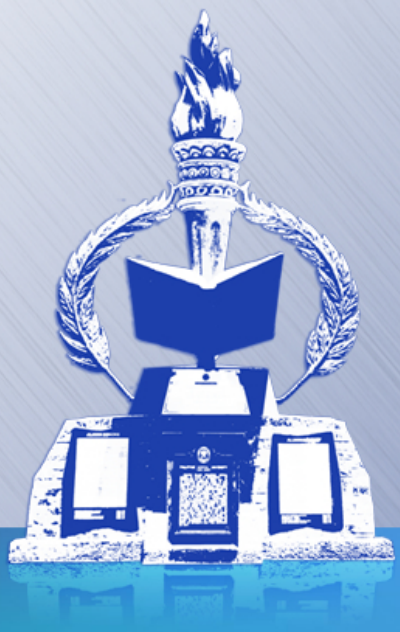
October 2014

A Fully - Automated Computerized Reading Program for Reading Rate and Comprehension Development of Grade Two Pupils

Lilia Reynaldo Hernandez
Philippine Normal University



A FULLY - AUTOMATED COMPUTERIZED READING PROGRAM FOR READING RATE AND COMPREHENSION DEVELOPMENT OF GRADE TWO PUPILS

A Seminar Paper
Presented to the College of Graduate Studies
and Teacher Education Research
Philippine Normal University
Manila

In Partial Fulfilment
of the Requirements for the Degree
Master of Arts in Teaching
English Language Arts

LILIA REYNALDO HERNANDEZ

October 2014

CERTIFICATE OF APPROVAL

In partial fulfillment of the requirements for the Degree of Masters of Arts in Teaching with specialization in English Language Arts, this seminar paper titled **"A Fully – Automated Computerized Reading Program for Reading Rate and Comprehension Development of Grade Two Pupils",** submitted by **LILIA REYNALDO HERNANDEZ,** is hereby recommended for acceptance.

_____ _____

Date **MERRY RUTH M. GUTIERREZ, Ph. D.**
Adviser

Accepted in partial fulfillment of the requirements for the Degree of Master of Arts in Teaching English Language Arts.

_____ _____

Date **ROSARITO T. SUATENGCO, Ph. D**
Program Coordinator

_____ _____

Date **ADONIS P.DAVID, Ph. D**
Director, Graduate Research Office

_____ _____

Date **ZENAIDA Q. REYES, Ph. D.**
Dean, College of Graduates Studies and Teacher Education Research

ACKNOWLEDGEMENT

A major research project like this can never be accomplished by the researcher alone. The contributions of several people, in so many touching ways have made this diligent search possible. Knowing the rationale behind it, the researcher would like to proffer her appreciation most especially to the following:

First and foremost, she wants to give her sincerest gratitude to the God Almighty, for the wisdom and knowledge He has unceasingly bestowed upon the researcher during this study, and without any question at all, His grace which He has bestowed on her from the beginning up to the present;

She would also like to state her honest and genuine appreciation to her adviser, Merry Ruth M. Gutierrez, Ph.D. for her forbearance, her indefatigable guidance and advocacy concerning this research project. Her cool expertise and assiduous motivation towards this paper work touched her to no end. Her course' professors in PNU from day one up to the present time are also recognized;.

To her brethren in their church, Bethany Baptist Church, Makati, she is extending her unending appreciation for the encouragement and prayers for her to finish this project, with special mention to her Pastor, Reverend Gerardo G. Nable, Mrs. Rowena Nable, Mrs. Mona Herrera,

Mrs. Victoria Villacorta, Dean Oliver Ventinilla, Mrs. Coty C. Cataluna, Mrs. Merci Cremat, and Mrs. Mary Lou C. Cabais;

Her family, her brethren, and her students in the LDWBC Colleges became her source of inspiration and a guiding influence as well;

It is the researcher's utmost desire to express in writing her greatest appreciation to the unconditional support, love, and understanding she has been receiving through the years from her husband, Mahal, who through thick and thin waters was with her side, pampering her for the betterment of her teaching proficiencies; her daughter Purple, her son, Louise Phillip, her daughter – in – law, Arlene, her grandchildren Luane Arwen, Blessy Gail, her brothers and sisters, nephews and nieces for being her pillar, her source of strength, comfort and joy. In the same manner, the researcher is dedicating with awe this labor of love in memory of her dearly beloved parents, Rose and Raffy Sr;

But above all, the researcher was able to reach the finish line by the grace and mercies of the Omnipotent God with that perspicuous promise from Philippians 4:13: "I can do all things through Christ that strengthens me."

I.r.f.

ABSTRACT

Researcher: **Lilia Reynaldo Hernandez**

Title: **A Fully – Automated Computerized Reading Program for Reading Rate and Comprehension Development of Grade Two Pupils**

Key Concepts: **Reading Rate, Comprehension Development, Automated Reading Program**

Degree: **Master of Arts in Teaching**

Specialization: **English Language Arts**

Adviser: **Merry Ruth M. Gutierrez, Ph.D.**

The main purpose of this study is to describe the technology-integrated reading program called the Readmaster Plus to develop the reading rate and comprehension levels of young readers. The descriptive method of research was employed in this study to find out the growth in these reading elements after months of being in the program. The Readmaster Program Report Charts and Progress Records showed how the pupils improved in terms of reading rate and comprehension, owing to the effectiveness of the program as it helped in the development of their reading proficiency. Majority of the respondents performed better in the 3rd quarter as compared to their performance in the 2nd quarter by performing several types of reading like that of independent reading, repeated reading, guided reading, and reading aloud. These were

performed by the pupils with the guidance and direction of the teacher regularly which aided the pupils to face the Readmaster Plus with ease and more confidence in performing their weekly reading sessions. The Grade 2 Level 1A pupils became more fluent readers in the 3rd quarter because their reading proficiency had improved. The program being found helpful in improving the rate and comprehension of young learners, it is therefore recommended to try out the Readmaster Program to other grade levels with attention on vocabulary, comprehension, and writing skills for literacy development.

Table of Contents

List of Figures

List of Tables

CHAPTER 1

THE PROBLEM AND ITS BACKGROUND

A. Introduction

Comprehension needs to be the end result of all reading, but more often than not teachers fall short to furnish their students with the kind of information that will enable them to read competently having sufficient knowledge, judgment, skill or strength.

Reading is a multifaceted, complex skill made by a number of psychological, physical, and social elements. Reading is not merely a

skill; it is an engagement of the person relating to or consisting of concepts and social world. These engagements, according to Kuhn (2003) are vital because they start “a positive spiral of reading, knowing, and sharing”.

One of the key elements in a quality education is reading proficiency, which the United Nations Educational Scientific and Cultural Organization (UNESCO 2005) has claimed to be one of the most important foundations of a basic education. Recent research studies have outlined the important aspects to teaching reading, which the National Reading Panel (2000) has highlighted as phonemic awareness, phonics instruction, comprehension, computer technology, and reading fluency.

Pupils learning to read and those who are struggling readers have a difficult time with decoding words. Before these pupils can read words, they have to be mindful of the letters and the sounds depicted by letters so that sounding out and blending of sounds can come to mind to pronounce words. As soon as the words are pronounced, the good reader notices whether the word as recognized makes sense in the sentence. The reading process can arouse competitive interest, thought, or action resulting in additional time spent in decoding and labored reading with less time for comprehension. Yet “when readers become more automatic at decoding, their reading become faster and they tend to chunk text into phrases as they read” (Nicholson,1991).

Marked by firm determination, an effective reader is able to interpret and decode the words on the written page easily and make sense or meaning of what is being read. These readers are said to have expanded fluency in reading.

Fluency is important because it is accurately related to comprehension. Fluency in reading means being able to read text precisely, quickly and with facial aspect or vocal intonation indicative of feeling. The goal of reading instruction is comprehension, and in order for students to focus on using strategies for comprehending or making meaning, readers should have the capability of identifying word spontaneously. According to the automaticity theory described by Laberge and Samuels (1976), some readers have difficulty comprehending because they spend too much time and attention on word identification, while fluent readers identify words automatically without paying much attention to decoding. Readers who read fluently and at ease are in command of their reading and, as a result, are able to concentrate on making meaning. They find it easier to comprehend text than poor decoders because effortless and smooth reading releases the energy necessary for pupils to utilize their comprehension strategies. In other words, if readers use all their energy for decoding words, they do not have enough energy left for thinking about the structure of text and using their comprehension strategies. Therefore, effective teachers of reading help their pupils become fluent

readers to make them better readers so that their attention can focus on comprehending.

One step reading teachers can take is to provide programs for addressing fluency, rate, and comprehension skills development among readers. Thus, the study explored the use of technology-based, fully-automated reading program for Grade 2 learners to address the growth of young readers in these skills.

B. Theoretical Framework

Reading Defined

Reading is the formation or blending into a functioning whole and understanding of meaning that results from the interaction between the illustration and grammar cues. It is offered by the material and the reader's background of experiences and prognostication of the written material's message. It is also a form of exchanging of information and opinions that takes place between the reader and the material itself.

Reading is a complex activity that involves both sensitive awareness and idea consisting of two related processes: word recognition and comprehension. Word recognition refers to the process

of comprehending how written symbols coincide to one's spoken language.

One basic reason of reading is to make sense of the text, to learn and engage in the central meaning and purpose that are articulated, and this can be facilitated by fluent reading as the judicious building block that prepares the reader for this competence.

As soon as the pupils comprehend and master the capacity to translate words, it is important for them to incorporate control of their reading fluency. Hence, they are able to concentrate on making meaning of the text.

