs and difficulties of learners.	1	2	3	4
4. provided appropriate intervention activities for learners at risks.	1	2	3	4
5. recognized multi-cultural background of learners when providing learning opportunities.	1	2	3	4
6. adopted strategies to address needs of differently-abled learners.	1	2	3	4
7. showed fairness and consideration to all learners regardless of socio-economic background.	1	2	3	4

B. Curriculum Content and Pedagogy

<i>Within the appraisal period, I . . .</i>	Appraisal Rating			
	BB	B	P	HP
1. delivered accurate and updated content knowledge using appropriate methodologies, approaches and strategies.	1	2	3	4
2. used integration of language, literacy, numeracy skills and values in teaching.	1	2	3	4
3. explained learning goals, instructional procedures and content clearly and accurately to students.	1	2	3	4
4. linked the current content with past and future lessons.	1	2	3	4
5. aligned the lesson objectives, teaching methods, learning activities, and instructional materials or resources appropriate to the learners.	1	2	3	4

6. created situations that encourage learners to use high order thinking skills through the use of local language among others if needed.	1	2	3	4
7. engaged and sustained learner's interest in the subject by making content meaningful and relevant to them.	1	2	3	4
8. integrated scholarly works and ideas to enrich the lesson.	1	2	3	4
9. established routines and procedures to maximize instructional time.	1	2	3	4
10. selected, prepared and utilized available technology and other instructional materials appropriate to the learners and the learning objectives.	1	2	3	4
11. provided appropriate learning tasks, portfolio and projects that support development of good study habits.	1	2	3	4
12. used available ICT resources for planning and designing teaching- learning activities.	1	2	3	4

C. Planning, Assessing and Reporting

<i>Within the appraisal period, I</i>	Appraisal Rating			
	BB	B	P	HP
1. constructed valid and reliable formative and summative tests.	1	2	3	4
2. used appropriate non-traditional assessment techniques and tools. (i.e portfolio, journals, rubric, etc)	1	2	3	4
3. interpreted and used test results to improve teaching and learning.	1	2	3	4
4. identified teaching-learning difficulties and possible causes.	1	2	3	4
5. managed remediation activities.	1	2	3	4
6. used tools for assessing authentic learning.	1	2	3	4
7. provided timely and accurate feedback to learners to encourage them to reflect on and monitor their own learning growth.	1	2	3	4
8. kept accurate records of grades/performance levels of learners.	1	2	3	4
9. conducted regular meetings with learners and parents to report learners' progress	1	2	3	4

II. SCHOOL, HOME, COMMUNITY LINKAGES

D. Learning Environment

<i>Within the appraisal period, I</i>	Appraisal Rating			
	BBI	B	P	HP
1. provided equal opportunities for all learners regardless of gender.	1	2	3	4
2. maintained a safe and orderly classroom free from distractions.	1	2	3	4
3. used individual and cooperative learning activities to improve capacities of learners for higher learning.	1	2	3	4
4. inspired learners to set and value high performance targets for themselves.	1	2	3	4
5. handled behavior problems quickly and with due respect to children's rights.	1	2	3	4
6. created situation that develop a positive attitude among learners towards their subject and teacher.	1	2	3	4

E. Community Linkages

<i>Within the appraisal period, I</i>	Appraisal Rating			
	BB	B	P	HP
1. involved parents /community in sharing accountability for learners' achievement.	1	2	3	4
2. used varied and available community resources (human, materials) to support learning.	1	2	3	4
3. used community as a laboratory for teaching and learning.	1	2	3	4
4. got involved in / shared community information on school events and achievement	1	2	3	4
5. led students to apply classroom learning to the community.	1	2	3	4
6. informed learners, parents and other stakeholders regarding school policies and procedures	1	2	3	4

III. PERSONAL, SOCIAL GROWTH AND PROFESSIONAL CHARACTERISTICS

F. Social Regard for Learning

<i>Within the appraisal period, I . . .</i>	Appraisal Rating			
	BB	B	P	HP
1. abide by and implemented school policies and procedures.	1	2	3	4
2. demonstrated punctuality in accomplishing tasks and attendance on all occasions.	1	2	3	4
3. maintained appropriate appearance and decorum at all times.	1	2	3	4
4. demonstrated appropriate behavior in dealing with learners, peers and superiors.	1	2	3	4

G. Personal, Social Growth and Professional Development

<i>Within the appraisal period, I . . .</i>	Appraisal Rating			
	BB	B	P	HP
1. maintained stature and behavior that upholds the dignity of teaching.	1	2	3	4
2. manifested personal qualities like enthusiasm, flexibility, caring attitude, collegiality among others.	1	2	3	4
3. demonstrated my educational philosophy of teaching in the classroom.	1	2	3	4
4. updated myself with recent developments in education.	1	2	3	4
5. participated actively in professional organizations.	1	2	3	4
6. reflected on the quality of my own teaching.	1	2	3	4
7. improved teaching performance based on feedback from mentors, learners, peers, superiors and others.	1	2	3	4
8. used self-assessment to enhance strengths and correct my weaknesses.	1	2	3	4
9. accepted accountability for learners' outcomes.	1	2	3	4
10. abide by the Code of Ethics for Professional Teachers.	1	2	3	4

PART II- THE PLUS FACTOR

The Plus Factor shall be claimed at the end of the school year for the summative appraisal. Items claimed in the current appraisal period will not be credited in the succeeding appraisal period.

Teachers who are dedicated in their profession perform some jobs beyond what is required of them. Most of these are voluntary in nature, thus to acknowledge the added performance, certain reward in the form of the Plus Factor is provided in this appraisal system.

Each item in the list is equivalent to **.04** and a teacher who accomplishes a maximum of **10 items** during the appraisal period gets a maximum value of **.4**. The maximum value of .4 or a fraction shall be added to the total weighted average on the CB-PAST for the overall rating of the teacher performance. The three components shall have a **maximum number** of items to be accomplished and claimed by the Teacher to wit: **I. Instructional Competence – any four (4) items; II. School, Home, Community Linkages- any three (3) items and III. Personal, Social Growth and Professional Development- any three (3) items.**

Only teachers who have an overall rating description of **Highly Proficient, Proficient, or Basic** shall claim for the Plus Factor component in the appraisal system.

