THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG SAMAR

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Major in Elementary Education

ROSALIE B. DACUTANAN
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APPROVAL SHEET

In partial fulfilment of the requirements for the degree, **MASTER OF ARTS IN EDUCATION**, this thesis entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG SAMAR"**, has been prepared and submitted by **ROSALIE B. DACUTANAN**, who having passed the comprehensive examination and pre-oral defense is hereby recommended for final oral examination.

March 3, 2012
Date

LETECIA R. GUERRA, Ph.D.
Education Supervisor 1-Pre-School-SPED,
DepEd Samar Division
Adviser

Approved by the Committee on Oral Examination on March 3, 2012 with a rating of **PASSED**.

MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies, SSU
Chairperson

REDENTOR S. PALENCIA, M.A.
Head, Publication Services, SSU
Member

GAIL B. VELARDE, Ph.D.
Graduate School Faculty, SSU
Member

RUSTUM D. GEONZON, M.A.I.S.
Education Supervisor 1–English Designate (Secondary)
Member

Accepted and approved in partial fulfilment of the requirements for the degree, **Master of Arts in Education**, major in **Elementary Education**.

July 29, 2019
Date

ESTEBAN A. MALINDOG, Jr., Ph.D.
Dean, College of Graduate Studies, SSU

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Dedication

This study is wholeheartedly dedicated
to my husband Dennis
and to my kids,
who have been my source of inspiration
and gave us strength when I thought of giving up.

Thank you for your endless love.

To my parents, brothers and sister,
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to the Almighty God,
thank you for the guidance, strength, power of mind,
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and for giving us
a healthy life.

All of these,
we offer to you.

Rosalie

ABSTRACT

This study attempted to find out the learning styles and academic performance of grade six pupils in the district of Motiong for the school year 2011-2012. The study employed the descriptive-correlational research which utilized the questionnaire as the basic data gathering instrument. Other data gathering instrument was documentary analysis. In terms of ranking, the most available learning materials at home were books of about 182 of them and this was followed by 160 dictionaries ranked at number 2. nest was television set at 134 ranked as third available learning materials at home. Ranked fourth as available learning materials at home was radio at 125 units. This was again followed by magazines at 94 copies ranked as the fifth available learning materials at home and seventh are journals at 15 copies. Computer set was ranked at number 8 and last one was computer with internet connection at 3 units. Learning styles along their relations to others was significantly related to average family monthly income but not with their age; sex; parents' education; number of siblings; birth order; place if dwelling; available learning materials at home; and years stay in school. Learning styles in terms of relations with ideas was significantly related to place of dwelling; and with years of stay in school but not with age; sex; parents' education; average family monthly income; number of siblings; birth order; and available learning materials at home. Teachers should provide pupils with opportunities to maintain healthy pupil competition and high expectations in

learning, such as announcing mean scores of class tests for comparison and setting clear expectations for assignments and tests.

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Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

The way people learn and process new information that they are taught is one of the many factors that makes each individual person unique. While some people learn quickly by actually performing a task for themselves, others learn better by watching someone do the task or simply by hearing the task explained. The method that each person prefers for learning is known as their unique learning style. For teachers and parents, understanding the child's learning style can be the key to unlock their full potential and making difficult concepts seem easy as can be (Tenedero, 2009).

The above paragraph asserts the learning styles of an individual. His manner of learning, his interaction with his environment and the way he feels on certain stimulus affect the learning process which has something to do with the modification of his behavior towards a pleasant one.

The old school of formal discipline explains that learning is an instinctive act of the child as a potential learner. And at birth according to John Lock in his "tabula raza theory" that the child's mind is compared to a clean slate of paper wherein it starts scribbling as he experiences various stimuli and relatively responds to his environment. So then many psychologists have defined the child as an organism who is capable of responding to his environment as a living creature who eventually have a great role in his new environment (Atkinson, et al., 1980: 74).

Young children learn by touching, feeling, moving, and experiencing. During the school years, however, educators often ignore these tactual and kinesthetic preferences. Instead, classroom instruction focuses on auditory and visual teaching strategies. Dunn, Dunn and Perrin (1994: 111-113) have indicated that many pupils do not become strongly visual before third grade, that auditory acuity first develops in many pupils after the sixth grade, and that boys often are neither strongly visual nor auditory even during high school.

Therefore, since most young children are tactual and kinesthetic learners, such resources should be developed and used, particularly for those who are experiencing difficulty learning through lectures, direct verbal instructions, and textbook assignments. Instruction should be introduced through an individual's strongest perceptual strength and reinforced in the two next strongest modalities.

Pupils who do well in school tend to be those who learn either by listening in class or by reading. This leads to the belief that the brighter students are auditory and/or visual learners. In reality, however, teachers usually teach by telling (auditory), assigning readings (visual), or explaining and writing on a chalkboard (auditory and visual). Youngsters who are able to absorb through these two senses are the ones who retain what they have been taught. They also respond well on tests, which are either auditory (teacher-dictated) or visual (written or printed).

Two decades of research have verified that many pupils who do not do well in school are tactual or kinesthetic learners their strongest perceptual strengths are neither auditory nor visual (Stellwagen, 2001:265-268). They tend to acquire and retain information or skills when they can either handle manipulatives or participate in concrete, real-life activities. Because so little of what happens instructionally in most classes responds to the tactual and kinesthetic senses, these pupils are, in a very real sense, handicapped. Once they begin to fall behind scholastically, they lose confidence in themselves and either feel defeated and withdraw (physically or emotionally) or begin to resent school because of their repeated failures.

Fundamentally, teaching is the guidance of learning (Kapunan, 1994: 72). Asking questions using visual aids, undertaking projects, making use of illustrations, conducting reviews or drill lessons, stimulate pupil learning activities which are the care of any educational programming. A child's attitude, sense of values, appreciations, motives and interests depend upon the experience and training he received in the classroom. It is not enough however to teach pupils how to learn. What is important is to provide economical and effective method by which they will learn through their preferred learning styles.

The Grade VI pupils of the District of Motiong had obtained the following mean percentage scores (MPS): 81.10 percent in the District Achievement Test DAT) and 82.83 percent in the District NAT Achievement Test (DMAT) for school year 2009-2010, and 80.79 percent in the DAT and 88.52 percent in the DNAT for school year 2010-2011. These results are not so dramatically convincing because these gave a slight increase from the DepEd proficiency level of 75.00 percent.

If educators accept the fact that the child is the center of all educative process, then, teachers should strive to know more about their pupils' learning style whom they teach in order to assist them to maximize pupils' learning by adjusting their teaching methods. Knowing pupils' learning styles in relation to their achievement in the different learning areas is one important aspect which teachers should be aware of it. Teaching methods that involve a variety of learning styles may lead to more pupil success. Hence, this was one reason that this study was undertaken to look deeper into the different learning styles of grade VI pupils in specific subjects.

Statement of the Problem

This study attempted to find out the learning styles and academic performance of grade six pupils in the district of Motiong for the school year 2011-2012.

Specifically, it sought answers to the following questions:

1. What is the profile of the pupil-respondents in terms of:

    1.1 age;

    1.2 sex;

    1.3 parents' education;

    1.4 parents' occupation;

    1.5 average family income per month;

    1.6 number of siblings;

    1.7 birth order;

    1.8 place of dwelling;

    1.9 available learning materials, and

    1.10 years of stay in school?

2. What are the different learning styles of the pupil-respondents in the District of Motiong along:

    2.1 sensory preferences;

    2.2 relation to others;

    2.3 relation with ideas;

    2.4 relation with learning task, and

    2.5 overall orientation?

3. Is there a significant relationship between the learning styles of the pupil-respondents and their:

    3.1 age;

    3.2 sex;

3.3 parents' education;

3.4 parents' occupation;

3.5 average family income per month;

3.6 number of siblings;

3.7 birth order;

3.8 place of dwelling;

3.9 available learning materials, and

3.10 years of stay in school?

4. What is the level of academic performance in the second grading period along the following areas:

4.1 English;

4.2 Science;

4.3 Mathematics;

4.4 Filipino, and

4.5 Makabayan?

5. Is there a significant relationship between the level of academic performance of the pupil-respondents and their:

5.1 age;

5.2 sex;

5.3 parents' education;

5.4 parents' occupation;

5.5 average family income per month;

5.6 number of siblings;

5.7 birth order;

5.8 place of dwelling;

5.9 available learning materials, and

5.10 years of stay in school?