Reading fluency is a major focus of instruction in second grade. It is of foremost importance when a reading teacher knows the strengths, needs, and reading levels of every pupil. Teachers need to listen to students read aloud to make judgments about their progress in reading fluency (Zutell & Rasinski, 1991). Systematic observation helps assess pupil progress and determine instructional needs. Teachers observing pupils' oral reading fluency should consider each critical aspect of fluent reading: rate and comprehension. Moreover, the measurement of pupils' word-reading rate can take numerous forms. Simply listening to oral and counting the number of errors per 100 words can provide invaluable information for the selection of appropriate text for various instructional purposes for an individual or group of pupils. Through careful examination of error patterns, a teacher can

determine which strategies the pupil is using and which strategies the student is failing to use. A good example to this is the observation of a pupil's attempts to figure out an unknown word might yield evidence of phonemic blending, guessing based on context, or a combination of decoding, and contextual analysis. These observations can provide information about areas in need of further instruction to improve word-reading accuracy.

Both the National Reading Panel (NICHD, 2000) and the National Research Council recommend that teachers assess fluency regularly (NICHD, 2000). Fluency assessments need to cover the component skills or indicators that provide a valid measure of fluency: accuracy of decoding and automaticity/rate of word recognition which have been shown to be both reliable and valid by Curriculum-Based Measurement (CBM) using the Oral Reading Fluency (ORF). The teacher listens to and/or tape-records the student reading a grade-level passage for one minute. The total number of words read, the number of uncorrected errors, and the number of words read correctly (WPM) are recorded. Rasinski (2003) adapted CBM, such that the component skills indicated above can be assessed from this one-minute recording and compared against target norms, provided by grade and time of testing.

Accuracy or percentage of words read correctly is calculated as words divided by the total number of words read (WCPM / total). Word-reading accuracy refers to the ability to recognize or decode words

correctly. Strong understanding of the alphabetic principle, the ability to blend sounds together (Heri & McCormick, 1998), and the knowledge of a large bank of high-frequency words are required for word-reading accuracy. Poor word - reading accuracy has obvious negative influences on reading comprehension and fluency. A reader who reads words incorrectly is unlikely to understand the author's intended message, and inaccurate word reading can lead to misinterpretations of the text. In the 2002 Oral Reading Fluency Study, conducted as part of the National Assessment of Educational Progress (NAEP), researchers found out that when pupils made errors that changed the meaning of the text, there was a more direct relationship to reading comprehension than the errors that did not result in a change of meaning (National Assessment Governing Board, 2002). They also noted that errors that do not affect meaning are rare.

Rate is simply the number of words read correctly in one minute (WCPM). There is an apparent link between reading rate and reading proficiency. Reading rate comprises both word - level automaticity and the speed and fluidity with which a reader moves through connected text. Automaticity is quick and effortless identification of words in or out of context (Ehri & MxCormick, 1998; as cited by Kuhn & Stahl, 2000). The automaticity with which a reader can decode or recognize words is almost as important as word - reading accuracy. It is not enough to get the word right if a great deal of cognitive effort is required to do so;

automaticity frees up cognitive resources that can be set apart for a special purpose to text comprehension (Laberge & Samuels, 1974).

A great number of educators quantify rate in terms of reading speed -- either the number of words read correctly per minute or the length of time it takes for a reader to complete a passage. Poor readers are often characterized by slow, laborious reading of connected text. Many fluency evaluations focus on increasing reading rate, because slow reading can result in weakened comprehension.. Students who read slowly often fail to complete their work, lose interest in school, and seldom read for pleasure.

When the ease of administration and interpretation are furnished, these assessments can be repeated throughout the school year using different grade-level passages and meeting the recommendation for regular fluency assessment.

When the basic reading skills have been acquired, pupils should be motivated to further cultivate their reading fluency, rate and comprehension, and it is the right time to creatively offer instruction in various modalities like the Readmaster Plus which serves as a valuable tool for building on and improving these skills.

The Readmaster Plus reading program is a delightful computerized reading performance that emphasizes stories from the

Christian Character Series (**CCS**). If properly administered, they provide the basic reading skills every learner demands.

This series has been used successfully by schools using the School of Tomorrow program for many years. The program provides a total of 432 character-building stories (36 each for levels 1 – 12) along with vocabulary and story previews, and a comprehension test for each story.

The Readmaster Plus requires an IBM PC/XT/AT compatible computer with an EGA, VGA, or SVGA color graphics card. The Readmaster software runs from a 3.5” or 5.25” floppy disk system and on any AcceleTUTOR CVI computer.

Furthermore, several computer monitor types may be used, including CGA, EGA, and SVGA. VGA and SVGA monitors provide better screen resolutions and such screen resolutions reduces eyestrain. A complete Readmaster Plus kit contains Diagnostic Disk, twelve Story Disks (Levels 1 – 12), and three complimentary Student Program Disks. One Student Program Disk is needed for each pupil per story level (or 36 story sessions). Each Student Program Disk is designed to contain one year’s worth of student data, as written again in the Readmaster User’s Manual, (1992).

This fully automated reading program helps to increase comprehension, build vocabulary, accumulate reading rate, and instil

Biblical values. It brings into action a word power vocabulary of over 4,000 words. Diagnostic program is given to the pupils individually to prescribe their correct, initial reading level and speed. The assessment used is the Readmaster Plus, a computerized version that replaces the Reading Tutor machine with a fully automated, computerized reading program. The Readmaster Plus while providing a more efficient system, retains the excellent stories from the previous program used by the school. Although it is intended to increase the learner's reading speed, vocabulary and comprehension, a side benefit of using Readmaster Plus is increased computer literacy for learners.

From these theories, the researcher was able to derive the following conceptual framework as shown in Figure 1 below.

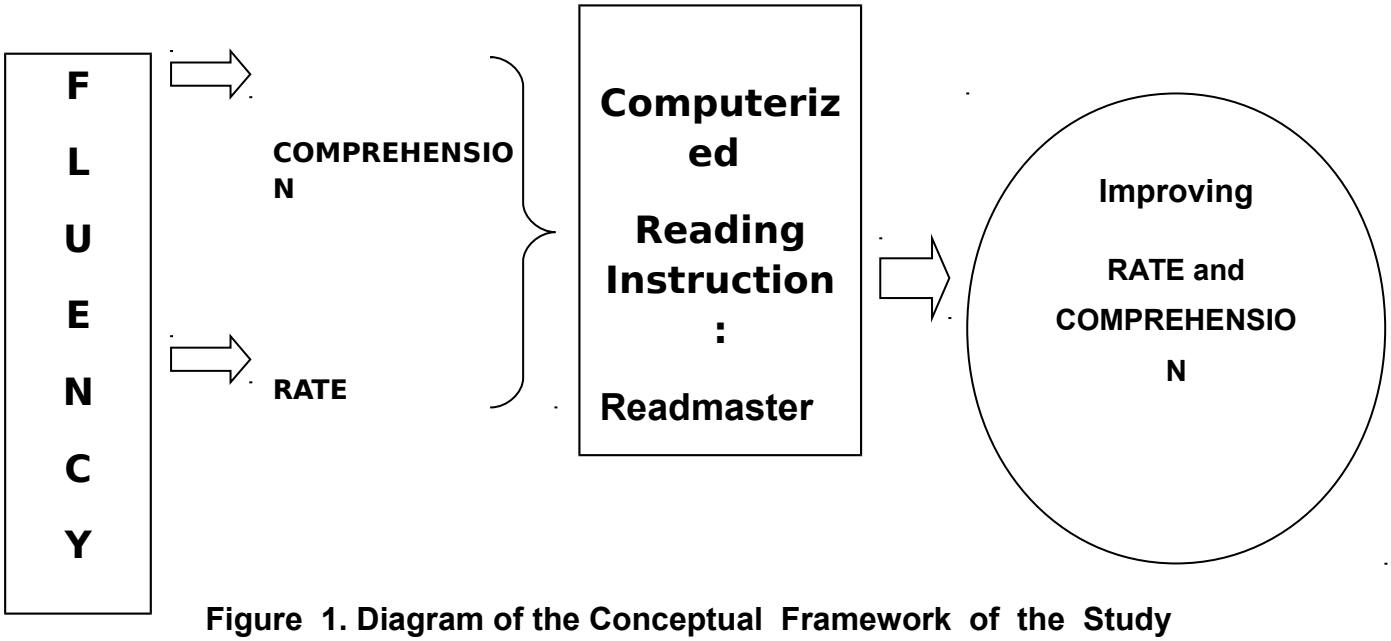


Figure 1. Diagram of the Conceptual Framework of the Study

The figure shows what fluency requires- skills in comprehension and reading rate, which when established in the beginning level, should be honed

further by implementing creative program delivery like the use of the Readmaster Plus Reading Instruction Program. It is believed to have a direct link to improving these skills. The Readmaster Plus is designed to assist the students in two important learning processes, with the goal of gradually increasing reading rate without sacrificing comprehension.

C. Statement of Objectives

The purpose of the study is to provide reading instruction for the reading rate and comprehension improvement through the Readmaster Plus reading program of the grade 2 pupils of Bethany Baptist Academy, located at Dian St., corner Emilia St., Barangay Palanan, Makati City.

Specifically, the study sought to:

1. Assess the reading rate and comprehension development of grade 2 pupils;
2. Implement a developmental reading program for reading rate and comprehension improvement of the target learners;
3. Evaluate the reading rate and comprehension level of the target learners after the reading program.