I. Plus Factor for Instructional Competence

- _____ 1. Acted as a mentor/coach in professional development to at least 2 peers
- _____ 2. Served as a demonstration teacher at least once in a rating period, for peers, cooperating teachers, resource teachers in the in-service and, pre-service students on innovative teaching strategies, classroom management.
- _____ 3. Conducted one (1) action research whose findings and recommendations have been adopted by the school. (district or division)
- _____ 4. Acted as coordinator, chairperson in activities, projects that relate to Instructional Competence.
- _____ 5. Innovated teaching strategies, classroom management and assessment to enhance learning.
- _____ 6. Increased the difference in the achievement rate of the division post test over the pretest by 2.5 % or higher on a all classes taught.
- _____ 7. Maintained zero drop out rate or reduced drop out rate in the class.

II. Plus Factor for School, Home, Community Linkages

- _____ 1. Organized and implemented at least one (1) home-school-community project in a rating period which resulted to enhanced learning outcomes.
- _____ 2. Established a model that exemplifies a learning environment conducive to teaching and learning. (i.e. Science Gardens, Mathematics Laboratory, Model classroom, others)
- _____ 3. Made at least one (1) best practice on how to involve majority of the parents in the education of their children.
- _____ 4. Conducted at least 1 action research and shared results to peers on problems related to learning environment, home, school and community involvement.
- _____ 5. Conducted at least two home visitations to encourage parents to support their children in their school activities; to reduce absenteeism and tardiness.
- _____ 6. Others not included but related to school, home and community involvement.

III. Plus Factor for Personal, Social Growth and Professional Characteristics

- _____ 1. Received award(s) for exemplary personal and professional attributes such as honesty and integrity, leadership, dedication, initiative, courtesy, fairness of an outstanding teacher from recognized academic institutions and other award giving bodies.
- _____ 2. Acted as coach or trainer to award winning students or group of students in academic and non-academic contests recognized at least at the division level.
- _____ 3. Earned relevant professional trainings (an aggregate of at least 60 hours) or graduated from a higher relevant degree.
- _____ 4. Received scholarship awards, educational exchange, educational observation, study tour and the like which have competitive screening process. (Claim can only be made after the award has been enjoyed.)
- _____ 5. Others not mentioned but related to personal and professional characteristics

Teacher Performance Index (TPI)

3.51- 4.00-Highly Proficient. Teacher performance consistently exceeds expectations. Displays at all time, a consistently high level of performance related skills, abilities, attributes, initiatives and productivity. All assignments/responsibilities are completed beyond the level of expectation. Self-direction of the teacher is evident

2.51- 3.50-Proficient. Teacher performance often exceeds expectations. Displays a high level of competency related skills, abilities, initiatives and productivity, exceeding requirements in many of the areas

1.51- 2.50-Basic . Teacher performance meets basic expectations based on standards. Displays basic level of work and performance outputs as required outcomes or expectations of the job.

1.00-1.50- Below Basic. Teacher performance on the job and outputs frequently fall below standard. Work outputs consistently low, regularly fails to meet required outcomes needing repetition of duty or by completion of others. The teacher may need immediate instructional support.

Overall Performance Rating Description and Critical Requirements for the Summative Appraisal

Description of Overall Performance Rating	Critical Requirements
	Note: A teacher who does NOT meet the critical requirement will get the next lower level of the overall performance rating.
Outstanding	3.51 or higher and <i>no performance index of below proficient</i> in any of the standards.
Very Satisfactory	2.51 or higher and <i>no performance index value of below basic</i> in any of the standards
Satisfactory	1.51 – 2.50 and <i>no performance index value of below basic</i> in any of the standards
Below Basic	1.00 or higher <i>with at least one performance index values below basic</i> in any of the standards

CB-PAST Summary of Ratings Template

Criteria	Assigned Weight	No. of Items	Score	Mean (score ÷ no. of items)	Description of the TPI	Weighted Average (Mean x Weight)
I. Instructional Competence 60%						
A Diversity of Learners	10%	7				
B Curriculum Content and Pedagogy	30%	12				
C Planning, Assessing, and Reporting	20%	9				
<i>Sum of Weighted Average of A, B, & C</i>						

II. Home, School & Community Involvement		20%					
D	Learning Environment	10%	6				
E	Community Linkages	10%	6				
<i>Sum of Weighted Average of D & E</i>							
III. Personal Growth & Professional Development		20%					
F	Social Regard for Learning	10%	4				
G	Personal, Social Growth & Professional Development	10%	10				
<i>Sum of Weighted Average of F & G</i>							
Formative Performance Rating							
(Sum of the Total Weighted Average of I, II, & III)							
Description for Overall Performance Rating in TPI for Formative Appraisal							
Plus Factor (for the Summative Appraisal)							
(Each item gets 0.04. A maximum of 0.4 will be added to the Total Weighted Average)							
Summative Performance Rating							
(Sum of the Total Weighted Mean from I, II, III and the Plus Factor earned)							
Description of Overall Performance Rating with critical requirement for Summative Appraisal							

Remarks: _____

Agreements: _____

I hereby, certify that my self-ratings reflect the true and honest evaluation of my teaching performance.

Ratee: _____
Teacher (Name & Signature) **Conferred with:** _____
School Head (Name & Signature)