6. Is there a significant relationship between the academic performance of the pupil-respondents and their learning styles, according to:

6.1 sensory preferences;

6.2 relation to others;

6.3 relation with ideas;

6.4 relation with learning task, and

6.5 overall orientation?

7. What recommendations maybe formulated based on the findings of this study?

Hypotheses

Based from the aforecited problems, the following hypotheses were tested:

1. There is no significant relationship between the learning styles of the pupil-respondents and their:

1.1 age;

1.2 sex;

1.3 parents' education;

1.4 parents' occupation;

1.5 average family income per month;

1.6 number of siblings;

1.7 birth order;

1.8 place of dwelling;

1.9 available learning materials, and

1.10 years of stay in school.

2. There is no significant relationship between the level of academic performance of the pupil-respondents and their:

2.1 age;

2.2 sex;

2.3 parents' education;

2.4 parents' occupation;

2.5 average family income per month;

2.6 number of siblings;

2.7 birth order;

2.8 place of dwelling;

2.9 available learning materials; and

2.10 years of stay in school.

3. There is no significant relationship between the academic performance of the pupil-respondents and their learning styles, according to:

3.1 sensory preferences;

3.2 relation to others;

3.3 relation with ideas;

3.4 relation with learning task, and

3.5 overall orientation.

Theoretical Framework

This study is anchored on the Dunn and Dunns' Learning Style Model (Dunn, 2003: 1–6) since the study is about the learning styles of pupils. The Learning style model is about five strands (environmental, emotional, sociological, physical, and psychological) of 21 elements that affect each individual's learning as shown in the Figure 1.

They defined learning styles as the way in which each learner begins to concentrate, process and retain new and difficult information and interaction occurs differently for everyone. When a pupils' natural tendency and style is triggered, his or her ability to concentrate and make associations improves his or her chances of transferring information to long-term memory.

Some of these elements are biological and others are developmental. Learning style and behavioral trends exist, and pupils from particular socialization and cultural experiences often possess approaches to knowledge that are highly functional in their original living environment and can be capitalized upon to increase performance in academic settings (Claxton, 2000:6-8).

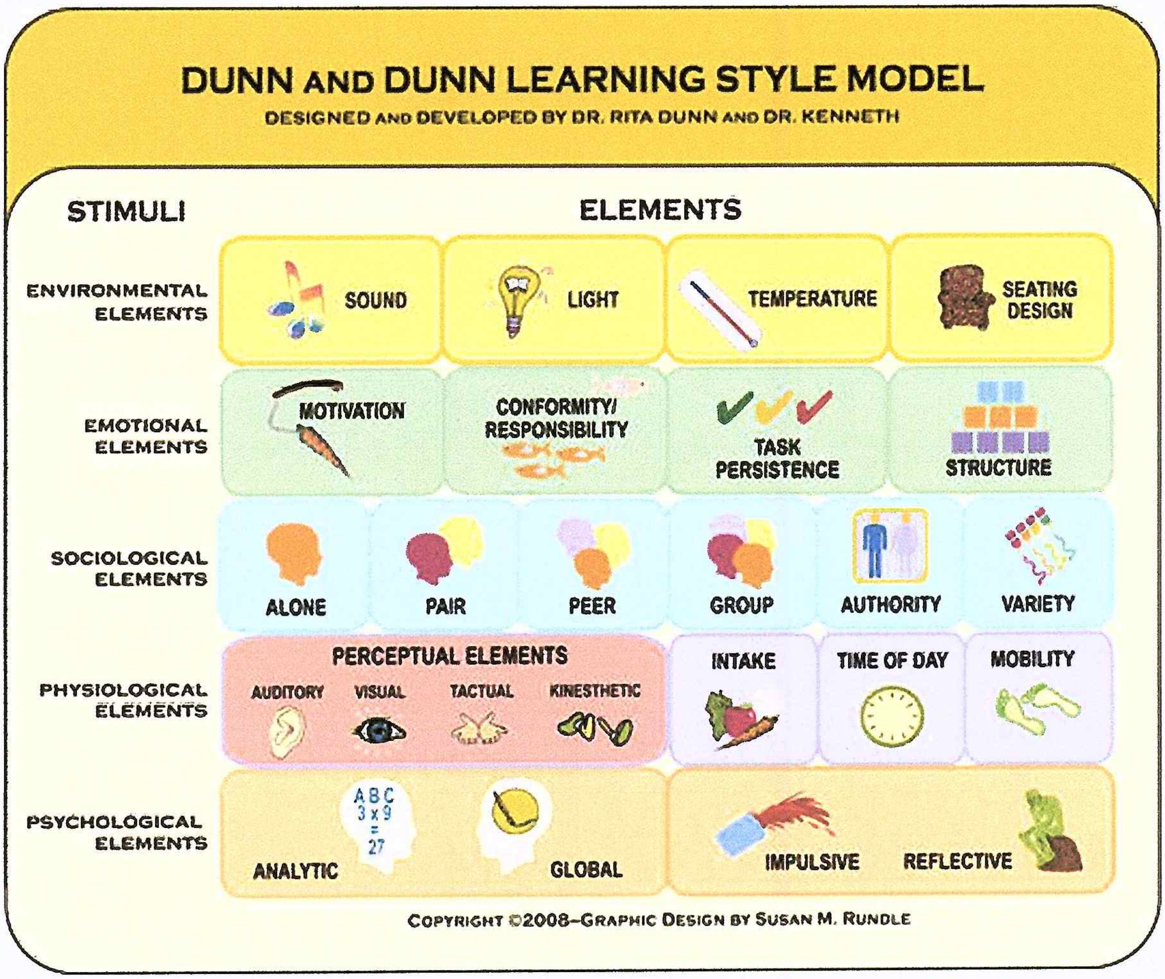
DUNN AND DUNN LEARNING STYLE MODEL
DESIGNED AND DEVELOPED BY DR. RITA DUNN AND DR. KENNETH
STIMULI
ELEMENTS
ENVIRONMENTAL ELEMENTS
SOUND
LIGHT
TEMPERATURE
SEATING DESIGN
EMOTIONAL ELEMENTS
MOTIVATION
CONFORMITY/ RESPONSIBILITY
TASK PERSISTENCE
STRUCTURE
SOCIOLOGICAL ELEMENTS
ALONE
PAIR
PEER
GROUP
AUTHORITY
VARIETY
PHYSIOLOGICAL ELEMENTS
PERCEPTUAL ELEMENTS
AUDITORY
VISUAL
TACTUAL
KINESTHETIC
INTAKE
TIME OF DAY
MOBILITY
PSYCHOLOGICAL ELEMENTS
ABC
3 x 9
=
27
ANALYTIC
GLOBAL
IMPULSIVE
REFLECTIVE
COPYRIGHT ©2008–GRAPHIC DESIGN BY SUSAN M. RUNDLE

Figure 1. Dunn and Dunn Learning Style Model

Learning styles is a pupil's way of perceiving, conceptualizing, and problem solving; a preferred way of interacting with and responding to the environment. They are cognitive, affective, and psychological indicators of the manners by which pupils perceive, interact with, and respond to their learning environment. According to Tenedero (2009), pupils who learn with their preferred learning styles are more likely to gain more knowledge and skills when taught and counseled through their natural or primary style rather than through a style that is secondary or undeveloped, particularly when they are presented with new materials or engage in new experiences.

Pupils learn in many ways, like seeing, hearing, and experiencing things first hand. But for most pupils, one of these methods stands out. Research has shown that students can perform better on tests if they change study habits to fit their own personal learning styles (Gabb, 2005).

For example, visual-learning pupils will sometimes struggle during essay exams, because they cannot recall test material that was heard in a lecture (Durodoye and Hildreth, 1995:241-247). However, if the visual learner uses a visual aid when studying, like a colorful outline of test materials, he or she may retain more information. For this type of learner, visual tools improve the ability to recall information more completely. A simple explanation of learning styles is this: some students remember best materials they have seen, some remember things they have heard, while others remember things they have experienced.