D. Significance of the Study

The result of the investigation will be of help to the following stakeholders:

School Administrator. This study could guide them to implem50

ent the reading program for the pupils not only for developmental but also for intervention instruction for young learners.

Teachers. Likewise, this study will provide the teachers important information regarding the reading difficulties of their pupils. The data will serve as the basis in selecting instructional curriculum materials in reading suited to the levels of their pupils.

Reading Specialist. This study will make the reading specialist realize the need of an intervention program in helping pupils with reading difficulties, and consequently be motivated to undergo training for personal and professional growth. The result of this research will likewise help find out what other possible solutions are best to address the existing problems regarding reading difficulties.

Parents. The study will help the parents find out the placement of their children in terms of their reading ability. They will know what to expect among their children in relation to their reading fluency skills and serve as the schools' partners in implementing the program for their children.

Researchers. The study gives future research directions as to the kind of reading program to plan for learners, the possible reading strategies developed in learning from computer-aided modality, and various ways of engaging with text types and structures.

E. Scope and Delimitation

This study had only thirteen (13) participants from grade 2 Level 1A pupils of Bethany Baptist Academy using a fully automated, computerized reading program . Diagnostic program is given to the pupils individually to prescribe their correct, initial reading level and speed. The assessment used is the Readmaster Plus, a computerized version that replaces the Reading Tutor machine with a fully automated, computerized reading program. The Readmaster Plus while providing a more efficient system, retains the excellent stories from the previous program used by the school.

When the basic reading skills have been acquired, pupils should be motivated to further cultivate their reading fluency, rate and comprehension. Readmaster Plus is a valuable tool for building these skills.

F. Definition of Terms

The following terms are for further understanding of the study:

Automaticity. It refers to the word recognition and the ability to quickly recognize words automatically, with little cognitive effort or attention.

Composite Reading Rate. It refers to the number of words correctly read per minute (w.p.m.) while maintaining good comprehension.

Comprehension. It refers to the process of constructing meaning through interaction between the reader and the text.

Elapsed Time. It refers to the time required for the student to complete all the areas including the Vocabulary Preview through the Comprehension.

Frustration Reading Level. It refers to the level at which a text is so difficult that a child cannot read it, even with help from the teacher.

Independent Reading Level. It refers to the level at which a student can read a text without assistance because it appears easy and manageable.

Instructional Reading Level. It refers to the level at which a child can read a text with the help or assistance offered by a teacher.

Reading Fluency. It refers to the ability to read text accurately and quickly with appropriate rate and smooth, fluid delivery.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter presents an overview of previous work on related topics which have direct bearing on this study, and provides the necessary background for the purpose of the research.

Reading

Reading is a process in which readers create meaning or develop an explanation. It is a key to a wealth of knowledge and experience that links people in a way that extends to distant environs and distant times. It also provides experience by which an individual may expand his horizon of knowledge. Throughout the act of reading, the meaning does not go from the page to readers. Rather, it is a complex concession between the text and readers that is shaped by several components: readers' knowledge about the topic; their purpose for reading; how closely the language matches the language used in the texts; and readers' expectations about reading based on their previous experiences. The act of reading is facilitated and is necessitated by readers' fluency.

The interest in reading fluency emerged as a result of the work by Samuels and LaBerge (1974) in their work on automatic information processing. "According to automaticity theory, the fluent reader decodes texts automatically, that is without attention, thus leaving attention free to be used for comprehension" (Samuels, 1997). These researchers speculated that emerging readers focus on the decoding of words and

thus are limited in their ability to make meaning with the text. Their work outlined the sequence of the beginning reader and the stages of development required for word recognition. The beginning reader is non-automatic and allocated little attention to comprehension and doesn't have the ability to comprehend all of what the pupil reads. The most highly complicated stage of fluency development according to Samuels is the automatic stage. In this stage the reader can decode words automatically without effort and may read faster that he or she speaks using expression and demonstrates comprehension of the text.

Using this theory of automaticity, Samuels (1997) developed a teaching method for teachers to use in the classroom with emerging readers to promote reading fluency. "Teachers can do two things to help students develop automaticity in word recognition. First, they can give instruction on how to recognize words at the accuracy level. Second, they can provide the time and the motivation so that the students will practice these word recognition skills and will become automatic readers" (Samuels, 1997).

The repeated reading technique has many different approaches that vary in levels of support and emphasis on building speed. Repeated readings emphasize practice as a way of working on all of the areas of reading fluency ---- **rate and comprehension** and is one of the most-studied methods for increasing reading fluency (Meyer &

Felton, 1999; as cited by Kuhn & Stahl, 2000; and touched by NICHD, 2000).

It is pondered for readers to have the additional cognitive capacity that comes from automatic word decoding and they need also to functionally use that capacity to make sense of the text. Readers have had the experience of accurately and automatically decoding words while thinking about something else and, as a result, failed to understand the passage.

This is where fluency is emphasized as directly connected to comprehension when readers entrench appropriate volume, tone, emphasis, phrasing, and other elements in oral expression. These elements are giving evidence of actively interpreting or constructing meaning from the topic. Just as fluent musicians interpret or construct meaning from a musical score through phrasing, emphasis, and variations in tone and volume. Fluent readers use cognitive resources to construct meaning through expressive interpretation of the text.

Comprehension

Effective reading is reading with speed and comprehension. To achieve reading speed one must develop skills related to eye

movement and visual discrimination. Studies have shown that a reader's rate of reading depends to a great extent on the number of fixations that his/her eyes make as they move across a page. Reading is a process in which readers create meaning or develop an interpretation. Whatever the motivation, whatever the purpose, reading implies comprehension. An individual must understand what s/he reads to accomplish any purpose except to waste time. Since before the turn of the century, educators and psychologists have noted the importance of comprehension as a part of reading and have tried to understand what really happens when a reader comprehends.

Comprehension is a process by which the reader constructs or assigns meaning by interacting with the text. Reading and writing are both constructive processes that are mutually supportive (Pearson & Tierney, 1992). The understanding readers achieved during reading comes from their prior knowledge, experiences that are triggered as they identify the author's words, sentences, and paragraphs. Although readers need not be able to orally translate every word on a page, they must be able to use the diversity of a central meaning or purpose provided in printed text to decode words. The interaction, or transaction, between the reader and the text is the foundation of comprehension.

Comprehension has often been major concern of teachers in the classroom. Many students achieve accuracy in recognition and pronunciation, but few succeed in comprehension. To comprehend

means to understand the meanings not only of single words and sentences but also of the interrelationships among sentences in a discourse. It implies the ability to summarize, outline, and organize concepts. It also involves a full grasp of the author's style and purpose and the features of the local setting against which a story unfolds.

Comprehension can also be considered as a strategic process in which readers adjust their reading to serve their purpose and the type of text they are reading. (Anderson, Hiebert, Scott & Wilkinson, 1985). Both processes, constructing meaning and strategic adjustment, operate simultaneously. Strategic readers also able to monitor their thinking while reading. Each time you read, you have a goal to achieve. If you are reading for fun and enjoyment, you will read in a different manner than if you are reading to study for a test or to follow the instructions for putting a puzzle together. Strategic readers are also able to adapt their reading to the type of topic at hand.

Reading is the act or result of analysing the mutual relations of words in a sentence. The inherent effect of reading is comprehension because without understanding, there is no reading. Based on the studies of Don Holdaway, (as cited by Fountas and Pinnel, 2001) "Reading words without understanding is a string of meaningless noise." Everything about reading is aimed toward making meanings that are inspired with active curiosity, passion and satisfaction. One thing to discern is that comprehension is not something that happens right after

reading. Comprehension is to form or have in mind what we do before, during, and after reading.

Effective comprehenders are able to identify words automatically (Adams, 1990). However, they do not have to identify every word or know the meaning of every word in a text to comprehend it. In encapsulating the research on how many unknown words a student can handle in a text, Nagy (1988) points out that readers may be able to "bear the text in which as many as 15% of the words are not fully known." He goes on to infer that "students do not have to know all of the words in a text to read it with a high level of comprehension".

Reading Rate

When a group of students is observed as "reading well", it does not mean that they read everything at the same pace with the same technique. Reading rate is how quickly students read a peculiar reading passage at their level in a given time. Speed or reading rate is generally measured in words per minute (WPM) or words correct per minute (WCPM). Maintaining a smooth, conversational pace contributes to good comprehension of the text. Efficient readers adjust rate and approach to reading within a given selection and for various kinds of reading materials. The rate may vary from under fifty to several thousand words per minute. Striving for maximum comprehension is a

necessary factor in achieving reading flexibility, since a student cannot read faster than ideas can be comprehended.

An effective rate is achieved when the reader can employ a maximum unforced speed and obtain the desired meaning from the content.

The conclusions of several studies suggest that reading flexibility consists of many factors rather than one. The flexible readers choose reading rate according to (1) the purpose for which the material is being read; (2) ability to read and comprehend the materials; (3) the complexity, content, and style of the text; and (4) his background experiences and interests in the subject. Attaining efficiency in comprehension requires a flexible approach to rate adjustment, rather than speed (Harris, 1968). An investigation done in the seventies, for example, was concerned by the eye movements made by readers as they read to answer questions. The findings showed that more visual fixations occur and the reading time is longer than when the questions are placed after paragraph than when they are placed before them. The researchers decided that reading is more efficient when readers view questions before reading paragraphs. Hence, the change or adjustment in rate was the consequence rather than a cause of flexibility.