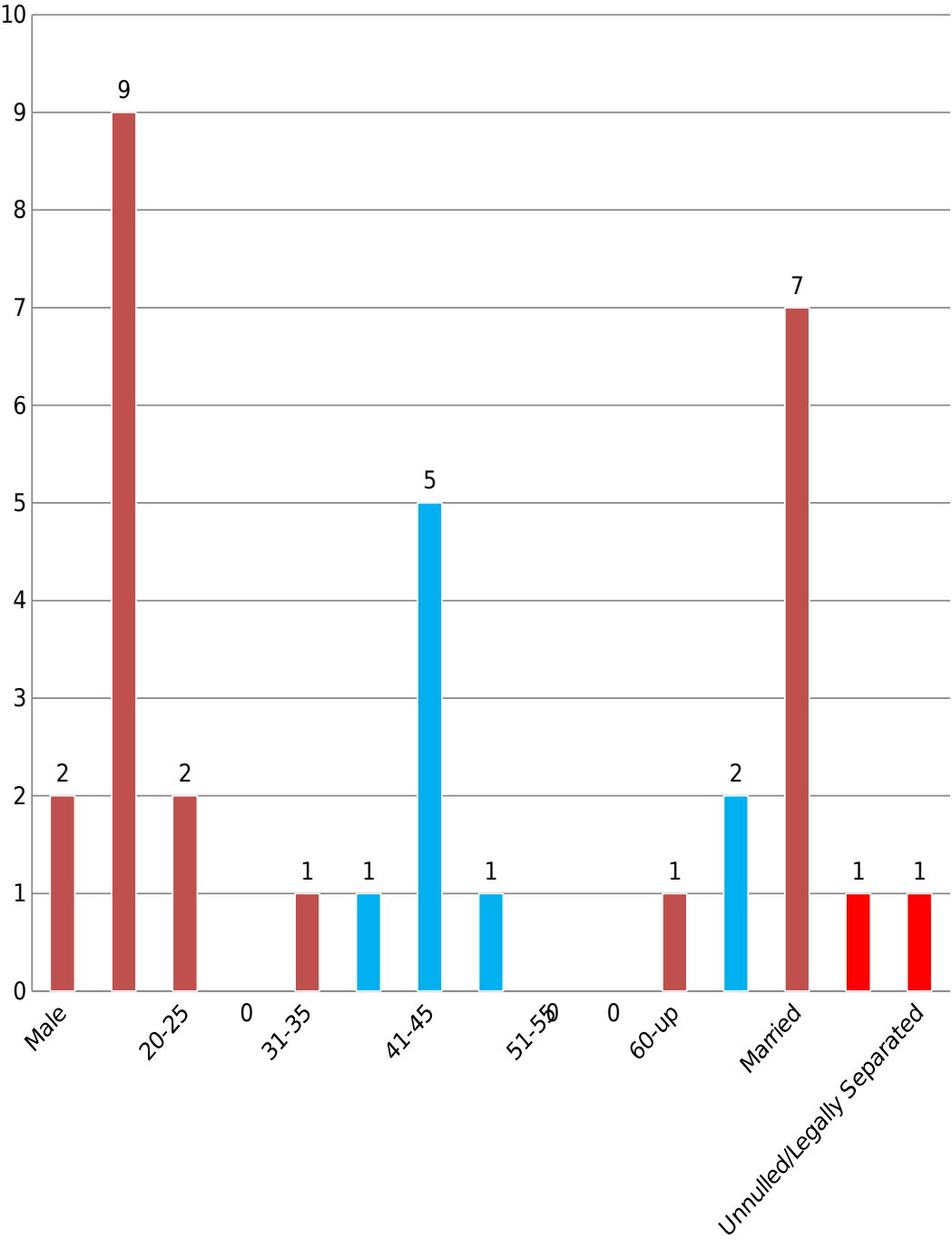
ATTESTED BY: _____
District Supervisor/Coordinating Principal

Recommending Approval: _____
Assistant Schools Division Superintendent

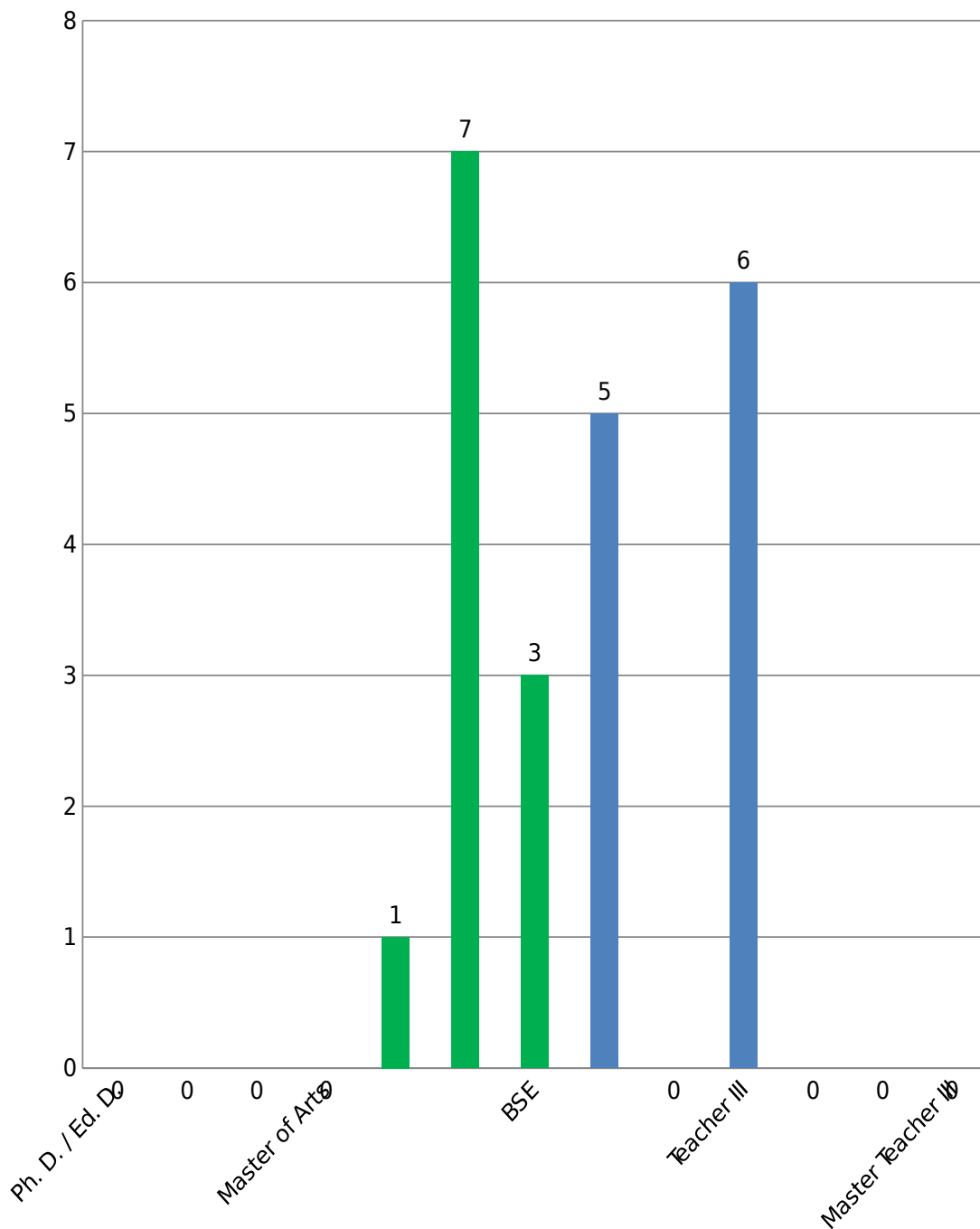
APPROVED: _____
Schools Division Superintendent