Visual learners are those who learn through seeing things (Coker, 2000: 441-444). They are usually good at spelling but forgets names, need quiet study time, have to think awhile before understanding lecture, are good at spelling, like colors and fashion, dream in color, understand or like charts, and are good with sign language.

On the other hand, auditory learners are those who learn best through hearing things. They like to read to self out loud, are not afraid to speak in class, like oral reports, are good at explaining, remember names, notice sound effects in movies, enjoy music, good at grammar and foreign language, read slowly, follow spoken directions well, cannot keep quiet for long periods, enjoy acting and being on stage, good in study groups.

In the case of kinesthetic learners, they learn through experiencing or doing things. They are also good at sports, cannot sit still for long, not great at spelling, do not have great handwriting, like science lab, study with loud music on, like adventure books and movies, like role playing, take breaks when studying, builds models, get involved in martial arts or dance, and fidgety during lectures.

Styles change overtime because they are affected with several factors. Environmental strands refer to the elements of lighting, sound, temperature and quiet room, and others cannot focus unless they have music playing and it is warm (sound and temperature elements). Emotionality includes the elements of motivation, persistence, responsibility, and structure. Sociological represents the elements related to how individuals learn in association with other people. Physiological are elements on perceptual, (auditory, visual, tactual and kinesthetic) time of day energy levels and psychological refers to the left and right brain processing (Tenedero, 2012).

Conceptual Framework

Figure 2 shows the conceptual framework of the study. The base of the paradigm is Motiong District of the Division of Samar which serves as the research environment. Going up in the direction of the arrow is Grade VI pupils serving as respondents in the study.

In the middle, a big box with three boxes within pupil's profile containing the variates of age, sex, parents' education, parents' occupation, average family income per month, number of siblings, birth order, place of dwelling, available learning materials, and years of stay in school. The center box has the different learning styles with the following variates: sensory preferences, relation to others, relation with ideas, relation with learning task, and overall orientation. The third box on the right side is the level of academic performance in the following learning areas: English, Science, Mathematics, Filipino and Makabayan.

With the research process, this will result in the findings and implications as shown in the direction of the arrow on the top box. From here a small broken line going back to the research environment as feedback.

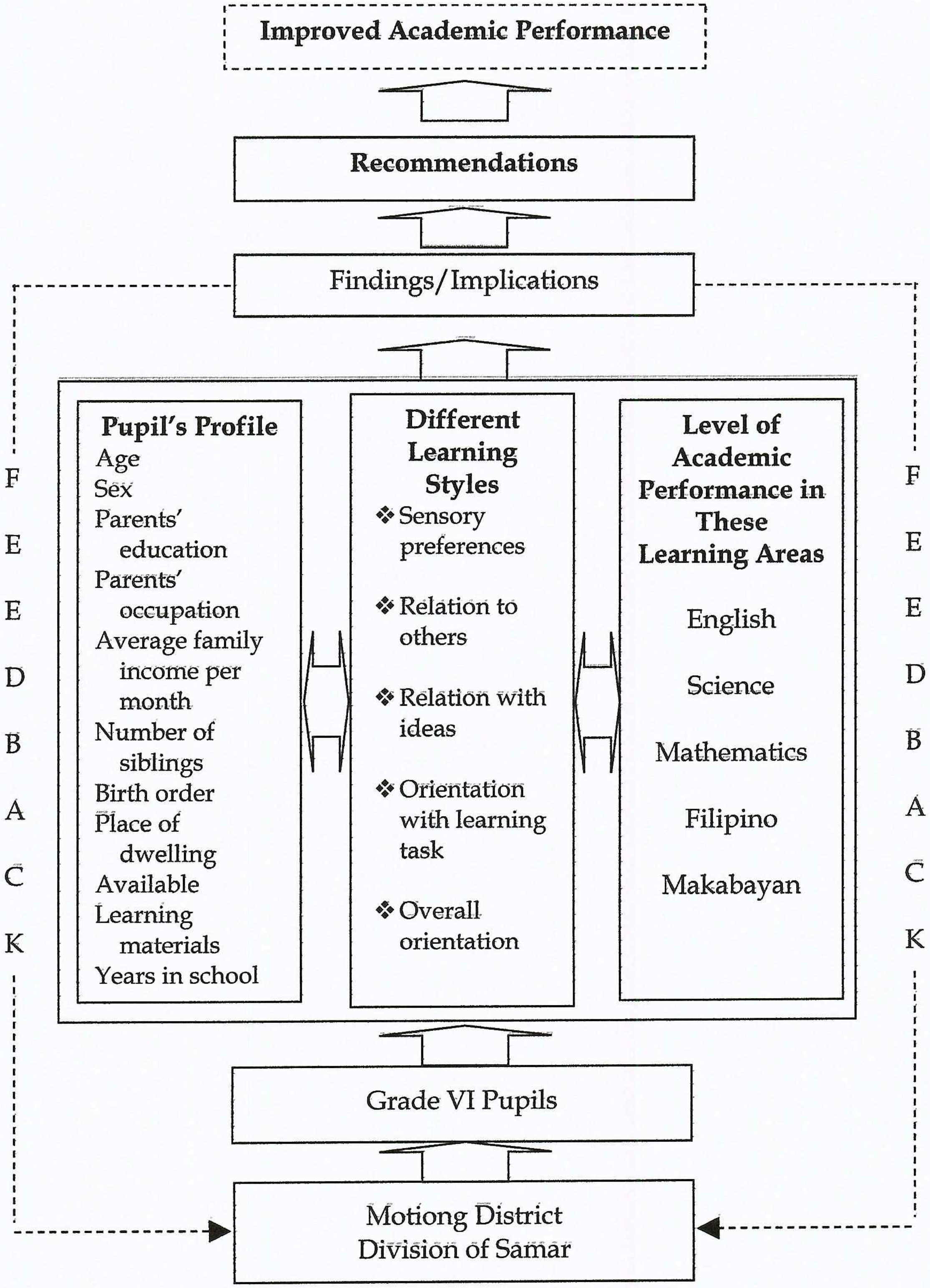
Improved Academic Performance
Recommendations
Findings/Implications
Pupil's Profile
Age
Sex
Parents' education
Parents' occupation
Average family income per month
Number of siblings
Birth order
Place of dwelling
Available Learning materials
Years in school
Different Learning Styles
❖ Sensory preferences
❖ Relation to others
❖ Relation with ideas
❖ Orientation with learning task
❖ Overall orientation
Level of Academic Performance in These Learning Areas
English
Science
Mathematics
Filipino
Makabayan
Grade VI Pupils
Motiong District
Division of Samar
FEEDBACK
FEEDBACK

Figure 2. Conceptual Framework of the Study

The big box is again connected upward to another box representing the findings and implications of the study and further connected to another box above it representing the recommendations of the study.

The apex box of the schema represents the ultimate goal of the study which is improved academic performance of Grade VI pupils of the District of Motiong, Samar.

Significance of the Study

This study could benefit the following who are concerned much on the educative process: pupils, teachers, school administrators, and future researchers.

To the pupils. A psychological knowledge and thorough understanding of the needs, abilities, and characteristics of the individual pupils is a paramount importance in this study.

To the teachers. Understanding well the different laws of learning, transfer of learning and effective use in the teaching-learning situation would help them much upgrade their teaching skills and enhance their competencies and ultimately infuse in them the sense of professionalism.

To the Parents. The result of the study would give insights to parents regarding the academic performance and learning styles of their children. By knowing the learning styles of their children they would be able to adjust their modes of helping children when doing assignments or school.

To the administrators. This study would guide them in the institutionalization of their projects, programs, and thrust, and see to it that their school is advanced them the rest profiting them much on the achievement and performance of their school children. Quality assurance and standards of pupils are measured in terms of pupils' achievements and the kind of graduates that are turn out at the close of the school term.

To the DepEd policy makers. This study would serve them a guide in the formulation of policies of the school system.

To the future researchers. This study one's completed would make a great contribution to the educators' endeavor. Moreover, researchers may have a follow-up study or a replication of this study in their particular locality. Moreover, its significant findings will be used as situationers or a take off point for another study that could conceptualize and develop in contribution to the prevailing system of education.