According to Fountas and Pinnell (2001), rate of reading has a great deal to do with anticipating meaning. When students read rapidly ,

they think about what might come next. They will confirm it using visual information. They don't just read words as secluded units. To establish a good reading rate, learners must comprehend what they are reading. The ability to rapidly perceive print information is another factor affecting the rate of reading. If a selected topic has many words students do not know, their reading will slow down. Automatic, quick word recognition permits students to think about the meaning, which in turn cultivates fluency. Fountas and Pinnel (2001) support the concept that when students read a passage aloud more than once, their reading is more free-flowing, largely accurate, and meaningfully phrased. Reading rate furnishes the capability of determining students' level of spontaneous reading. The theory is that rapid reading is a reflection of automaticity in word recognition.

Fluency in Reading

The ability to read words accurately, rapidly, and automatically is what reading fluency is. Students who read fluently are better able to understand what they read because they can identify words easily (Laberge & Samuels, 1976; Perfitti, 1985; and Stanovich, 1986). Students who are not fluent readers often read hesitantly and with great effort. Less competent readers spent too much mental energy in identifying words, leaving little energy to focus on comprehension. Readers do not have unlimited amount of mental energy to use when

they read, and they cannot focus on both word identification and comprehension at the same time. So, as students become fluent readers, they use less energy for word identification and focus more energy on comprehending what they read.

Proffered as an essential element of every reading performance especially for pupils who struggle in reading, fluency in reading is gaining new recognition. It is one of the defining characteristics of good readers, and a lack of fluency is a common characteristics of poor readers. Differences in reading fluency not only distinguish good readers from poor, but a lack of reading fluency is also a reliable predictor of reading comprehension problems (Stanovich, 1991). When the struggling readers learn sound – symbol relationships through intervention and become accurate decoders, their lack of fluency emerges as the next hurdle they face on their way to reading proficiency). This lack of fluent reading is a problem for poor readers because they tend to read in a laboured, disconnected fashion with a focus on decoding at the word level that makes comprehension of the text strenuous, if not enormously gruelling.

Fountas and Pinnell (2001) state that fluency results from complex interrelationship of processes that is more than the sum of the component parts such as: using the 'feed forward" mechanisms of meaning and syntax to anticipate the text, reading at a good rate of speed, recognizing words rapidly and automatically, decoding words

rapidly and apparently effortlessly, attending to language and noticing punctuation to produce accurate phrasing, changing pitch or voice to reflect punctuation, and slowing down to problem-solving when needed but speeding up again for reading that is mostly smooth and expressive. They added that, “fluency relates significantly to comprehension. Results of the NAEP Integrated Reading Performance Record assessment for fourth graders suggest that there is high correlation between accuracy, rate, fluency, and scores on comprehension (Pinnell et al., 1995; Fountas and Pinnell, 2001). The fluent reader is not only swift but resilient. Ultimate attention is given to meaning and phrasing because of the mutual relationship of the processes above.

Students need many opportunities to practice reading in order to develop fluency, and easy-to-read books are useful in developing reading fluency. Many easy-reader books written at the first and second-grade reading levels are available, such as *Wish for a Fish*, *The Hen on the Box, The Lamp on the Mat* and many more. The type of reading that pupils use depends on the teacher’s purpose, the availability of reading materials, and pupil’s reading proficiencies.

One type of reading that elementary teachers purposely plan as one of their instructional activities is the **guided reading**, Here the pupils and teachers read, think, and talk their way through the reading of a text together. This approach is “guided” in that the teacher directs

the pupil's reading by asking them to make predictions and by focusing on vocabulary words, comprehension, and the reading skills and strategies. Teachers usually guide students to make predictions, read and discuss a section of the text and then repeat the process. As the pupils talk about their reading, teachers gauge pupil's comprehension or understanding of their reading. This approach can be used when pupils are reading individual copies of a book or when teachers read aloud to pupils. It can also be used with the whole class or with small groups of pupils. One good example of this is the Directed Reading – Thinking Activity (**DRTA**).

Another type of reading that contributes much in using reading as learning tool is the **independent reading** where students are in charge of their own reading (Hornsby, Sukarna, & Parry, 1986). Learners read books by themselves and at their own pace. Sometimes teachers ask students to read particular types of books but it is important that they spend time looking at books and thinking about literature regardless of whether they can read every word in a book. At the primary-grade level, students may read independently for only 10 to 20 minutes each day.

The reading aloud is not an "extra" or a reward for good behavior, but an important component of the literacy program. Teachers read aloud to students at all grade levels from kindergarten through eighth grade, not just to young children who do not read independently

yet. When teachers read aloud they model what good readers do and how good readers use reading strategies. Reading aloud also provides a chance for advancement for teachers to think aloud about their use of reading strategies and the opportunity for the teachers to model fluent reading.

When reading aloud, fluent readers sound natural. Their reading is accurate, quick, and uses proper expression. In contrast, dysfluent readers may make many errors. Their reading may be slow and laborious as they employ strategies to identify words, and their reading may lack expression, instead being monotone and unnatural sounding. Based on these observable differences, fluency of oral reading can be easily assessed within 60 seconds (Rasinski, 2004). Though most easily assessed orally, reading fluency is not solely an oral skill. Reading fluency is defined as the ability to decode and comprehend text at the same time (NICHD, 2000; as cited by Samuels, 2006). This definition of reading fluency has been expanded from earlier conceptualizations, which focused only on word recognition (Harris & Hodges, 1995) and those that focused solely on the components or indicators of fluency without attention to the larger concept of fluency.

The speed with which text is translated into spoken language has been identified as a major component of reading proficiency (Allington, 1983; as cited by Adams, 1990). Many struggling readers may not gain reading fluency incidentally or automatically. In contrast to

skilled readers, struggling readers often need direct instruction in how to read fluently and sufficient opportunities for intense, fluency-focused practice incorporated into their reading program. The National Research Council recommended that reading fluency be regularly assessed in the classroom and effective instruction be provided when dysfluent reading is detected. Despite the importance of reading fluency and the need for direct teaching, it is often neglected in reading instructional programs (Allington, 1983). Teachers who are concerned about meeting the needs of all students in their classrooms should consider whether they know who their dysfluent readers are and what types of instruction they plan to provide for those readers.

The goal of reading instruction is comprehension, and in order for students to focus on using strategies for comprehending or making meaning, they must become fluent readers, capable of identifying words automatically. Reading has been described as involving two components: decoding and comprehension. As stated by Adams (1990), neither component is equivalent to reading by itself, and both are necessary for reading.

Reading Assessment Through Diagnostic Tests

Assessment is more than testing; it is a fundamental part of teaching and learning (Goodman, Goodman, & Hood, 1989). Teachers learn about their pupils, about themselves as teachers, and about the

upshot of instructional programs through assessment. In addition, pupils learn about themselves as learners and about their learning.

Traditional assessment reflects archaic views of how students learn to read. Scholastic assessment is beginning to catch up with the dramatic changes in teaching that have occurred over the past 20 years. Pupils learn best when they learn developed or acquired abilities and methods in the context of real reading. These revisions affect the way teachers assess pupils. No longer does it seem sufficient to organize pupils' vocabulary exercises or ask them to answer multiple - choice comprehension questions on reading passages that have no point beyond the exercise. Teachers need assessment information that tells about the complex achievements that pupils are making in real reading.

In as much as the goal of reading is comprehension, it is extremely important that teachers assess whether or not students understand what they are reading. Nevertheless, because comprehension is an invisible process, teachers must find ways to examine what students say and write about their reading to see how well they comprehend (Tompkins, 1997). She further formulated that the traditional way to check on pupils' comprehension is to ask learner must-have basic questions, but there are more authentic ways to assess comprehension.

According to Anderson (2000), there are three fundamental goals of reading assessment - to diagnose good reading behaviors, determine a pupil's reading level, and document a pupil's development. Every learner must have basic reading adeptness. These skills are inherent to accomplishment in this information age. In whatever manner, reading proficiency is not accomplished by accident. It necessitates effort, discipline, and the right tools.

One naturally- used tool in assessing reading or comprehension level is the informal reading inventory (IRI). It is a publicly-utilized instrument that consists of an assortment of graded passages at different grade levels. Each approach is followed by questions to ask the learner . **IRI** grade levels generally span preprimer, primer, and first through sixth or eight grades. All **IRI**s give detailed directions for recording and scoring student's responses (Anderson, 2000).

The goal of an Informal reading Inventory (**IRI**) is to furnish greater insight into a student's reading level, deciding whether a learner can read and understand passages at higher and lower levels of difficulty than the classroom materials. It does not provide a particular diagnosis; instead, it gives the "normal" classroom teacher greater understanding of a child's abilities, which in turn may direct to more precise instruction where their own goals have to be achieved (Rutledge, 1998).

The Philippine Informal Reading Inventory is one modification of **IRI**. It is adjusted in the context of **IRI** to help teachers decide the reading abilities and conditions of the learners in order to have bases for planning their classroom instruction. It is an accurate reading assessment tool that seeks to evaluate the reading proficiency level of public elementary pupils nationwide. As an informal measure that determines the children's use of comprehension, vocabulary and word identification strategies within the context of the story, passage or poem, it provides teachers with both quantitative and qualitative information about the children's reading capabilities (http://bee-deped.tripod.com/id2.html.7)

Mckenna and Stahl (2009) identified three comprehension levels conforming to the informal reading inventory. The *Independent Level* is the level at which a pupil can read a text without assistance. This involves the reader's competence to both decode the text and understand what he is reading. In order to build effortlessly smooth and rapid reading, children need to read a text at their independent level. A topic is considered to be at the learner's independent level if the learner is able to read the text with 95% accuracy or higher and understands the text with at least 90% accuracy during assessment. Meanwhile, the *Instructional Level* is the level at which a learner can read a text with the assistance of a teacher. The reader can work through the text, but it will present a stimulating and interesting task or problem that will require him to learn new problem-solving strategies. A

text is classified to be at a learner's instructional level if the learner is able to read the text with at least 90% accuracy and understands the text with at least 75% accuracy. On the other hand, the *Frustration Level* is the level at which a text is so difficult that a learner cannot read it, even with assistance, and s/he may evoke a negative feeling and lose interest from reading the text. If a learner is forced to read frustration-level texts, it will smother his/her fluency and cause agitation.