Appendix H

GRAPH 1
 Graph on the Personal- Related Variables of Grade 7 Mathematics Teacher-Respondents



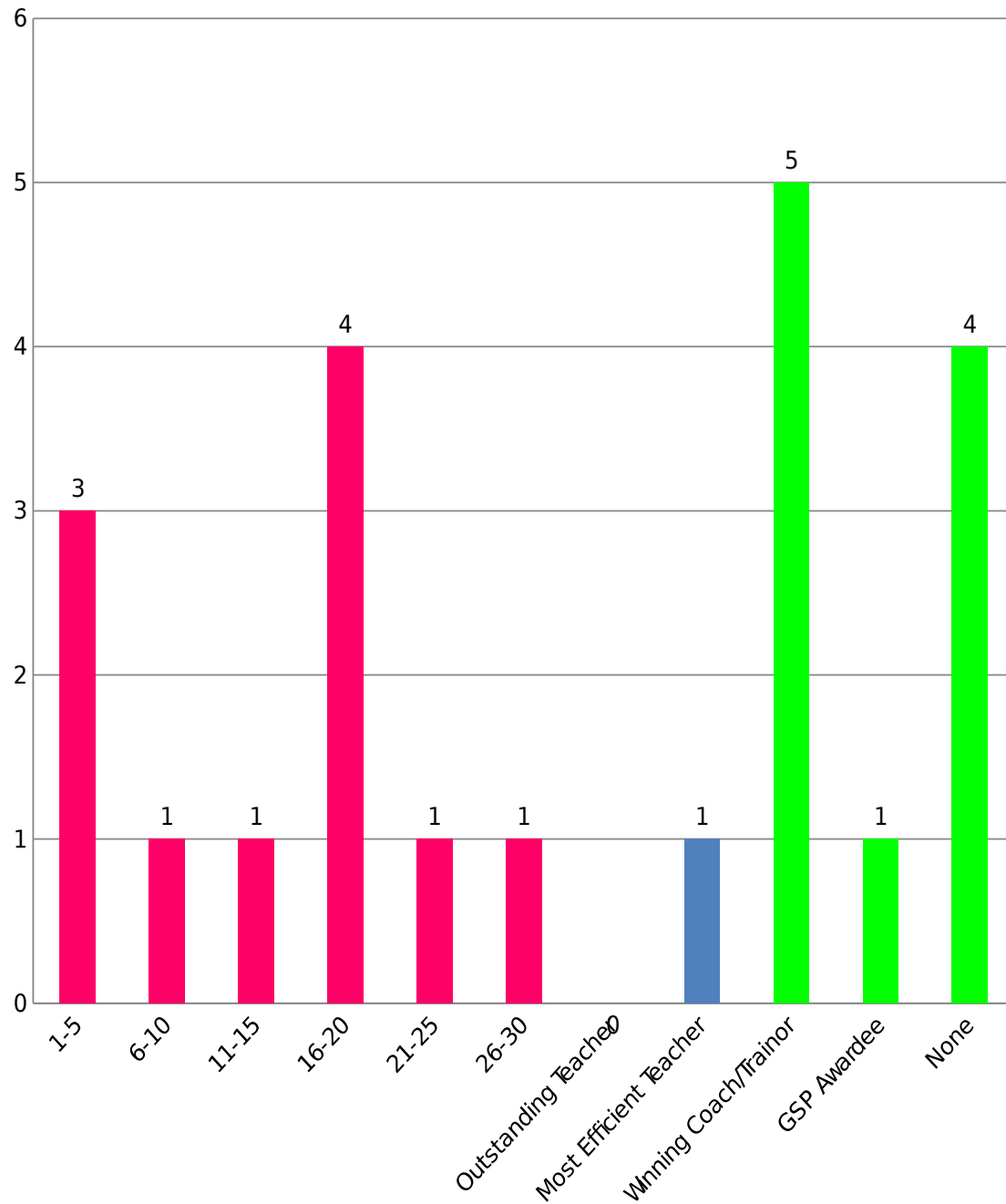
GRAPH 2
Graph on Profession-Related Variables of Grade 7 Mathematics Teacher- Respondents