Scope and Delimitation

This study covered the learning styles and academic performance of 215 grade VI pupils in Motiong District, Division of Samar.

It was delimited to the learning styles focused on physiological strands on auditory, visual, tactile, kinesthetic and environmental factor. It also dealt on the academic performance of the learning areas for the first semester particularly in English, Science, Mathematics, Filipino and Makabayan.

The study was conducted during school year 2011-2012.

Definition of Terms

Hereunder are the terms in the study which are defined conceptually and operationally for easier understanding of the readers.

Academic performance. This term refers to the outcome of education in terms of the extent to which a student, teacher or institution has achieved their educational goals (Academic Achievement, 2012). As used in the study, it refers to the second grading period grades in English, Science, Mathematics, Filipino and Makabayan of the pupil-respondents.

Auditory learning. This refers to the learning through hearing or listening (Auditory Learning, 2012). The same definition is used in this study as measured by the research instrument.

Environmental learning. This refers to the learning through the changes in place, time and temperature.

Kinesthetic learning. This refers to learning through touching or sensing or doing things (Learningstyle, 2012). The same definition is accepted as determined by the research instrument.

Learning styles. Refers to the characteristic, cognitive, affective, and psychological behaviors that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment (Keefe and

Monk, 1986:56). The same definition is used in this study as measured by the research instrument.

Makabayan. One of the basic learning areas in the 2002 BEC, which contain various components: Hekasi, MSEP, EPP, and Character Education.

Place of dwelling. The term refers to the locality or location where the respondents live. As used in this study, it refers to the home, place where one lives.

Tactile learning. This refers to learning through the sense of touch (Learningstyle, 2012). The same definition is used as determined by the research instrument.

Scheme. Refers to the plan or purpose (Webster, 1980: 178). As used in this study, this will be a proposal or program that will be made based on the findings and recommendation in this study.

Sibling. This refers to the children in a family (Webster, 1980: 185). As used in this study, it refers to the number of brothers and sister of the pupil-respondents.

Visual learning. This refers to learning through perception on seeing (Learningstyle, 2012). The same definition is accepted as determined by the research instrument.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the literature and studies called from books, magazines and unpublished materials which have relevance to this study. This helped the researcher conceptualized and substantiate in the development of the present study.

Related Literature

Swiss psychologist Jean Piaget (1985) has done the most to make the stage concept of development plausible. His interest for many years has focused on the cognitive or intellectual development of children. Piaget's main stages of intellectual development are as follows: Sensorimotor Stage, Pre-operational Stage, Concrete Operational Stage, and Formal Operational Stage. Sensorimotor stage starts from birth to two years. This is characterized by grasping and reaching for objects which he can put into his mouth. The concept of object performance is an awareness that an object continues to exist. The pre-operational stage occurs from two to seven years. This could revolve around him and he has difficulty taking view point of others. The concrete operation stage is from seven to 12. In this stage, the child begins to perform logical manipulation, using abstract symbols in relation to concrete objects. The last stage in the formal operation starts from 12 years old up. He learns to follow logical proposition, reason out concerning hypothetical situations.

There are theories most important teaching procedures: 1) active participation wherein the learner is actively interacting with the curriculum materials by responding, practicing and testing each step of the material. The old adage "learning by doing" is well exemplified, in contrast to the passive learning that takes place during a lecture; 2) information feedback the learners finds out with minimal whether the responses is correct, these immediate correction of an error is permitted this type of feedback has been shown to be important in a range of tasks – from operant conditioning with animals, in which immediate reinforcement procedures faster learning to verbal learning studies with human subjects in which knowledge of results provided similar benefits; 3) individualization of instruction, the learner moves at his own rate. The rapid learner can progress quickly through the material while the slower can move less rapidly (often being diverted to a remedial program) until he, too has mastered the basic concepts (Atkinson, et al., 1985).

An important issue in optimizing learning is the extent to which the learning of one thing facilitates the learning of something else. If everything that is learned is specific to the situation in which it was learned, the amount of learning that could take to be creamed into lifetime would be phenomenal. Fortunately, most learning is readily transferable with some modification to a number of different situations (Ibid, 253).

It is important for teachers to understand the ways students learn and the components of critical and creative thinking. Learning is a reflective process whereby the learners either develop new insight and understanding on changes restructures his or her mental process. So constructive learning combines both inductive thought (general to specific) and deductive thought (specific to general). Whereas, learning connotes specific aspects of learning (Ornstein, 1990).

There have been three major schools of learning theories in the last 100 years: 1) behavioral theories see learning in terms of changing what we do. They emphasized behavioral modification through conditioning by means of reinforcement; 2) Field and Gestalt theories consider how individual perceived the learning environment or situation. They emphasize observational learning, imitation and modeling; 3) reasons and transfer information to new learning situations (Ibid, 34).

The contemporary cognitive psychology list the following principles of learning to wit: learning by doing is good advice, one learns to do what one does, the amount of reinforcement necessary for learning is relative to the students' needs and abilities, the principle of readiness is related to the learners' stage of development and their previous learning, the students' self-concept and beliefs about their abilities are extremely important, teacher should provide opportunities for meaningful and appropriate practice, transfer of learning to new situation can be horizontal (across subject matter) or vertical (increased complexibility of the subject), learning should be goal directed and focused, positive feedback, realistic praise and encouragement are motivating in the teaching learning process whereby students acquire specific learning strategies and also sense when they are not learning or having trouble learning (Foster, 1986).

The concept of learning differs from the notion that the learner remains passive, reacts to stimuli, and waits some reward. Here the learner is regarded as active and able to monitor and control cognitive activities. He or she processes information through assimilation and integration with old information. Without this integration new information is lost to memory and task performance dependent on the information is unsuccessful (Ausubel, 1988). Learning new information results in modification of long term memory. The responsibility for engaging in learning including central direction and focus belongs to the individual. The teacher can facilitate the process through explicit or direct instruction and by linking new information with existing relevant and related information (Peterson, 1989).

Letteri (1985) lists seven comprehension or thinking skills that students can develop to enhance the way the process and integrate information: they are skills that teachers should understand and help students acquire: analysis (called field dependence-independence), focusing (scanning), comparative analysis (reflective-impulsitivity), narrowing (breath of categorization) complex cognitive (complexity-simplicity), sharpening (leveling), and tolerance (tolerant-intolerant).

Weinstein and Mayer (1986) classify eight comprehensions or thinking process, namely: basic rehearsal strategies, complex rehearsal strategies, basic elaboration strategies, basic organizational strategies, complex organizational strategies, comprehension monitoring, and affective strategies.

One of the earliest notions of transfer of learning prevalent among educators around the term of the century maintained that the mind was composed of faculties that could be strengthened through exercise much as individual muscles can be strengthened. This notion known as the doctrine of formal discipline, was advanced in support of keeping such studies as Latin and Greek in the high school curriculum. It was argued that the study of Latin, for example trains a student's power of self-discipline, reasoning, and observation.

Eventually, Lapus (http://www.deped.gov.ph) maintained that ability to improve basic education rests on the country's ability to create strong and capable schools which can be made possible through a rational revolution of powers to the school and to the community. The creation of a strong and capable school should mean the selection of teachers who have competence in terms of teaching styles, teaching strategies and attitude towards a particular subject.

Because of the challenge to create strong and capable schools, educational institutions should consider efficiency and effectiveness, quality and excellence, relevance and responsiveness, and access and equity which should be directed towards the teachers who are the forefront of the teaching-learning situation (Aquino, 1988).

The said ideas stressed that teachers must possess desirable patterns essential to the how's of quality teaching as a manager, counselor, motivator, leader, model, public relations specialist, parent, surrogate, and instructor. But, to be able to teach effectively, teachers must know their pupils, particularly about their academic performance, aptitudes, and personalities (Gregorio, 1988).

Understanding the academic performance of learners in a particular field of study involves knowing their learning styles which are simply different approaches or ways of learning. A growing body of research on young children suggests that increased learning gains can be achieved when instruction is designed with students' learning styles in mind (Nelson, et al., 2003). In addition, several practitioners have noted the importance of teaching with learning styles in mind. Furthermore, attention to learning styles and learner diversity has been shown to increase student motivation to learn. Quite often when student motivation is increased, larger learning gains are achieved.