Readmaster Plus: A Fully Automated, Computerized Reading Program

For a number of years, schools and parents using materials published by Accelerated Christian Education, Inc., (A.C.E.) have incorporated several programs by Learning Systems, Inc., (LSI). These programs include: **The Christian Character Series** (CCS) for enhancing reading fluency, speed, rate and comprehension, **Audit** for building English skills, and **Zero-In Perception** for academic remediation, as drafted by the Readmaster User's Manual (1992).

Readmaster Plus replaces the Reading Tutor machine with a fully automated, computerized reading program. This Readmaster Plus, while providing a more efficient system, reserves the excellent stories from the CCS program. To further boost its efficacy, the computerized system offers an on-board reading diagnostic feature to assist the pupil in two

important learning processes: (1) Comprehension Mastery, and (2) Reading Fluency. The goal of this program is to gradually increase the pupil's reading fluency without sacrificing the comprehension. Each Pupil Program disk is designed to contain complete lessons for the pupils' growth through the whole school year.

Students who are using the School of Tomorrow curriculum should complete the A B C's of ACE, and most of the first level PACES before being positioned in the Readmaster Plus system. When a pupil has finished the above – mentioned materials, the Diagnostic Program can now be utilized to determine the performance and the story levels. Supposing the pupil struggles considerably with the first three stories on level one, it would be best to wait a while before setting him/her up on the program.

As with any academic program, it is significant to remember that slower learners and pupils with learning difficulties need to have a closer supervision. Nonetheless, the Readmaster Plus system can help to make these pupils proficient and effective readers.

Diagnosing

The first time the pupils enter Readmaster Plus, they will be placed into the diagnostic application in order to determine their current reading rate. The pupils will follow the on-screen instruction to complete the story and comprehension test. If they score 80% or higher on the

test, the program will report their reading need to diagnose at a lower level.

The Diagnostic Program is designed to accurately place students in the Readmaster Plus program as it identifies the student's **Reading Performance Level** and **Reading Rate** (i.e., the number of words per minute, or w.p.m.).

Readmaster's Diagnostic Feature

The second attribute seen on the Main Menu is the Diagnostic option. The Diagnostic Test area is the central and the essential part of the Diagnostic Program. The Diagnostic Test embodies the following items: The Student Information Screen, The Story Selection Screen, The Vocabulary Preview, The Story Reading Session, The Comprehension Test Report, and the Comprehension Test Review.

The Readmaster User's Manual (1992, p. 12) pointed out that this Diagnostic Program features 36 sample stories, three stories from each of the levels 1 through 12. The stories featured are numbered according to the grade level and story number pertinent to Readmaster's Story disk series. The first two digits represent the grade level, and the last two digits represent the story number. (Please see Appendix for the complete list of stories).

.

The Diagnostic Program Report

Once the Comprehension Test was fully carried out, the Readmaster Plus fosters to the Diagnostic Program Report screen. The following information appears on the report. First, we have The Full Name and this is the field that comprises the pupil's complete name. The field Date shows the date on which the student listed as a user of the Diagnostic Program. With Story Number, this field includes the current story number. For example, it might record "05-25," which depicts the first story in level 5. At the Session Start Time, the session time starts when the student begins the Vocabulary Preview. Then there is the Session Finish Time, wherein the session time ends when the pupil finalizes the Comprehension Test. At the Elapsed Time, the session elapsed time is computed by subtracting the session start time from the session finish time. It characterizes the time needed for the student Comprehension Test. The field Words refers to the Diagnostic Program that spontaneously counts the total number of words in each chosen story. The succeeding term with important information is Reading Elapsed Time. Here the program measures the time required for the students to complete the reading selection. Comparing this time with the Session Elapsed Time allows the supervisor to determine how much time was actually spent on the reading exercise. The last field with significant information is the Reading Rate. It is the measurement of how many words per minute (w.p.m.) the pupil read during the reading exercise. The Reading Rate is computed by dividing the total

number of words in the selected story by the Reading Elapsed Time. It is in the field of Comprehension Test where its percentage scored contains. Whereas the tests for levels 3 through 12 contain 10 questions each, with each question worth 10 points. Here in this field will regulate the whole number scores such as 80%, 90%, and 100%. An 80% score is cogitated to be the minimum passing score.

Lastly, we have the Composite Reading Rate which is the number of words read per minute (w.p.m.) while maintaining 100% comprehension. A good example to this, is a pupil reading 100 words per minute with 100% understanding would have a Composite Reading Rate of w.p.m.. If the said pupil achieved a Comprehension Test score of 90%, his Composite Reading Rate would be 90 w.p.m. If he had attained 80% on the Comprehension Test, his Composite Reading Rate would then be 80 w.p.m.

Once the Diagnostic Program results are known, the supervisor is required to decide an instruction for the pupil. If the pupil passes the Diagnostic Test with a Composite Reading Rate of 80% or much higher, the results may suggest that the pupil should start the Readmaster's Pupil Program at the tested level. Nonetheless, if the pupil scores an 80% Composite Reading Rate, he is required to be tested again using story #13, or probably story #25 on the same rank to firmly establish he is within the correct rank for his reading competence.

Whether the pupil achieves a Composite Reading Rate of less than 80%, the reading level may be too difficult. The supervisor should analyse the level of the pupil again using the FIRST STORY in the NEXT LOWER LEVEL. If the pupil scores an 80% or higher Composite Reading Rate on his second Diagnostic Test, the supervisor should continue to test with story #13, and perhaps story #25, of the same rank to make sure the pupil is at his correct reading level.

If after testing a second time (with the first story on the next lower level), and the pupil fails to achieve a Composite Reading Rate of 80%, follow the same procedure and drop back additional levels, as needful, until an applicable reading level is firmly decided.

CHAPTER III

RESEARCH METHODOLOGY

This chapter presents the method and procedure used in the study. It describes the research design, the participants involved, the

research instrument, the system used in the study, the methods / procedures as well as the gathering and analysis of data.

Research Design

The descriptive method of research was employed in this study. According to Gay (1992), descriptive research determines and reports the way things are. It involves the collection of data in order to test the assumption made especially in order to test its logical or empirical consequences or answer questions regarding the current situation of the participants in the study.

In this study, the researcher described the reading fluency, reading rate and comprehension levels of the grade 2 pupils in English through the use of the Readmaster Plus reading program.

Participants of the Study

The study was confined to one class of Grade 2 Level 1A pupils in Bethany Baptist Church Academy, Dian St., corner Emilia St., Barangay Palanan, Makati City. The class is composed of 13 pupils only, with 6 boys and 7 girls.

Research Instrument

The tool used to collect the needed data and information relevant to the study is the adoption of the Christian Character Series which is one of the programs by the Accelerated Christian Education to enhance reading speed and comprehension. The recording and the assessing / determining of the reading rate and comprehension of each pupil in their weekly reading sessions contributed to the data gathered by the researcher.

Research Locale

Bethany Baptist Academy, situated at Dian St., corner Emilia St, Barangay Palanan, Makati City was the locale of the study. It has an individualized curriculum, non-graded, and allows each pupil to work at his/her own level of achievement, which may vary from subject to subject.

Data Gathering Procedure

The researcher requested the permission of the Pastor of Bethany Baptist Church and the concurrent School Administrator of Bethany Baptist Church Academy, Reverend Gerardo G. Nable. The assistant school administrator, the reading supervisor of the Readmaster Plus and

the classroom supervisor / adviser of the Grade 2 Level 1A were informed through letters and were asked to supply Readmaster Progress Report Chart needed by the researcher. (Please see Appendix A).

.Readmaster Plus Procedures

Consequently, as stated in the Readmaster User's Manual (1992), the Readmaster Diagnostic program is enforced by the Reading Supervisor to prescribe the correct, initial reading level and speed. For most effective use, steps should be followed such as:

1. Diagnose a particular students.
2. Use the "Story Number and Grade Level Chart" on this page to choose beginning point for diagnosing student. Two numbers on left suggest grade level, and two numbers on the right point out the story numbers within the grade level.
3. When results from story # 1 are known, decide the direction to take. If his Composite Reading Score was 80% or better, it may indicate student is on correct level. For a better result, administer story # 13, and even # 25. If scores less than 80% on story # 1, give the student story # 1 from the next lower level. If he scores 80% or better,

give him story # 13 and # 25 to make certain he is at his correct reading level.

4. If scores are still under 80%, follow the same procedures and decline additional grades, as necessary, until an appropriate reading level is determined.

5. Students returning the next school year simply continue in Readmaster Plus from where they stopped the previous year.

Apart from the steps and procedures mentioned above, the researcher gathered necessary emergent literary reading skills for the study.

The researcher provided each pupil one Readmaster Plus Progress Chart. It was used in the recording of each pupil's weekly reading session which was done during their 2nd quarter of this school year. Readmaster Plus program is designed to provide new story each week.