Appendix J

GRAPH 3

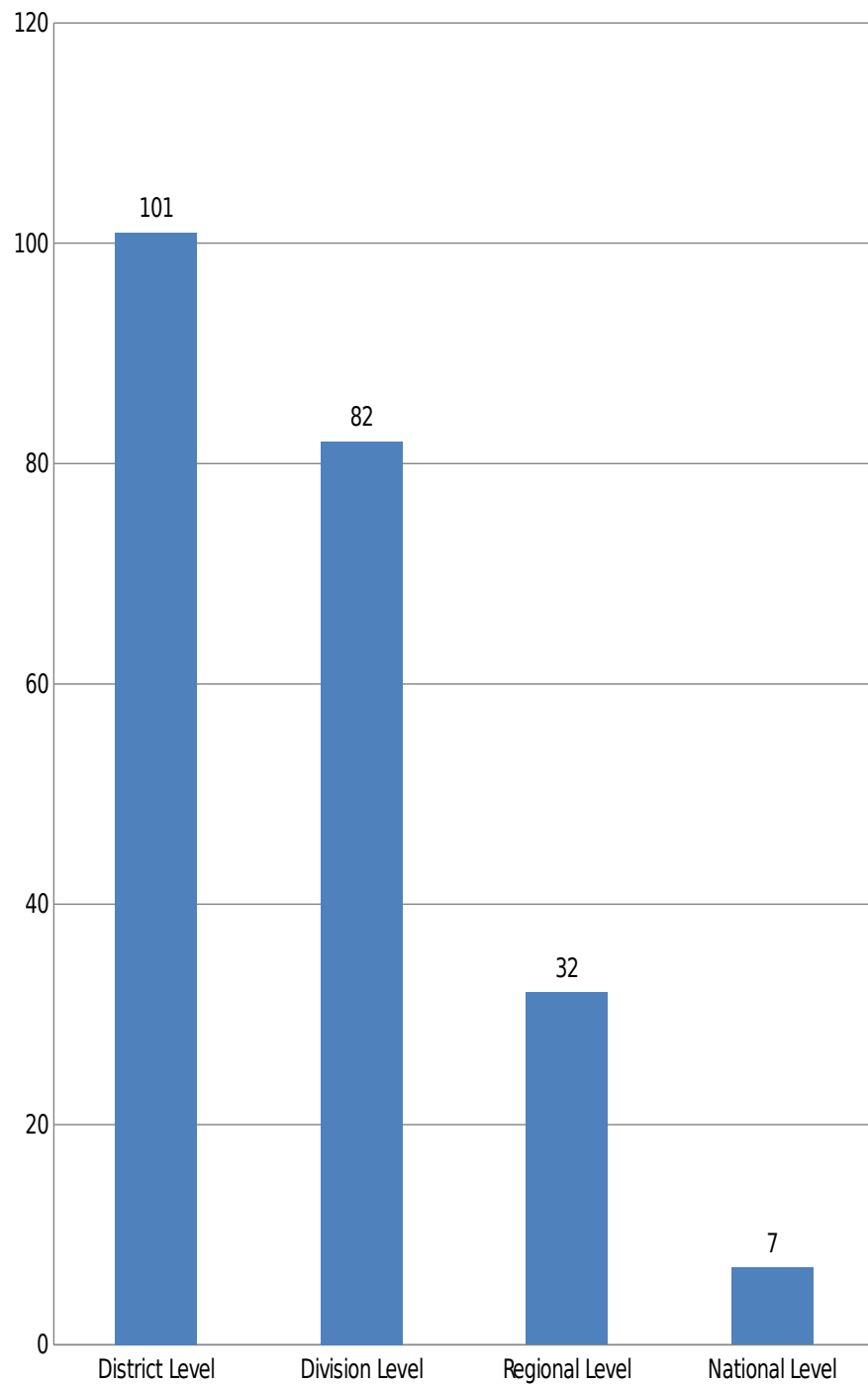
Graph on Profession-Related Variables of Grade 7 Mathematics Teacher-Respondents



Number of Years in Teaching

Awards Received

GRAPH 4
Graph on Profession-Related Variables (Seminars Attended) of Grade 7 Mathematics Teacher-Respondents



Appendix K

Appendix L

Table 13

Correlation Between the Rankings of the Respondents' Ratings on the Teachers' Mastery of the Subject Matter

Items	Rank		Deviation	
	Students	Administrators	d	d ²
1	1	1.5	-.5	0.25
2	2	3.5	-1.5	2.25
3	3	9	-6	36
4	5	9	-4	16
5	7	1.5	5.5	30.25
6	12	9	3	9
7	9	6	3	9
8	15	11.5	3.5	12.25
9	14	14	0	0
10	4	3.5	1.5	2.25
11	8	15	-7	49
12	13	6	7	49
13	11	6	5	25
14	6	11.5	-5.5	30.25
15	10	13	-3	9
				279.50

Level of Significance : 0.05

Degrees of Freedom : 15

Critical Value (CV) : 0.4821

$\rho > 0.4821$ = no significant difference

$\rho < 0.4821$ = significant difference

Appendix M

Table 14

Correlation Between the Rankings of the Respondents' Ratings on Methods and Techniques of Delivery

Items	Rank		Deviation	
	Students	Administrators	d	d ²
1	2	3.5	-1.5	2.25
2	6	8.5	-2.5	6.25
3	12	8.5	3.5	12.25
4	7	6	1	1
5	10	6	4	16
6	8.5	6	2.5	6.25
7	5	1	4	16
8	11	13.5	-2.5	6.25
9	3	11	-8	64
10	1	3.5	-2.5	6.25
11	15	15	0	0
12	13	13.5	-0.5	0.25
13	8.5	11	-2.5	6.25
14	4	2	2	4
15	14	11	3	9
				156

Level of Significance : 0.05

Degrees of Freedom : 15

Critical Value (CV) : 0.4821 $\rho > 0.4821$ = no significant difference

$\rho < 0.4821$ = significant difference

Appendix N

Table 15

Correlation Between the Rankings of the Respondents' Ratings on Classroom Management and Organization

Items	Rank		Deviation	
	Students	Administrators	d	d ²
1	1	1	0	0
2	2	6.5	-4.5	20.25
3	3.5	3	0.5	0.25
4	5	2	3	9
5	9.5	10	-0.5	0.25
6	6	9	-3	9
7	3.5	8	-4.5	20.25
8	7	4.5	2.5	6.25
9	8	4.5	3.5	12.25
10	9.5	6.5	3	9
				86.50

Level of Significance : 0.05

Degrees of Freedom : 15

Critical Value (CV) : 0.4821

$\rho > 0.576$ = no significant difference

$\rho < 0.576$ = significant difference

Appendix O

Table 16

Correlation Between the Rankings of the Respondents' Ratings on Teacher-Students Rapport

Items	Rank		Deviation	
	Students	Administrators	d	d ²
1	2	3	-1	1
2	1	1	0	0
3	4	4.5	-0.5	0.25
4	5	4.5	0.5	0.25
5	7	10	-3	9
6	6	8	-2	4
7	8	8	0	0
8	3	8	-5	25
9	10	6	4	16
10	9	2	7	49
				104.5

Level of Significance : 0.05

Degrees of Freedom : 15

Critical Value (CV) : 0.4821

$\rho > 0.576$ = no significant difference

$\rho < 0.576$ = significant difference

Appendix P

Table 17

Correlation Between the Ranking of Items in the TBI and in CB-PAST as Assessed by the Administrators

Items	Administrators' Ratings			
	Scores in TBI	Ranking	Ratings in CB-PAST	Ranking
Mastery of Subject Matter	3.19	4	2.86	3
Methods and Techniques of Teaching Used	3.47	1	2.71	4
Classroom Management and Organization	3.25	2	3.00	2
Teacher-Students Relationships	3.20	3	3.11	1
AVERAGE	3.28	Effective	2.92	VS

Level of Significance : 0.05
 Degrees of Freedom : 4
 Critical Value (CV) : 0.8114

$\rho > 0.8114$ = no significant difference
 $\rho < 0.8114$ = significant difference

Appendix Q

MEAN PERCENTAGE SCORES OF GRADE SEVEN MATHEMATICS IN FOURTH QUARTER EXAMINATION IN SECONDARY SCHOOLS IN GUMACA, QUEZON SY 2013-2014