According to Coffield, et al. (2004), one of the most widely-known theories assessed is the learning styles model of Dunn and Dunn. For more than 35 years, the Dunns, Rita and Kenneth, have developed an extensive research program designed to improve the instruments that derive from their model of learning style preferences. Dunn and Dunn's VAK learning style model uses the three main sensory receivers: Visual, Auditory, and Kinesthetic to determine the dominant learning style. The model is also known as VAKT (Visual, Auditory, Kinesthetic, and Tactile).

Visual learners need to see the teacher's body language and facial expression to fully understand the content on a lesson (Dunn, 2003). They tend to prefer sitting at the front of the classroom to avoid visual obstruction (e.g. people's heads). They may think in pictures and learn best from visual displays including: diagrams, illustrated textbooks, overhead transparencies, video, flipcharts and handouts. During a lecture or classroom discussion, visual learners often prefer to take detailed noted to absorb the information.

Auditory learners learn best through verbal lectures, discussions, talking things through and listening to what others have to say. Auditory learners interpret the underlying meanings of speech through listening to tone of voice, pitch, speed and other nuances. Written information may have little meaning until it is heard. These learners often benefit from reading text aloud and using a tape recorder.

Dunn and Dunn (1994) have adopted learning styles models. They classified that learning could occur through the different stimuli which could eventually cause some responses. They classified the learning styles model into: environmental which could be motivated through sounds, light, temperature, and other things that are concerned through his feelings or sensation; emotional, sociological which could be characterized by being alone, in pairs or groups;

physiological which contains the basic needs in the hierarchical manner and psychological as occurring whether the person himself.

Dunn as advocates of learning styles models have based their principles on the following aspects: biological and developmental, preferences, individual learning styles, responsive environments, making it as cornerstone in their instructional program, capitalizing on their learning style strength in concentrating difficult academic material and they can academically successful individual, etc.

According to the theory, one or two of these receiving styles is normally dominant. This dominant style defines the best way for a person to learn new information by filtering what is to be learned. This style may not always be the same for some tasks. The learner may prefer one style of learning for one task, and a combination of others for a different task. An important principle in Dunn and Dunn's model is the idea that students' achievements are heavily influenced by relatively fixed characteristics (Dunn and Griggs, 2003). The recent overview of the model contains the claim that 'the learning styles of students changed substantially as they matured from adolescence into adulthood'.

Related Studies

The following studies were reviewed by the researcher and found to be related to this present study:

Dela Cruz (2000) studies on the language learning strategies and learning styles of first year college students for the English language. She found significant findings on the various strategies used by college instructors teaching English as a second language. Though freshmen students in the tertiary level uncovered various learning styles to develop their communication competence found difficulties in the English language. The study made recommendation of coming up with certain remedial schemes to enhance individual students and develop proficiency of the English language.

The above cited study has similarities to the present study particularly in the variables of learning styles and the identified English language which is also a learning area in this study. However, both studies differ in these aspects: level of respondents, research environment and level of learning being treated. The present study made use of pupils in grade six while the cited one is first year college students, the research environment of the cited study is tertiary level while the present one is the elementary level, grade six, in particular in the District of Motiong, Division of Samar. The delimitation of the present study is on the learning styles and academic performance, while the former study focused on strategies in language learning and at the same time the teaching styles of teachers in English discipline.

Azul (2000) conducted a study on the learning styles of mathematics high school students in a laboratory high school and found out some significant findings of student-respondents, i.e. accommodative learning styles, processing information from concrete experience to actual experimentation and gave meaningful learning as they made use of their multisensory sensation. Further, students learn how to learn by observation and later performed the solving problem by themselves. Moreover, students do their homework and made preferences of the learning environment to be silent, undistributed and individual comfort.

The similarities of these two studies are on the principal variables of learning styles. However, the cited study focused specifically on the learning style in mathematics while this study on the basic tool subject under the 2002 Basic Elementary Curriculum, i.e. English, Science, Mathematics, Filipino and Makabayan. Moreover, the respondents are high school students in a university laboratory school while this study are grade six pupils in a particular district in Samar Division, elementary level.

This first study finds semblance to the present study in terms of the variates of age and sex as determinant of style. However, they differ in the nature of study since the study cited dealt with investigation of supervisory styles on secondary school head teachers while the present study on the learning styles of the grade school pupils. More so, both of these two studies differ on the research environment being the former is Eastern Samar division while the present one is Samar Division, particularly in the District of Motiong.

Boco's study on the other hand ascertained the relationship between the degree of position powers by school managers' expertise of expert, coercive and instructional competence, management of learning environment, professionalism and establishing parent and community relations.

The study of Jabonete (2009) on student attitude towards their teachers has impact on their academic performances. Salient features of the study had uncovered the academic performance of the student was significantly influenced by their attitudes towards their teachers and that the average academic performance of the students was fairly satisfactory but still could be improved by themselves with their teacher's effectiveness guidance and counseling. Further, the researcher recommended that problems encountered by students and teachers must be given special and direct attention to create a learning environment in the acquisition of learning.

There is a similarity in the study of Jabonete and the present study regarding the variables on academic performance and the research environment this Division of Samar. Though their differences was on the involvement of subjects being high school students on the study cited while the present one are grade six pupils in the elementary level.

The study of Sadullo (2008) entitled, "Learning Styles of Secondary Chemistry Students in the Division of Samar: Basis for an Instructional Redirection" revealed some significant findings and concluded the four learning styles: accommodator, assimilator, converger and diverger showed significant relationships with the age of the respondents. All learning styles have significant relationships with the average monthly income of parents. Those who belonged to low income families tend to show more of the characteristics of the four learning areas.

The similarity of Sadullo's study to the present study is on the variable of learning style. However, the former differs in some aspects on the kind of learning styles because the present study is focused on the kind of learning style which includes auditory, visual, tactile, kinesthetic and environmental factors. More so, the learning areas and the subject respondents are different because the reviewed study was on chemistry subject while the present covers a general perspective of learning on the different discipline respondents of the former high school students while the present study are grade VI elementary pupils.

Palencia (2009) conducted a study on "Correlation of Oral English Performance in the Language Functions of Nursing Freshmen: Inputs for Improved English Instructors." He concluded that the learning styles of the respondents in terms of their relation with others depicted a significant relationship with their oral English performance in the interactional and the representational language function. However, the respondents' oral English performance in the instrumental, regulatory, personal, heuristic and imaginative function showed no significant relationship with their learning styles.

Palencia's study has similarity to the present study on the variates of learning styles. It differs, however on the scope and respondents of the study because the former was more encompassing and focused on oral English performances with subjects as college students while the latter specifically identified the different learning styles based from the strand of physiological dimension of auditory, visual, tactile, kinesthetic, and environmental factors.

Versoza (2005) conducted a study on English Proficiency: Its Relationship to Science and Mathematics Achievement of Fourth Year Secondary Students in Samar". She concluded the following in her study: the types of school attended by the student-respondents have significant relations with their academic achievement in English, Science and Mathematics. Moreover, she concluded further that there was significant relationship of the students' English proficiency and their achievement in English, Science, and Mathematics.

Similarity of Verzosa to the present study is on achievement/academic performance of the respondent-subjects. Though Verzosa stipulated the subjects on English, Science and Mathematics on the focus of the study, the present, however made an evaluation of the academic performance of the basic learning areas in English, Filipino, Science, Mathematics, and Makabayan. On the other hand, the respondents coming from selected secondary public and private schools while the present are grade VI pupils from the public elementary schools.

Other studies pertaining to academic performance were conducted by Gonzaga (2004) and Dolorzo (2005). The first one pertains to "Relationship of Students Academic Performance and Perceived Role of Model: A Tribute for Teachers and Parents". In the conclusion of his study, it was revealed that the students' academic are significantly related to the role model attributes of the teachers and the parents manifested to their students. The second one, that of

Dolorzo, on "Pupils' Academic Performance and their Involvement in School Organizations: Input to Pupil Development Program", he concluded that there was a significant relationship between the academic performance of the elementary grade pupils and their extent of involvement in school organization.