The researcher followed the exact procedure and was able to gather the essential data needed to justify the objectives of this study. The 2nd and 3rd quarter results in the weekly reading session were promptly entered in the Readmaster Plus Progress Chart.

Analysis of Data Gathered

The individual data gathered for several quarters of study was summarized and tabulated to show the scores of pupils in rate and comprehension. Once tabulated, the use of descriptive statistics like frequency, rank, and averaging generated results for analysis and interpretation.

Chapter IV
PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the analysis and interpretation of the gathered data that ultimately answered the inquiries of the study.

The computer-assisted reading instruction program called the Readmaster Plus was implemented with the Grade 2 pupils Level 1A of Bethany Baptist Academy to determine how it has facilitated the reading rate and comprehension skills of the pupils' reading fluency. A total of 13 pupils, 6 boys and 7 girls, participated in the study who underwent the program for two quarters.

Results of Reading Rate and Comprehension Level Assessment

The table illustrates the result of reading rate assessment done at the onset of the second quarter of school-year 2013 – 2014, middle of August, prior to the implementation of computer-aided developmental reading instruction which lasted until the second week of October 2013. . Although 13 pupils were supposed to be included, only 12 of them had results in the rate assessment.

Table 1. Reading Rate and Comprehension Level Assessment Results

Pupil Number	Reading Rate (in *wpm)	Comprehension Score	Comprehension Level
3	298	87.38	Instructional
4	705	82.22	Instructional
5	171	79.83	Frustration
6	96	91.00	Independent
9	394	87.50	Instructional
12	420	83.17	Instructional
13	203	90	Independent
16	122	83.3	Instructional
22	347	94.29	Independent
24	312	88.57	Instructional
30	153	85	Instructional
31	114	86.67	Instructional

*wpm- word per minute

Based on the assessment of the reading rates of the Grade 2 Level 1A, they all passed the cut-off score to continue their present level and story number. It means that as far as the fluency element of rate in reading is concerned, the 12 grade 2 pupils were within the standard for rate, and some were even performing better or above the cut-off number of words

for the grade level. Only pupil 1 got a wpm below 100, only 96 words, but this is still within the level. However, rate is only one factor to consider in fluency. Another to be looked into is the comprehension that goes with the rate, which other specialists consider as speed. Speed is not only concerned with wpm, but more importantly with the comprehension that should go hand in hand with it. Consequently, a balance view of fluency requires an inquiry into the level of comprehension, which the study had endeavoured to accomplish.

It can be observed that the reading level was focused more on giving higher weight on comprehension than on rate. For example, in spite of the faster rate of pupil 5 with 171 wpm compared with pupil 6 at 96 wpm, the former was in lower reading level, which was frustration because of the 79.83 score, than the latter, which was independent as indicated by the score of 91.

Two (2) pupils or 17% were in independent reading level, while nine 9 or 75% were in instructional level. One pupil or 8% was found in the frustration level despite the good rate in reading. Repeatedly, what matters in reading is not so much on rate as the speed, or that which considers both elements developing side by side.

Apparently, the young readers were performing according to the grade level expectation in reading, except for one which might need extra assistance other than the computer-aided reading instruction. Nevertheless, the Readmaster Plus program was still implemented to establish steady growth and constant reading practice for mastery of the fluency skills needed for academic reading in the latter years of the pupils' academic life.

Readmaster Plus Program Monitoring of Rate and Comprehension

The program was implemented from August to October where the pupils did the computer-aided reading once a week following the standard procedures stipulated in the manual. (Please see Appendix __ for the Program Description).

The data presented here starts form the initial assessment of the pupils' reading rate in second quarter, the weekly rates, and the final reading rate at the end of the third quarter in the Readmaster Plus program of the 13 participants. The data is shown to reflect the close monitoring of the skills development in fluency by looking at the rates achieved each time the pupils engaged in the reading of texts for quarter 1 and quarter 2.

It should be remembered that fluency is measured by combining the rate and comprehension scores, which the program calls the **Composite Reading Rate,** an aggregate score computed based on the number of words read per minute (w.p.m.) while maintaining 100% comprehension. In short, where the initial assessment separated these two elements for clear identification of possible difficulties with each, the monitoring computed these two as one connected element called fluency and labelled it as composite reading rate.

Shown in Table 2 is the Composite Reading Rate of each pupil for ten (10) weeks of the Readmaster Plus Program for Quarter 2.

Table 2. Results of Composite Reading Rate Monitoring (Quarter2)

Pupil Number	Composite Reading Rate (in %) in 10 weeks									
	week1	2	3	4	5	6	7	8	9	10
3	100	80	80	*R	80	80	100	100	-	(exam
4	80	100	80	80	80	80	80	80	-	week)
5	80	80	80	R	80	80	-	-	-	
6	R	80	80	100	100	100	100	80	100	
9	80	80	80	100	80	100	100	80	-	
12	80	80	R	80	100	R	-	-	-	
13	100	100	80	80	80	100	80	80	100	
16	80	80	80	80	100	80	-	-	-	
22	100	80	80	100	100	100	100	-	-	
24	100	100	80	80	100	80	80	-	-	
29	100	80	R	100	80	80	-	-	-	
30	80	100	80	80	100	80	-	-	-	
31	R	R	R	R	R	-	-	-	-	

*R= retained

At the beginning of the program, it could be seen that two pupils were marked R meaning retained. As the program progressed, cases of R were also noticed, but Pupil 31 consistently had the R for all the selections. Meanwhile, others sporadically got it, specifically Pupils 3, 5, 6, and 12 on various text selections. The result seemed normal since readers' speed and comprehension tend to vary depending on the text and context factors. Unfortunately, Pupil 31 seemed to be struggling in performing the grade level reading demands, which could be calling for teacher's attention for other assistance aside from being in the Readmaster Program. It could be that the

pupil needs intervention program alongside the regular developmental instruction.

Table 3. Results of Composite Reading Rate Monitoring (Quarter 3)

Pupil Number	Composite Reading Rate in % for 10 weeks week1	2	3	4	5	6	7	8	9	10
3	80	R	80	100	80	80	100	100	100	(evaluation of rate in wpm)
4	80	80	100	80	80	80	80	100	100	
6	R	80	80	80	80	80	80	80	R	
9	80	100	100	80	80	R	80	80	-	
12	80	80	80	100	100	80	100	80	100	
13	80	80	80	100	80	100	80	80	80	
15	80	80	80	100	80	100	80	100	80	
16	100	100	100	100	80	80	80	100	100	
22	100	100	100	80	80	100	80	80	80	
24	R	80	100	100	80	100	100		-	
29	100	80	100	80	100	100	80	80	80	
30	80	100	100	100	80	80	80	100	80	
31	R	R	80	100	80	80	100	80	100	

*R= retained/remedial

Like the results observed in Quarter 2, the pupils' scores in the third quarter showed cases of R. For instance, Pupils 3, 9, and 24 had it once in different text selection, while Pupils 6 and 31 had R twice in different selections too. It appeared that the results were more positive in the third quarter since Pupil 31 earned better scores across text selections, except for the two which might be attributed to the type of text read and the content and concepts therein. Further, this observation could be confirmed by the improved scores of the pupils.

Evaluation Results of the Reading Rate and Comprehension Level

Table 4 reveals the pupils' evaluation results after more than two months of being in the Readmaster Plus program.

Table 4. Reading Rate and Comprehension Level Evaluation Results

Pupil Number	Reading Rate (in *wpm)	Comprehension Score (in %)	Comprehension Level
3	323	88.78	Instructional
4	715	86.70	Instructional
5	271	85.75	Instructional
6	101	80	Instructional
9	494	84.9	Instructional
12	437	88.89	Instructional
13	263	84.44	Instructional
16	147	93.33	Independent
22	369	86.67	Instructional
24	562	93.33	Independent
30	173	88.89	Instructional
31	139	88.89	Instructional

The reading rate scores of the pupils indicate that all of them could read faster at more than a hundred words per minute, a positive indication of improvement as they went through the reading program aided by computer. Likewise, the level showed the pupils were either in instruction or independent level, but none on frustration level. Eleven (11) pupils or 92% were now in instruction level and 1 or 8% was in independent level. Again, this data points to the idea that an improvement was made through constant practice of the reading skill, even when this was not as frequent as required for mastery.

Table 5. Comparison of Scores Before and After the Reading Program

Pupil Number	Reading Rate (in *wpm) Before Readmaster Plus	Reading Rate (in *wpm) After Readmaster Plus	Comprehension Score Before...	Comprehension Score After the Program
3	298	323	87.38	88.78
4	705	715	82.22	86.70
5	171	271	79.83	85.75
6	96	101	91.00	80
9	394	494	87.50	84.9
12	420	437	83.17	88.89
13	203	263	90	84.44
16	122	147	83.3	93.33
22	347	369	94.29	86.67
24	312	562	88.57	93.33
30	153	173	85	88.89
31	114	139	86.67	88.89

From the table can be noticed the fluency development in terms of rate and comprehension among the grade two pupils in two quarters of working in the computerized reading program called Readmaster Plus.

100% of the participants improved on the reading rate, where all of them could now read for more than 100 words a minute. Yet the same could not be said as regards comprehension; although many showed improvement, some appeared to decrease in this area. Pupils 3, 4, 5, 12, 16, 24, 30, and 31 manifested an increased comprehension score, accounting for 66.66% of the

pupil-participants. On the other hand, Pupils 6, 9, 13, and 22 decreased their score in comprehension, accounting for 33.33% of the pupil-participants. This case looks still within the normal phenomenon in reading attributable to the complex factors intertwined in the process, but perhaps in this case mostly caused by textual factors and mode of delivery of instruction. Some measures could have been done to be flexible in meeting the needs of those who seem not doing well on a case to case basis, such as individual follow-up through interview and scaffolding.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary of the efficacy of the Readmaster Plus Program where the components of reading proficiency are built in the system that gradually increased the reading rate/speed of the Grade 2 Level 1A pupils of Bethany Baptist Academy without sacrificing comprehension.