No .	Name of School	Average Mean	Average MPS	Rank
1	Bantad National High School	20.16	50.40	3
2	Camohaguin National High School	21.11	52.78	2
3	Gumaca National High School	25.06	62.65	1
4	Inaclagan National High School	19.38	48.45	4
5	Panikihan National High School	18.59	46.48	6
6	Villa Perez National High School	19.15	47.88	5
	AVERAGE	20.58	51.44	

Appendix R

Values of r for the Different Levels of Significance

df	.1	.05	.02	.01	.001
1					
2	.98769	.99692	.999507	.999877	.99999
3	.90000	.95000	.98000	.990000	.99900
4	.8054	.8783	.93433	.95873	.99116
5	.7293	.8114	.8822	.91720	.97406
6	.6694	.7545	.8329	.8745	.95074
7					
8	.6215	.7067	.7887	.8343	.92493
9	.5822	.6664	.7498	.7977	.8982
10	.5494	.6319	.7155	.7646	.8721
11	.5214	.6021	.6851	.7348	.8471
12	.4973	.5760	.6581	.7079	.8233
13					
14	.4762	.5529	.6339	.6835	.8010
15	.4575	.5324	.6120	.6614	.7800
16	.4409	.5139	.5923	.6411	.7603
17	.4259	.4973	.5742	.6226	.7420
18	.4124	.4821	.5577	.6055	.7246
19					
20	.4000	.4683	.5425	.5897	.7084
25	.3887	.4555	.5285	.5751	.6932
30	.3783	.4438	.5155	.5614	.6787
35	.3687	.4329	.5034	.5487	.6652
40	.3598	.4227	.4921	.5368	.6524
45					
50	.3233	.3909	.4451	.4869	.5974
60	.2960	.3494	.4093	.4487	.5541
70	.2746	.3246	.3810	.4182	.5189
80	.2573	.3044	.3578	.3932	.4896
90	.2428	.2875	.3384	.3721	.4648
95					
100	.2306	.2732	.3218	.3541	.4433
110	.2108	.2500	.2948	.3248	.4078
120	.1954	.2319	.2737	.3017	.3799
130	.1829	.2172	.2465	.2830	.3568
140	.1726	.2050	.2422	.2673	.3375

100

.1638

.1946

.2301

.2540

.3211

SOURCE: Appendix R is reprinted from Table VI of R.A. Fisher and F. Yates, Statistical Tables for Biological, Agricultural, and Medical research, published by Oliver and Boy LM. Edinburgh.

Appendix S

PROGRAM OF ACTION ENHANCING THE TEACHING EFFECTIVENESS OF G7 MATHEMATICS TEACHERS

Areas of Concern	Objective	Strategies	Person Involved	Time Frame	Budget	Key Result Area	Performance Indicator
☐ Content Algebra Geometry Trigonometry Statistics	Increase understanding of the different concepts in Mathematics	Brainstorming Lectures Groupings Discovery Method Pre & Post - Test	Resource Person Teachers Principal Head -Teacher	1 week	40,000.00	In-Depth Knowledge of contents of Mathematics	90% of the G7 Mathematics Teachers gained in-depth understanding of the different concepts in Mathematics
☐ Techniques/ Strategies Construction Rubrics Balanced assessment Developing Level of Teacher-Made Test Cooperative Interactive Learning Integration of ICT	Develop a good working idea on the techniques and strategies used in teaching Mathematics	Use of ICT Group work Brainstorming Lectures Discussion Demonstration	ICT coordinator Teachers Principal Head Teacher Students	1 week		Enrich their skills in assessment, Tests construction and in using computers	95% of the G7 Mathematics Teachers enhanced their skills in the different strategies and techniques in the teaching-learning process. 100% of the G7 Mathematics Teachers prepared their own ready-to-use rubrics and tests questions 80-90% G7 Mathematics Teachers can use ICT in the classroom

☐ Classroom Management Making the Classroom Effective Core Competencies of Classroom Management Managing	Enhance their talents and creativity in classroom management and organization	Use of ICT Group work Brainstorming Lectures Discussion Room Visitation	Resource Person Teachers Principal Head Teacher Students	1 week		Enhance their creativity in classroom management	90-95% of the G7 Mathematics Teachers understand the importance of managing the learning environment. 100% of G7 Mathematics Teacher actively joined the search.
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Prepared by:

JULIETA O. PORTADES

Researcher

Appendix T

CURRICULUM VITAE

I. PERSONAL INFORMATION

Name: Julieta O. Portades
 Date of Birth: May 18, 1971
 Place of Birth: Gumaca, Quezon
 Civil Status: Married
 Spouse: Rene L. Portades
 Children: Paulo Rae, Keith Gabriel. Jan Vincent, Sophia Adelle
 Address: Brgy. Bagong Buhay, Gumaca Quezon

II. EDUCATION BACKGROUND

Elementary: Gumaca East Central School 1978-1984
 Secondary: Holy Child Academy 1984-1988
 Trade Course: Basic Computer`` 1992

Tertiary: Bachelor of Science in Secondary Education 1988-1992

Graduate Study: Philippine Normal University MAT, Mathematics

III. CIVIL SERVICE ELIGIBILITY

Professional Examination For Teachers (PBET)

Sub-Professional Examinations

IV. WORK EXPERIENCE

Secondary School Teacher I, Gumaca National High School, 1994-2011

Secondary School Teacher II, Gumaca National High School, 2011-2012

Secondary School Teacher III, Gumaca National High School, 2012 to date

V. TRAININGS/ IN – SERVICE SEMINARS

International

International Seminar on Mathematics and Science Education, Baguio Convention
Center, Baguio City, March 9-11, 2012

National

Summer Training Program for Enhancing Science and Mathematics Competence of in-
service Teachers in the Fourth District of Quezon, PNU Manila, April 24-May 17,
2006

Regional

Regional Training of Grade 7 Teachers on the K to 12 Curriculum, MSEUF Lucena City,
May 21-26, 2012

Four-Day Mass Training of First Year Teachers on the 2010 Secondary Education
Curriculum, QNHS Lucena City June 1-4, 2010

Anti-Graft and Corruption Prevention Seminar, GNHS March 22, 2005

Regional Training of Public and Private Schools Educators in Mathematics, Balayan
NHS, Batangas, May 12-16, 2003