Both studies have semblance to the present study with respect to academic performance as variable in the study. Their differences lie on the extent of involvement in school organization and perception on their role models attribute as variables of these studies. However, the present study aside from the academic performance of the basic learning areas and the learning styles of the subject-respondents.

Another study on academic performance was conducted by Bermejo (2008) entitled "Eating Habits and Academic Performance of Secondary Student in Selected Public Schools in the Division of Samar", has come up with the following conclusions: eating habits, during breakfast, lunch and supper do not influence the student-respondents academic performance and performance in TLE. However, eating habits during snacks influence their academic performance and TLE.

The similarity of Bermejo's study to the present study is on academic performance of the respondents. However, there is marked differences in the study on certain aspects. Bermejo's study is associated with eating habits while the present study focuses only on learning styles and academic performance.

The subject-respondents of Bermejo were secondary students taking TLE while the latter are grade six pupils in the District of Motiong, this division.

Geche (2009) conducted a study entitled "Learning Styles and Strategies of Ethiopian Secondary School Students in Learning Mathematics". The purpose of the study was to identify preferred learning styles and strategies of secondary school students and to examine the prevailing problems that restrict them to use their own preferences. The study was intended to highlight a number of issues that need to be revealed and addressed in the learning of mathematics. The result has shown that students were not learning mathematics on the basis of their preferred learning styles and strategies and the teachers were practicing autocratic teaching styles. These imply that the organization of secondary school mathematics curriculum requires reform to accommodate the preferred learning styles and strategies of students.

The study of Geche was deemed similar to the present study since both studies focused on learning styles. However, the two studies differed in some respect. The study of Geche was on the effect of learning styles on learning mathematics while the present study covered the different subject areas in grade VI. Another difference is that the study of Geche involved high school student whereas the present study involved grade VI pupils.

A study was conducted by Moss in 2006 entitled "Learning Styles, Student-Centered Learning Techniques, and Student Performance: An Empirical Study". Though other categorizations of learning styles have been widely studied, few researchers have compared different learning styles inventories to undergraduate student achievement in agricultural economics courses. Moreover, few studies have explored the affects of instructional strategies, in concert with learning styles, on student achievement. This study does so, using data generated from an undergraduate course in agricultural economics. Results indicated that active learning and problem-based learning techniques, as a supplement to the traditional lecture format, can significantly and positively influence student learning. Additionally, students' learning styles significantly affect their performance in an introductory course in agriculture, resources, and food.

The study of Moss was considered related to the present study in the that both studies pertain to association learning styles in the process of learning. While the two studies are similar in this respect, they are also different in terms of other variables like the content area where learning styles has an effect. In the case of Moss, learning style was associated with the subject on agriculture while the present study considered all the learning areas in the grade VI curriculum.

The reviewed literature and studies had contributed much for the formulation of problems, conceptualization and development of the study.

Chapter 3

METHODOLOGY

This chapter deals on method and procedures that were used in this study. This includes the discussion of the research design, instrumentation and validation of instruments, sampling technique, data gathering procedure and statistical treatment of data.

Research Design

This study employed the descriptive-correlational research which utilized the questionnaire as the basic data gathering instrument. Other data gathering instrument was documentary analysis. The study was descriptive in the sense that the researcher looked into the profile of the respondents to establish personal characteristics and into the learning styles of the respondents and their academic performance along the following learning areas: English, Science, Mathematics, Filipino and Makabayan.

The data gathered was tabulated, categorized, organized and analyzed with the use of appropriate statistical tools, such as frequency count and percentage, mean and standard deviation, weighted means, Pearson-product-moment correlation coefficient and Fisher's t-test.

Instrumentation

The main instrument used in the data gathering in this study was the questionnaire and documentary analysis.

Questionnaire. The questionnaire was used as the main data gathering instrument in this study. It was composed of two parts: Part I covered the respondents' profile, Part II assessed the respondents on their learning styles based on the different learning styles such as auditory, visual, tactile, kinesthetic, and environmental factor.

Questionnaire Checklist on Strategy Inventory for Language Learning (SILL). This questionnaire-checklist was devised by Oxford (1998). This instrument assessed the respondents' language learning strategies. This instrument was developed by Oxford for the Language Change Project, which periodically assesses the amount of change found on language skills after the learner's foreign language training has been completed. His study used the modified version used by dela Cruz (2000:47-53).

The language learning strategies with their descriptions include:

A. Remembering more effectively. This covers the cognitive means that students use to remember or even absorb English words that come their way.

Auditory. If students learn more from listening to people or from different media or if they get easily distracted by noise.

Hands-on. If students rather do trip or are better stimulated to think or learn better when they move about.

B. Your Relations with Other

Extroversion. The degree to which a learner gets energy from the people and events outside himself.

Introversion. The extent to which a learner receives energy from ideas, feelings or concepts inside himself.

C. You Relations with Ideas

Intuitive. When students find fixed steps boring or when students like to discover or come up with something new.

Concrete. When students rather follow steps or are sequential, prefer concrete facts and exact answers.

D. Your Orientation to Learning Tasks

Closure. Tells how immediately students need to reach decisions and finish tasks.

Open. Tells how reasonably students need to delay or defer reaching decisions finishing tasks.

E. Your Overall Orientation

Global. If students focus more on similarities, enjoy tests requiring divergent answers and are confused with too many details.

Analytic. If students look at differences, understand things if broken down into pieces and solve problems through logical analysis.

Documentary analysis. The researcher browsed available documents to gather additional information, which were relevant in this particular study. Among the documents analyzed were the academic performance of the grade six pupils on their marks of their latest grading periods.

Validation of the Instrument

The main instrument utilized in this study was the questionnaire which was developed by the researcher herself. Since it was a self-made questionnaire, it passed through the validation processes. First, the researcher drafted the questionnaire and submitted the same to her adviser for correction. After the adviser corrected the questionnaire, the researcher revised it and subjected it to expert validation through the members of the panel of oral examiners, who were also graduate professors of Samar State University (SSU), City of Catbalogan, Samar during the pre-oral examination. Comments and suggestions on the results of the expert validation were considered by the researcher and included in the final revision.

A try-out of the questionnaire was administered to fourteen grade six pupils at Jiabong District at an interval of four days from the first administration to the second administration. Using Pearson Product Moment correlation, the reliability coefficient obtained was 0.803. This value indicated that the questionnaire was appropriate for school surveys as supported by the information below.

Reliability Coefficient	Degree of Reliability
0-95 – 0.99	Very High
0.90 – 0.94	High
0.80 – 0.89	Fairly High, adequate for individual measurement
0.70 – 0.79	Rather Low, adequate for group measurement
Below 0.70	Low, entirely adequate for individual measurement, although useful for group average and school surveys

Sampling Procedure

The researcher utilized stratified random sampling in the selection of pupil-respondents from the 467 grade six pupils from the District of Motiong, Division of Samar as respondents.

In calculating for the sample size, the researcher applied the Sloven's formula (Sevilla, et al., 1998: 107) as shown below.

$$n = \frac{N}{1 + Ne2}$$

Where: n = refers to the sample size
N = refers to the total population of Grade VI pupils
e = refers to the margin of error = 0.05

The computation yielded a sample size of 215 broken down as follows: 12 pupils from Bayog Elementary School out of 26 pupils, 55 pupils from 119 pupils from Motiong Central Elementary School, 69 pupils from 150 pupils from Calapi Elementary School, 14 pupils out of 31 pupils from New Minarog Elementary

School, 18 pupils out of 39 pupils from Carawas Elementary School, 22 pupils from 48 pupils from Bonga Elementary School, 14 pupils out of 30 pupils from Calantawon Elementary School, and finally 11 pupils from 24 pupils from Inalad Elementary School.

Data Gathering Procedure

In the data gathering phase of the study, the researcher sought the permission of the Schools Division Superintendent of the Division of Samar to conduct the study in the District of Motiong. The approved permit was used by the researcher as her reference to request permission from the District Supervisor to field the questionnaire among the grade six pupils. Further, the researcher also sought the permission from the Principals of the different elementary schools to have access on the available records in respective offices to serve and review relevant information as regards the documented attributes of the pupils' grades.

Ensuring high quality of data the researcher fielded the questionnaire personally to have high percentage of retrieval and with the help of some grade six teachers.