Findings

Through the data gathered from the instrument used, the researcher elicited the following findings:

1. Based on the pupil's Diagnostic Program Report, the Readmaster Progress Chart showed that grade two pupils were doing well in reading rate as they were within the expected grade reading level, but a few was struggling at the onset in relation to comprehension. Majority was within instruction level and some on independent level. A greater number of the

Grade 2 Level 1A pupils' rate and comprehension improved evidently, so much so that their reading rate, and comprehension increased apparently.

2. Majority of the pupils' reading rate and comprehension had improved a lot after two quarters of being in the program. The program impacted the reading rate more than the comprehension of the pupils.
3. The Readmaster Plus Reading Program seemed to have an influence on the development of reading rate, although its influence on comprehension needed further investigation.

Conclusions

A number of conclusions are drawn based on the findings of the study:

1. The computer- assisted reading system used by the pupils helped in the development of their reading proficiency and successfully determined their reading rate and comprehension.
2. Constant and regular practice of fluency skills on rate and comprehension, no matter how infrequent, aided the process toward mastery of the same. This helped the pupils by performing several types of reading like that of independent reading, repeated reading, guided reading and reading aloud, which made them face the Readmaster Plus with ease and more confidence in performing their weekly reading sessions. Consequently, they

appeared to read rapidly and automatically through the Readmaster Plus reading program.

3. The use of technology in developmental reading instruction facilitated the acquisition of fluency skills required for learning content area subjects in the school.

Recommendations

On the basis of the above-mentioned conclusions, the succeeding recommendations are being proffered:

1. As with any academic program, it is significant that slower learners with reading difficulties require closer supervision in school and in the home.

2. Regular integration of several types of reading such as independent reading, repeated reading, guided reading and reading aloud to enhance more effective reading program be included and done as often as time allows for better results.

3. Parents' involvement is considerably needed because though some students work much better in a classroom or learning center environment, others work better when they are motivated and taught by their parents at home.

4. Future researches can be conducted by having an interview among children who still struggle despite the program, blending this with other

pleasure reading activities, and close monitoring of text and reader interaction for a more personalized assistance to learners.

REFERENCES

Adams, M. J. (1990). Beginning to read. Thinking and learning about print. Cambridge, MA: MIT Press.

Allington, R. L., (1983). Fluency: The neglected reading goal. The Reading Teacher, 36, 556-561.

Allington, R. L. (1994). "The reading instruction provided readers of differing reading ability", Elementary School Journal.

Anderson, T. H., (1984). Handbook of reading research. New York: Longman.

Anderson, R. C., Hiebert, E. H., Scott, J. A., & Wilkinson, L. A. G. (1985). Becoming a nation of readers. Washington, DC: National Institute of Education.

Ehri McCormick (1998). Reading fluency assessment and Instruction: What, why and how?

Fountas, I. C. & Pinnelli, G. S. (2001). The reading teacher, vol. 66 Issued Dec. 4, 2012 / Jan. 2013.

Goodman, K. S. (1989). The whole language evaluation book. Portsmouth, NH: Heinemann. ***

Kuhn, M. R., Stahl, S. A. (2000). Fluency: a review of developmental and remedial practices (CIERA Rep. No. 2-008).

Kuhn, M. R. (2003). Fluency: a review of developmental and remedial practices. Journal of Educational Psychology.

Laberge, D., & Samuels, S. A. (1976) as cited by Tompkins, G. E. (1992). Toward a theory of automatic information processing in reading. Cognitive Psychology, 6, 293-323.

Nagy, W. E, (1988). Teaching vocabulary to improve reading comprehension. Urbana, IL: ERIC Clearinghouse on

Reading and Communication Skills and the National Council of Teachers of English and the International Reading Association.

National institute of child health and human development. (2000).Report of the national reading panel, teaching children to read: an evidence-based assessment of the scientific research literature on reading and its implication for reading instruction. (NIH Publication No. 00-4769), Washington, D.C.: S. Government Printing Office.

Pearson, P. D. & Tierney, R. D. (1992). Learning to learn from text. Reading in the content areas. Dubuque, IA: Kendull-Hunt.

Pinnelli, G. S. (1995). Listening to children read aloud: Oral fluency.

Rasinski, T. V. (2003). The fluent reader: oral reading strategies building word recognition, fluency and comprehension. New York: Scholastic.

Rasinski, T. V. (2000). Speed does matter in reading. The Reading

Teacher.

Readmaster User's Manual, (1992). Computerized reading

program for increasing reading speed and comprehension.

School of Tomorrow, 1992, ACE, Inc.

Samuels, S. J. (1997). The method of repeated reading. The

Reading Teacher.

Siah, P., & Kwok, W. (2010). The value of reading and the effectiveness of sustained silent reading. Clearing House.

Stanovich, K. E. (1991). Word recognition: Changing perspectives. Handbook of reading research (Vol. 2). New York: Longman.

Tinajero, J. V., & Nagel, G. (1995). Promoting parent involvement in schools. The Reading Teacher, 48.

Zutell, J., & Rasinski, T. V. (1991). Training teachers to attend to their students' oral reading fluency. Theory into Practice, 30, 211-217.

APPENDIX A

Readmaster Plus Program

The Comprehension Test Review

Within the Comprehension Test Review, questions are displayed one at a time. The learner's response is appropriately marked at the bottom of the screen. Correct answers are purposely marked with a check (i.e., /), while all wrong answers are marked with an "X". The correct answer for each question is always highlighted for the pupil.

During the test review, the student is NOT able to change his answers. He may, anyhow, move backward and forward, from question to question, by pressing the LEFT and RIGHT keys (i.e., < -- = >). Following the review, pressing the ESC key causes the program to return to the Menu.

The Override Option

The Readmaster Plus program automatically increases the student's reading rates and story assignment based upon the Diagnostic Test Results. Nevertheless, there are cases when it becomes necessary to modify or override the established rate and story number. The Override Option allows the supervisor to make adjustments in these and other areas.

From the Diagnostic Program Menu, the Override Option may be selected by pressing 3 and passing the Enter key. The Reading Rate Increment under this Override Option is automatically advanced by the program. This rate increases according to a table of prescribed increments. Increments vary with grade level as shown in the table below. When two hyphens (i.e., - -) are displayed in this field, the program uses the default increment present for each specific story level. We can refer to the table below.

The Reading Rate Increment may be adjusted (i.e., fine tuned to the pupil's need) by the supervisor at any time. For example, a student reading on level 3 would experience a rate increase of 25 w.p.m. each time he successfully completes a story. The student, in some way may encounter difficulty with such an increase each time a story is successfully done. The supervisor, in such a case may have the intention of decreasing the increment value to 15 w.p.m. This would allow the reading rate to increase more slowly with each successful session.

Reading Rate Increment Table

LEVEL	INCREMENT
1	15
2	20
3	25
4-6	20
7-9	25
10-12	50

Another Override Option is the Reading Rate Increment which is highly regulated with the use of the Diagnostic Program. A favourable example to this, is after having a Christmas holiday break or summer vacation, it may be beneficial to decrease the student's reading rate by 20% to 50%, hence allowing him to rebuild his reading rate.

When a student advances from one level to another, the level of reading difficulty increases. The reading rate could be decreased by at least 20% or more. If necessary, to help the pupil adjust.

The reading rate is automatically advanced by the program. This rate increases according to a table of prescribed increments. Increments may vary with grade level as shown in the table above. The Reading Rate Increment maybe adjusted by the supervisor at any time. For example, a pupil reading on level 3 would experience a rate increase of 25 w.p.m. each time he successfully completes a story. This pupil, hence, may encounter difficulty with such an increase each time a story is successfully done. The supervisor, in such a case, may wish to decrease the increment value to 15 w.p.m. This would allow the reading rate to increase more slowly with each successful session, Readmaster User's Manual, (1992).

Printing Reports - Readmaster's Last Diagnostic Feature

The Print option is shown on the Diagnostic Program Main Menu. It allows the supervisor to print reports based on the information recorded on the Student Progra m disk. When a report is requested, the Student Program disk must be situated in either drive A or B: for program to enter the student's data files. Reports are worth seeking in the following locations such as:

- Following a Diagnostic session
- As a ready references in the student's academic file
- For weekly or quarterly reading history reports
- When a student completes an entire level of 36 stories

When a report is essential, choose the Print option from the Main Menu screen. As motivated by the program, type A: or B: to specify the disk drive into which the Student Program disk has been placed. The program will exhibit the Print Menu, which has the following four report options:

- Diagnostic Report
- Diagnostic History
- Story Report
- Story History

The Diagnostic Report comprise the current Diagnostic Test results. Secondly which is the Diagnostic History controls a history of all Diagnostic Tests taken by a pupil. Whereas it may be necessary for the student to read two or more stories during the initial diagnostic session, it may be to their advantage to approximate the results of each test. Thirdly, we have the Story Report that includes the effect of the current story session. This effect is the same as the Report screen which directly follows the Comprehension Test. Lastly, the Story History that gives a history of all story sessions and practice reading sessions. It enumerates the story or practice story number, the session date, the session time, the Comprehension Test accuracy ratio (ex., 3/10 means 3 out of 10 questions correct), the reading ratio, and the Composite Reading Ratio (i.e., w.p.m. at 100% comprehension), Readmaster User's Manual, (1992).