Basic Computer, Non Formal Education, Gumaca National High School, March 24,
2001

Basic Computer Tesda, Gumaca National High School, May 31, 1996

Division

Project Excel's Conference in Achieving Teaching Excellence, DepEd Quezon's Training
Center, Sept. 12, 2012

Division Seminar Workshop in Developing Achievers in Teaching Excellence, April 8-10,
2014

8th Mathematics Teachers Convention, Pacific Mall Lucena City, Dec. 6, 2013

Division Mathematical Pedagogical Knowledge Echo-Training Workshop, Talipan NHS,
May 11-13, 2011

Division Follow Through of the First Quarter Implementation of the 2010 SEC for
Science and Mathematics I, GNHS, Sept. 24, 2010

Division Echo-Training Workshop for Secondary School Teachers Teaching
Mathematics I & II, PSL Lucban, Nov. 26-28, 2009

2006 Division Training Workshop of School/Cluster Trainors/Facilitators in Secondary
Mathematics, GNHS, July 13-15, 2006

Division Training Workshops for Secondary School Teachers in Mathematics on the Use
of Video Lesson, GNHS, Nov. 24-27, 2005

Division Training of Teachers in High School Mathematics on the Implementation of
RBEC, Lopez NHS, May 6-11, 2002

VI. POSITION HELD

Auditor, GNHS-TEA (SY 2007 – 2012)

Curriculum Chairman (SY 2007-2008, 2008-2009, 2009-2010)

PTA – BOD (SY 2009-2010)

VII. MERITORIOUS ACHIEVEMENTS (as trainor)

Mathematical Investigation Grade 7, Division Level – 2nd Place (Dec.3, 2013)

Math Quiz Bee, Division Math Fair- 3rd Place (Nov. 29,2007)

Damath Division Math Fair Level I-3rd Place (Nov.29, 2007)

Math Challenge, Division Team Competition-3rd Place (2005)

Division Academic Math Camp.- 1st Place (Sept. 30, 2005)

2005 Metrobank –MTAP-DepEd Math Challenge- 2nd Place (Feb. 25, 2005)

Math Talino, Level I, Division Mathematics Fair – 2nd Place (Dec. 2-3, 2004)

Mathematical Investigatio,Level I, 2004 Division Math Fair- 3rd Place (Dec. 2-3, 2004)

2004 Division Metrobank-MTAP DepEd Math Challenge – 1st Place (Jan. 16, 2004)

2003 Division Super Quiz Bee – 1st Place (Sept. 22, 2003)

1999 Division Math Fair – 3rd Place (Oct. 27, 1999)

VIII. RESOURCE SPEAKER

Special Topic in the Use of Collaborative Learning (Feb. 15, 2014)

Moving Up Ceremony of Kindergarten (Mar. 29, 2011)

Table 9

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Mastery of Subject Matter

STATEMENTS	STUDENTS								ADMINISTRATOR							
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)	V I	R
	5	4	3	2	1				5	4	3	2	1			
1. Sets learning goals clearly for the learners	174	97	59	11	3	4.24	FO	1	1	4	1	0	0	4.00	FO	1.5
2. Explains subject matter clearly	162	104	49	22	7	4.14	FO	2	0	4	2	0	0	3.67	FO	3.5
3. Reviews and checks the previous day's work	136	131	54	15	8	4.08	FO	3	0	2	3	1	0	3.17	OO	9
4. Develops the lesson in a logical manner	136	114	64	22	8	4.01	FO	5	0	2	3	1	0	3.17	OO	9
5. Explains the lesson without reading his/her notes	135	112	63	19	15	3.97	FO	7	2	2	2	0	0	4.00	FO	1.5
Cites current or relevant information related to the subject matter	108	124	74	32	6	3.86	FO	12	0	1	5	0	0	3.17	OO	9
7. Emphasizes key points of the lesson	110	132	70	24	8	3.91	FO	9	0	3	3	0	0	3.50	FO	6
Effectively explains cause- effect relationship	106	119	75	27	17	3.78	FO	15	0	1	3	2	0	2.83	OO	11.5
9. Uses textbook only as reference	107	122	71	28	16	3.80	FO	14	0	0	1	5	0	2.17	OcO	14
10. Provides opportunities for free expression of ideas	145	112	55	25	7	4.06	FO	4	0	4	2	0	0	3.67	FO	3.5
11. Reads explanations from the book or form his/her notes	126	117	62	27	12	3.92	FO	8	0	0	1	4	1	2.00	OcO	15
12. Presents information in appropriate sequence	115	110	80	25	14	3.83	FO	13	0	4	1	1	0	3.50	FO	6
13. Organizes content to enable students to arrive at conclusion or generalization	121	113	71	24	15	3.88	FO	11	0	3	3	0	0	3.50	FO	6
14. Presents information at a rate appropriate to the students' ability to comprehend it	125	125	66	23	5	3.99	FO	6	0	1	3	2	0	2.83	OO	11.5
15. Determines the points in the curriculum where enrichment has to be made	122	116	71	21	14	3.90	FO	10	0	0	4	2	0	2.67	OO	13
AVERAGE WEIGHTED MEAN						3.96	FO		AVERAGE WEIGHTED MEAN					3.19	OO	

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean:

4.50 – 5.00 - Consistently Observed (CO)

3.50 – 4.49 -Frequently Observed (FO)

2.50 – 3.49 - Often Observe d(OO)

1.50 – 2.49- Occasionally Observed (OcO) 1.00 – 1.49- Rarely Observed (RO)