Statistical Treatment of Data

The researcher utilized the descriptive and inferential statistics in the analysis and interpretation of data such as frequency count, percentage, mean standard deviation, weighted means, Pearson-product-moment correlation coefficient and analysis of variance.

Frequency counts and percentage. This tool was used to tabulate the variates in the profile and the indicators in the variables of the study.

Mean and weighted means. This was used to determine the general view to get the average of the particular data.

Standard deviation. This was used to measure the disparity of each observation as it deviates from the average.

Pearson product-moment correlation coefficient. This was used to measure the relationship of variables.

Fisher's t-test. This statistical tool was used to determine the significance of the computed correlation coefficient to test the hypotheses of the study using $\alpha = 0.05$ as level of significance.

Chapter 4

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents the data obtained, the analysis undertaken and the interpretation in connection with the specific questions of the study.

Profile of Pupil-Respondents

The demographic profile of the respondents such as age, sex, parents' education, parents' occupation, parents' average family income per month, number of siblings, birth order, place of dwelling, available learning materials at home, and years of stay in school are discussed and presented in several tables

Age and sex. Table 1 shows the age and sex distribution of the pupil-respondents.

The table reveals that the oldest pupil-respondents is a boy and a girl representing 0.47 percent of the total respondents with an age of 22 years. The youngest is 10 years old consisting of two boys and two girls at 0.93 percent. Three boys and 4 girls at 3.36 percent did not specify their age.

Many of the pupil-respondents are 12 years old composed of 20 boys and 42 girls for a total of 62 or 28.84 percent. This is followed by 59 or 27.44 percent 11 years old with 26 boys and 33 girls. Next are 52 or 24.19 percent who are 13 years old consisting of 21 boys and 31 girls.

Table 1

Age and Sex Distribution of the Pupil-Respondents

Age (in years)	Sex		Total	Percent
	Boys	Girls		
22	1	0	1	0.47
17	1	0	1	0.47
16	0	2	2	0.93
15	2	8	10	4.65
14	12	7	19	8.84
13	21	31	52	24.19
12	20	42	62	28.84
11	26	33	59	27.44
10	2	0	2	0.93
Not Specified	3	4	7	3.26
Total	**88**	**127**	**215**	**100.00**
Mean	**12.42**	**12.35**	**12.38**	-
SD	**1.22**	**1.66**	**1.41**	-

Of the total 215 pupil-respondents, there are more female pupils at 127 compared to 88 boys

It is also reflected in the table that the mean age of the respondents is pegged at 12.28 years with standard deviation of 1.41 years.

Parents' education. In Table 2 is presented the educational attainment of pupil-respondent's parents.

Of the total number of parents, 78 or 36.28 percent of the fathers and 68 or 31.63 percent of the mothers did not finish their elementary schooling. This is followed by 47 or 21.86 percent of the fathers and 46 or 21.40 percent of the mothers graduated from the elementary level. Next are 29 or 13.49 percent of the fathers while 35 or 16.28 percent of the mothers reached the high school level and 26 or 12.09 percent of the fathers compared to 28 or 13.02 percent of the mothers finished their high school.

Table 2

Educational Background of the Pupil-Respondents' Parents

Educational Background	**Category**			
	Father		**Mother**	
	f	**Percent**	**f**	**Percent**
With PhD/Ed/D units	1	0.47	0	0.00
MA/MS Graduate	0	0.00	0	0.00
With MA/MS units	3	1.40	1	0.47
College Graduate	10	4.65	15	6.98
College Level	13	6.05	11	5.12
High School Graduate	26	12.09	28	13.02
High School Level	29	13.49	35	16.28
Elementary Graduate	47	21.86	46	21.40
Elementary Level	78	36.28	68	31.63
No Schooling	5	2.33	3	1.40
Not Specified	3	1.40	8	3.72
Total	**215**	**100.00**	**215**	**100.00**

One or 0.47 percent of the fathers earned doctorate units with none from the mothers. Five or 2.33 percent of the fathers and three or 1.40 percent of the mothers were unschooled. Three or 1.40 percent of the fathers while eight or 3.72 percent of the mothers did not indicate their educational attainment.

Parents' occupation. Presented in Table 3 are the different occupations engaged in by parents of pupil-respondents.

Table 3

Occupation of the Pupil-Respondents' Parents

Occupation	Category			
	Father		Mother	
	f	%	f	%
Farmer/Fisherman	145	67.44	72	33.49
Businessman/Vendor/Buy and Sell	13	6.05	8	3.72
Government Employee	9	4.19	2	0.93
Principal/Teacher	0	0.00	3	1.40
LGU Official	4	1.86	0	0.00
Welder/Carpenter/Construction Worker	17	7.91	0	0.00
Driver/Security Guard	9	4.19	0	0.00
Househelp	0	0.00	2	0.93
Housewife	0	0.00	110	51.16
Doctor	0	0.00	1	0.47
Engineer	1	0.47	0	0.00
Others (Technician, Upholster, Painter, Caretaker, Manicurist)	3	1.40	2	0.93
Not Specified	14	6.51	15	6.98
Total	**215**	**100.00**	**215**	**100.00**

About 145 or 67.44 percent of the fathers is either a farmer or a fisherman. Next are 17 of 7.91 percent working as welder/carpenter/construction worker. Then, 13 or 6.08 percent of them are either a businessman, a vendor or engaged in buy and sell. Fourteen or 6.51 percent of the fathers did not specify their occupation. Nine or 4.19 percent are government employees with four or 1.86 percent as local government officials.

On the other hand, about 110 or 51.16 percent of the mothers are plain housewives. Seventy-two or 33.39 percent are engaged in farming or fishing while eight or 3.72 percent are businesswomen or vendor or engaged in buy and sell. Three or 1.40 percent is either a school principal or teacher. Fifteen or 6.98 percent of the mothers did not indicate their occupation.

Average family income per month. Shown in Table 4 is the distribution of parents' average monthly income of pupil-respondents.

Table 4

Monthly Income of the Pupil-Respondents' Parents

Income in Pesos (PhP)	f	Percent
9,000.00 - above	7	3.26
8,000.00 - 8,999.00	3	1.40
7,000.00 - 7,999.00	0	0.00
6,000.00 - 6,999.00	4	1.86
5,000.00 - 5,999.00	14	6.51
4,000.00 - 4,999.00	8	3.72
3,000.00 - 3,999.00	15	6.98
2,000.00 - 2,999.00	35	16.28
1,000.00 - 1,999.00	49	22.79
999.00 and below	20	9.30
Not Specified	60	27.91
Total	**215**	**100.00**
Mean	**PhP2,793.29**	
SD	**PhP3,275.80**	

Forty-nine or 22.79 percent of pupil-respondents' parents are earning averagely per month between PhP1,000.00 to 1,999.00 while 35 or 16.28 percent between PhP2,000.00 to PhP2,999.00. Twenty or 9.30 percent of the parents are earning on average per month at PhP999.00 and below. Fifteen or 6.98 percent of the parents are earning between PhP3,000.00-PhP3,999.00 range, followed by 14 or 6.51 percent at PhP5,000.00-PhP5,999.00 range. Only seven or 3.26 percent of the parents are earning on average per month of PhP9,000.00 and above. Sixty or 27.91 percent of the pupil-respondents did not indicate the average monthly income of their parents.

Moreover, the mean average monthly income of the parents is PhP2,793.29 and standard deviation of PhP3,275.80.

Number of siblings. The distribution of siblings of the pupil-respondents categorized as boys and girls is provided in Table 5.