The Advantages of Readmaster

In addition to Readmaster Plus' ability to develop reading speed and comprehension, the system emphasizes character values and vocabulary enhancement. Character values are woven throughout each story presented as the student progresses from level to level. Vocabulary enhancement is accomplished by the program's vocabulary previews and comprehension tests.

Readmaster offers several advantages over the paper-based program. These advantages include:

1. Increased efficiency.
    a. Automatic advancement of reading rates as progress is made.
    b. Automatic selection of stories based upon performance level.
    c. Reduced supervision.
2. Reduced paperwork.
    a. Elimination of student file searching and storing.
    b. Automatic story selected and retrieval.
    c. Elimination of misplaced or lost story sheets.
    d. Computerized scoring and daily record keeping.
3. Minimized student distraction.
    a. One reading station needed rather than three, as required with the paper- based system.
    b. Automatic scoring eliminates cheating.
    c. Immediate Comprehension Test Review.
    d. Easy-to-follow, on-screen directions.
4. Helpful diagnostic program.
    a. Features various FONT type and size selection.

b. Assists in determining pupil performance levels.
c. Assists in determining pupil reading rates.

5. New Innovations.
    a. Reports a Composite Score reflecting the pupil's reading rate at 100% comprehension.
    b. All stories remain stationary on the screen, rather than scrolling past a Reading Tutor machine's reading window.
    c. Wider range for possible Reading Rates (from under 20 to over 2,000).
6. Time and cost efficient.
    a. **Readmaster Plus'** current price **is less** than the paper-based product.
    b. One dedicated IBM-PC/XT/AT or compatible computer with an EGA, VGA, or SGVA Color Graphics Card which is adequate for an average-size school. Although highly recommended, the use of a hard disk drive is optional. Readmaster Plus software will run on a 3.5 floppy disk system and on an Accele TUTOR II compatible computer.
        1. Reading sessions average from 5 to 15 minutes each.
        2. One computer can handle 80 students per week, averaging four students per hour, four hours a day, five days a week.
7. Easy to understand and use.
    a. Simple instructions.
    b. Minimal learning curve.
    c. Helpful Diagnostic Program.
    d. Time-saving automation

To identify the authorized person responsible in administering the reading exercises the term supervisor is used. The supervisor must know the content, purpose, and procedures for each part of the Readmaster Plus program.

The supervisor should work through the Readmaster Plus Diagnostic Program. Completing several stories from the system should provide the supervisor an adequate familiarity with all the basic program features and procedures. The administrative learning curve is minimal, since the system is very easy to learn.

Upon the supervisor's familiarity of the program, each pupil should be carefully diagnosed. It is important that pupils be separately diagnosed to insure accurate results. Pupils normally find program controls easy to learn, however, guidance is a necessity to insure a valid diagnosis, as excerpted from Readmaster User's Manual, (1992).

APPENDIX B

READMASTER'S DIAGNOSTIC FEATURE

The Vocabulary Preview

Each diagnostic story has a Vocabulary Preview, except the first level. The pupil should attentively review the directions on the Vocabulary Preview title page before continuing with the Vocabulary Preview. The Vocabulary Preview is the first activity within the standard story session. After reading the preview directions, the pupil is introduced to each vocabulary word along with its pronunciation, part of speech, definition and an example sentence.

It should be observed with care that Vocabulary Preview is an important part of the Readmaster Plus program. The words within the preview should be studied

carefully before continuing with the remainder of the story session. Such preview prepares the pupil for the reading activity which follows, while improving the pupil's vocabulary and knowledge base.

The Vocabulary Preview introduces ten words, with the exception of those in level two, which have only five words. The words are numbered consecutively and are shown one at a time on the screen. Pronunciations are displayed within parentheses, divided according to syllabus, and labelled for accent stress. Each word's part of speech (whichever noun, verb, pronoun, adverb, adjective, etc.) is given. Vocabulary definitions are made up upon each word's use in the selected story.

Every vocabulary word is introduced with its pronunciation, part of speech, and definition. Words are used in example sentences according to their customary procedure in the story pertinent to their part of speech. By reconsidering the vocabulary words, the pupil is better prepared to reading the diagnostic story.

The Story Reading Session

As the researcher and the pupil follow the Vocabulary Preview, the Diagnostic Program presents the selected story for reading. While the program checks session time, care should be taken NOT to inform the pupil of this particular thing. On the other hand, the supervisor should motivate the pupil to read steadily and for comprehension. The learner's main concern should not be how fast he can read, but how well he can read at his standard speed. Inform the learner that he will be tested on the contents of the story following the reading session.

At the onset of the reading session, the student is presented with comprehensive, onscreen command. Then he will be given a story summary, called the Story Preview, which familiarize him with the story's basic content. Pressing the ENTER key at the Story Title screen causes the story text to appear and the program's session timer to begin. The supervisor should inform the pupil to press the ENTER key ONLY WHEN HE IS READY to begin reading.

There are some stories that are longer than others. If any key will be pressed it will cause the program to move forward to the next part of the text. The supervisor should warn the learner against pressing a key. If a screen advancement is discovered by the supervisor, a retest may be essential in order to accomplish an accurate diagnosis. When the last part of the story text is finished, the Diagnostic Program spontaneously begins the Comprehension test, as extracted from Readmaster User's Manual, (1992).

The Comprehension Test

Based on the requirements of the Readmaster Plus system, the Diagnostic test does not monitor the time taken to complete the Comprehension test. The Comprehension Tests are NOT timed. The supervisor should instruct the pupil not to hurry, but to do his best. The program requires the pupil to answer every question before exiting the test area. With the exception of levels 1 and 2, each Comprehension Test has ten (10) questions. There are five (5) questions on each test for levels 1 and 2. The pupil is not allowed to exit the test until he has answered every question.

At the start of the test complete on-screen instructions are provided for the pupil. Questions are numbered from one to ten, and each question is presented

separately. They are fashioned in the Multiple Choice style, each having four possible answers. The pupil should be instructed to choose the BEST answer. If the pupil is unsure of his response, he may skip the question but he must later return to it and make a final choice.

Choice “A” is always the default answer and is therefore automatically highlighted for every question. If the pupil presses ENTER for every question, the “A” choice would be recorded as his answer. It is possible for a pupil to do this and get one or more questions correct. The supervisor should caution the pupil not to “bluff” his way through the test in this manner.

This program allows the pupil to highlight what he THINKS might be a correct answer without actually selecting it. Upon his return, the interim choice is still highlighted. This attributed gives the pupil time to think and come back to the question later without having to restart the thought process in a new form.

When the pupil reaches the last question, he should be encouraged to review all of his answers. Pressing the HOME key enables the pupil to review the test beginning with the first question. When he has finished his review, pressing the ESC key will cause the program to advance to the Comprehension Test Report screen, taken from Readmaster User’s Manual, (1992).

For example, 01 – 25 represents grade level 2 and story number 25. Note on the Figure 2 below the chart for the story numbers that are available on the Diagnostic Program disk for the Grade 2 Level 1A pupils.

Chart for the Story Numbers and Title of the Story

STORY #	TITLE
01 – 01	A Dog and a Cat / The Dog
01 – 02	The Cat on the Mat / The Man’s Pen
01 – 03	
01 – 04	A Bag on the Rag
01 – 05	Rig and Jig and Sig
01 – 06	The Frog on a Log
01 – 07	The Cat and a Ball / The Top
01 – 08	The Race
01 – 09	The Sun
01 – 10	Wish for a Fish
01 – 11	Pup
01 – 12	The Hen on the Box / Ned and the Hen
01 – 13	Ann and Nat / A Man and a Boy
01 – 14	Nat and Rab / The Lamp and the Mat
01 – 15	Mary / Sue and Ann
01 – 16	Tom’s Horse / Rab and the Frog
01 – 17	The Fox and the Hen / Nell & the Ducks
01 – 18	Ann’s Cat

01 – 19	Clouds
01 – 20	Children at Play
01 – 21	Ann and Rab
01 – 22	A Review
01 – 23	Playtime
01 – 24	The Rainbow
01 – 25	Help! Help!
01 – 26	Another Review
01 – 27	Being Happy
01 – 28	Jesus Christ Makes a Servant Well
01 – 29	A Ride in the Country
01 – 30	Pleasing God
01 – 31	Plants and Animals
01 – 32	A Man Who Believed God
01 – 33	The Nicest Gift
01 – 34	Dick's Happy Day
01 – 35	The Last Ball
01 – 36	For a Price
	Being a Friend is Important

CURRICULUM VITAE

Personal Information

Name: **Lilia Reynaldo Hernandez**

Address: **1281 Interior 6 Tambunting Street, Sta. Cruz, Manila**

Birthday: **26 August 1951**

Birthplace: **City of Manila**

Age: **63**

Gender: **Female**

Citizenship: **Filipino**

Educational Background

Masteral: **Philippine Normal University**
Taft Avenue, Manila
Master of Arts in Teaching English Language Arts

College: **Philippine Normal College,**
Taft Avenue, Manila
Bachelor of Arts in Elementary Education with Specialization in English
April 20, 1972

High School: **Manuel Luis Quezon High School**
Abucay Street, Tondo, Manila
March, 1968

Grade School: **Plaridel Elementary School**
Lico Street, corner Pampanga Street,
Tondo, Manila
March, 1964