Table 10

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Delivery System Used

STATEMENTS	STUDENTS								ADMINISTRATOR							
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)	VI	R
	5	4	3	2	1				5	4	3	2	1			
1. Clearly states objectives/purposes of the lesson	179	100	39	15	11	4.22	FO	2	1	5	0	0	0	4.17	FO	3.5
2. Makes the best use of prime time at the beginning of the lesson	131	128	59	19	7	4.04	FO	6	0	3	3	0	0	3.50	FO	8.5
3. Shows a relation of the subject matter to real life or actual situation	116	113	72	28	15	3.83	FO	12	1	2	2	1	0	3.50	FO	8.5
4. Encourages students to learn by doing things with other	140	106	66	23	9	4.00	FO	7	1	2	3	0	0	3.67	FO	6
5. Asks questions that call for higher- order- thinking skills (HOTS)	109	133	64	28	10	3.88	FO	10	0	4	2	0	0	3.67	FO	6
6. Modifies instructional activities to accommodates learner needs	133	118	62	18	13	3.99	FO	8.5	0	4	2	0	0	3.67	FO	6
7. Communicates within the level of the students understanding	155	110	48	20	11	4.10	FO	5	5	1	0	0	0	4.83	CO	1
8. Integrates the application of Information and communication technologies (ICT) where appropriate	114	125	64	28	13	3.87	FO	11	0	0	3	3	0	2.50	OO	13.5
9. Employs non-traditional assessment techniques like portfolio, journals, rubrics , etc.	168	98	54	11	13	4.15	FO	3	1	1	3	1	0	3.33	OO	11
10. Gives assignment with clear instructions	187	101	41	11	4	4.33	FO	1	2	3	1	0	0	4.17	FO	3.5
11. Directions are incomplete and vague	91	100	77	42	34	3.50	FO	15	0	0	0	3	3	1.50	OcO	15
12. Unable to foresee and resolve potential difficulties	97	126	82	21	18	3.76	FO	13	0	0	3	3	0	2.50	OO	13.5
13. Selects and utilizes appropriate instructional materials	125	120	73	22	4	3.99	FO	8.5	0	2	4	0	0	3.33	OO	11
14. Presents information clearly and simple	163	101	50	17	13	4.12	FO	4	2	4	0	0	0	4.33	FO	2
15. Uses interactive and collaborative approach (Round Robin, Corners, Think-Pair-Share, Jigsaw, Coop, etc..)	95	122	73	38	16	3.70	FO	14	0	2	4	0	0	3.33	OO	11
AVERAGE WEIGHTED MEAN						3.97	FO		AVERAGE WEIGHTED MEAN					3.47	OO	

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Inter 57 of computed mean:

4.50 – 5.00 - Consistently Observed (CO)

2.50 – 3.49 - Often Observed (OO)

3.50 – 4.49 -Frequently Observed (FO)

1.50 – 2.49- Occasionally Observed (OcO)

1.00 – 1.49- Rarely Observed (RO)

Table 11

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Classroom Management and Organization

STATEMENTS	STUDENTS								ADMINISTRATOR							
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					(W m)	V I	R
	5	4	3	2	1				5	4	3	2	1			
1. Monitors the whole classroom	188	89	37	13	17	4.22	FO	1	2	3	1	0	0	4.17	FO	1
2. Starts a lesson on time	158	102	61	16	7	4.13	FO	2	0	2	4	0	0	3.33	OO	6.5
3. Apply rules always and fairly	139	118	59	21	7	4.05	FO	3.5	0	4	2	0	0	3.67	FO	3
4. Keeps students on- task	155	87	58	31	13	3.99	FO	5	1	4	1	0	0	4.00	FO	2
5. Criticizes students who give incorrect answers	121	111	57	29	26	3.79	FO	9.5	0	0	0	2	4	1.33	RO	10
6. Specifies expectations for class behavior	138	110	61	18	17	3.97	FO	6	0	0	3	3	0	2.50	OO	9
7. Organizes and plans classroom procedure well	147	106	64	15	12	4.05	FO	3.5	0	1	5	0	0	3.17	OO	8
8. Sets realistic expectation in line with student abilities and behaviors	131	115	55	32	11	3.94	FO	7	0	3	3	0	0	3.50	FO	4.5
9. Reinforces desirable behavior thru appropriate ways	116	113	84	21	10	3.88	FO	8	0	3	3	0	0	3.50	FO	4.5
10. Displays students' work in the classroom	138	80	66	37	23	3.79	FO	9.5	0	2	4	0	0	3.33	OO	6.5
AVERAGE WEIGHTED MEAN						3.98	FO		AVERAGE WEIGHTED MEAN					3.25	OO	

Legend:

(Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean:

4.50 – 5.00 - Consistently Observed (CO)

3.50 – 4.49 -Frequently Observed (FO)

2.50 – 3.49 - Often Observed (OO)

1.50 – 2.49- Occasionally Observed (OcO)

1.00 – 1.49- Rarely Observed (RO)

Table 12

Level of Teaching Effectiveness of Grade Seven Mathematics Teachers in Terms of Teacher-students Rapport

STATEMENTS	STUDENTS								ADMINISTRATOR							
	Rating / frequency (f)					(W m)	VI	R	Rating / frequency (f)					W m	VI	R
	5	4	3	2	1				5	4	3	2	1			
1. Conveys genuine concern for student	176	104	43	11	10	4.24	FO	2	2	3	1	0	0	4.17	FO	3
2. Knows and uses student names	189	92	34	17	12	4.25	FO	1	5	1	0	0	0	4.83	CO	1
3. Guides students through errors	171	85	52	23	13	4.10	FO	4	0	5	1	0	0	3.83	FO	4.5
4. Commends effort and gives praise for work well done	139	125	48	25	7	4.06	FO	5	0	5	1	0	0	3.83	FO	4.5
5. Gives opportunities to students to participate in decision making	141	111	63	19	10	4.03	FO	7	0	0	0	6	0	2.00	OcO	10
6. Develops students confidence and self-esteem	139	117	59	22	7	4.04	FO	6	0	0	1	5	0	2.17	OcO	8
7. Helps pupils with personal as well as educational problems	136	114	58	24	12	3.98	FO	8	0	0	1	5	0	2.17	OcO	8
8. Establishes an environment of courtesy and respect	164	99	52	20	9	4.13	FO	3	0	0	1	5	0	2.17	OcO	8
9. Calls low achievers less often	103	130	70	23	18	3.81	FO	10	0	0	3	3	0	2.50	OO	6
10. Express warmth and affection toward the students	136	102	65	27	14	3.93	FO	9	2	4	0	0	0	4.33	FO	2
AVERAGE WEIGHTED MEAN						4.06	FO		AVERAGE WEIGHTED MEAN					3.20	OO	

Legend: (Wm)- Weighted Mean

(VI)- Verbal Interpretation

R- Rank

Interpretation of computed mean 4.50 – 5.00
 3.50 – 4.49 -Frequently Observed (FO)

- Consistently Observed (CO) 2.50 – 3.49 - Often Observed (OO)
 1.50 – 2.49- Occasionally Observed (OcO) 1.00 – 1.49- Rarely Observed (RO)