Table 5

Number of Siblings of the Pupil-Respondents

Number of Siblings	Category			
	Boys		Girls	
	f	%	f	%
8	1	0.47	0	0.00
7	4	1.86	7	3.26
6	18	8.37	10	4.65
5	9	4.19	20	9.30
4	25	11.63	31	14.42
3	46	21.40	47	21.86
2	58	26.98	57	26.51
1	40	18.60	33	15.35
0	11	5.12	9	4.19
Not Specified	3	1.40	1	0.47
Total	**215**	**100.00**	**215**	**100.00**

Fifty-eight or 26.98 percent of the boys said they have two siblings while 57 or 26.61 of the girls also said same number of siblings. This is followed by 46 or 21.40 percent of the boys and 47 or 21.86 percent of the girls said they have three siblings followed by 40 or 18.60 percent of the boys and 33 or 15.35 percent of the girls have one sibling. Twenty-five or 11.63 percent of the boys while 31 or 14.42 percent of the girls said they have four siblings, 18 or 8.37 percent of the boys and 10 or 4,65 percent of the girls admitted they have six siblings, one or 0.47 percent but none of the girls said they have eight siblings. Eleven or 5.52 percent of the boys and nine or 4.19 percent of girls said they have no sibling while three or 1.49 percent of the boys and one or 0.47 percent of the girls did not specify their number of siblings.

Birth order. Provided in Table 6 is the distribution of pupil-respondents in terms of their birth order.

Table 6

Birth Order of the Pupil-Respondents

Birth Order	f	%
12	1	0.47
11	0	0.00
10	2	0.93
9	3	1.40
8	10	4.65
7	5	2.33
6	11	5.12
5	26	12.09
4	18	8.37
3	27	12.56
2	41	19.07
1	40	18.60
Not Specified	31	14.42
Total	**215**	**100.00**

Forty-one or 19.07 percent of the pupil-respondents are second child from the eldest while 40 or 18.60 percent of them are first born children. Next are 27 or 12.56 percent are third child, 26 or 12.09 percent are fifth child, 18 or 8.37 percent of them are fourth child, 11 or 5.12 percent are sixth child, 10 or 4.65 percent came out as eight child, two or 0.93 percent are eight children, and one or 0.47 percent as a 12th child. Thirty-one or 14.42 percent of the pupil-respondents did not specify their birth order.

Place of dwelling. Table 7 presents the distribution of pupil-respondents as to their place of dwelling.

Table 7

Place of Dwelling of the Pupil-Respondents

Place of Dwelling	f	%
Barangay	157	73.02
Town	30	13.95
Sitio	19	8.84
Carline	3	1.40
Mountain	2	0.93
Not Specified	4	1.86
Total	**215**	**100.00**

Of the 215 pupil-respondents, 157 or 73.02 percent lives in barangays compared to 30 or 13.95 percent who are living in towns. About 19 or 8.84

percent of the pupil-respondents dwell in sitios, three or 8.84 percent along the carline, two or 0.93 percent in mountains, and four or 1.86 percent of the respondents did not indicate their dwelling place.

Available learning materials. Presented in Table 8 below is the distribution of pupil-respondents in terms of availability of learning materials in their respective homes.

Table 8

Available Learning Materials at Home of the Pupil-Respondents

Available Learning Materials at Home	f	Rank
Books	182	1
Dictionary	160	2
Television Set	134	3
Radio	125	4
Magazines	94	5
Newspapers	89	6
Journals	15	7
Computer Set	7	8
Computer with Internet Connection	3	9

In terms of ranking, the most available learning materials at home are books of about 182 of them and this is followed by 160 dictionaries ranked at number 2. Next is television set at 134 ranked as the third available learning materials at home. Ranked fourth as available learning materials at home is radio at 125 units. This is again followed by magazines at 94 copies ranked as the fifth available learning materials at home and seventh are journals at 15 copies. Computer set is ranked at number 8 and last one is computer with Internet connection at three units.

Years of stay in school. Table 9 shows the number of years of stay in school of pupil-respondents.

Of the 215 pupil-respondents, 157 or 73.02 percent had been in school for almost six years, then 31 or 14.42 percent for seven years and finally one or 0.47 percent of being eight years in school. Twenty-six or 12.09 percent of the pupil-respondents did not specify the number of years they had been in school.

Table 9

Years of Stay in School of the Pupil-Respondents

Years of Stay in School	f	Percent
8	1	0.47
7	31	14.42
6	157	73.02
Not Specified	26	12.09
Total	**215**	**100.00**

Pupil-Respondents' Learning Styles

The different learning styles of the pupil-respondents are presented in several tables.

Sensory preferences. The learning styles of pupil-respondents in terms of sensory preferences are presented in Table 10.

Table 10

Pupil-Respondents' Learning Style in Terms of Sensory Preferences

Sensory Preferences	**f**	**Percent**	**Rank**
Visual	46	21.40	2
Visual-Auditory	15	6.98	7
Visual-Hands-on	18	8.37	5
Visual- Auditory-Hands-on	20	9.30	4
Auditory	34	15.81	3
Auditory-Hands-on	16	7.44	6
Hands-on	65	30.23	1
Not Specified	1	0.47	
Total	**215**	**100.00**	-

Of the 215 pupil-respondents, 65 or 30.23 percent of them have auditory-hands-on learning style and ranked at number 1. Ranked second are visual learners exhibited by 46 or 21.40 percent pupil-respondents. Ranked third are auditory learners preferred by 34 or 15.81 percent pupil-respondents. There are also visual-auditory-hands-on learners at ranked fourth composed of 20 or 9.30 percent pupil-respondents. The fifth rank are combined visual-hands-on learners comprised by 18 or 8.37 percent pupil-respondents. Next in rank at number six are 16 or 7.44 percent pupil-respondents who are auditory-hands-on learners. Fifteen or 6.98 percent of the pupil-respondents preferred visual-auditory learning ranked at number 7. One or 0.47 percent pupil-respondent did not specify his or her sensory preference.

Relation to others. Table 11 shows the distribution of pupil-respondents' learning styles in terms of their relations to others.

Table 11

Pupil-Respondents' Learning Style in Terms of Their Relations to Others

Category	f	Percent	Rank
Extrovert	93	43.26	1
Extrovert - Introvert	44	20.47	3
Introvert	76	35.35	2
Not Specified	2	0.93	
Total	**215**	**100.00**	-

Rank at number 1 are 93 or 43.26 percent pupil-respondents who are extrovert and this seconded by 76 or 35.35 percent being introvert learners, and ranked at number three are 44 or 20.47 percent pupil-respondents who are extrovert-introvert learners.

Relation with ideas. Table 12 provides the distribution of pupil-respondents with learning styles in terms of their relations with ideas.

Table 12

Pupil-Respondents' Learning Style in Terms of Their Relations With Ideas

Category	f	Percent	Rank
Concrete	155	72.09	1
Concrete - Intuitive	25	11.63	3
Intuitive	33	15.35	2
Not Specified	2	0.93	
Total	**215**	**100.00**	-

In terms of relations with ideas type of learning style, ranked at number one are 155 or 72.09 percent pupil-respondents being concrete learners. Thirty-three or 15.35 percent of the pupil-respondents are intuitive learners ranked at number two. Third in rank are 25 or 11.63 percent of the pupil-respondents being both concrete-intuitive leaners. Two or 0.93 percent of the pupil-respondents did not reveal their preferred learning styles in term of their relations with ideas.

Relation with learning tasks. Table 13 reveals the distribution of pupil-respondents' learning style in terms of their orientation with learning tasks.

Table 13

Pupil-Respondents' Learning Style in Terms of Their Orientation With Learning Tasks

Orientation with Learning Tasks	f	Percent	Rank
Close	128	59.53	1
Close - Open	34	15.81	3
Open	53	24.65	2
Total	**215**	**100.00**	-

Ranked at number one, are 128 or 59.52 percent pupil-respondents exhibiting close orientation with learning tasks type of learning style. This is seconded by 53 or 24.65 percent with open orientation with learning tasks type of learning style. Thirty-four or 15.81 percent of the pupil-respondents exhibited close-open orientation with learning tasks kind of learning style.

Overall orientation. Revealed in Table 14 is the distribution of pupil-respondents' learning style in terms of their overall orientation.

About 136 or 63.26 percent of the pupil-respondents have global overall orientation at number one and this is followed by 43 or 20.00 percent possessing global-analytic overall orientation at number two. Next at number three, are 30

Table 14

Pupil-Respondents' Learning Style in Terms of Their Overall Orientation

Overall Orientation	f	Percent	Rank
Global	136	63.26	1
Global - Analytic	43	20.00	2
Analytic	30	13.95	3
Not Specified	6	2.79	
Total	**215**	**100.00**	-

or 13.95 percent who have analytic overall orientation. Six or 2.79 percent of the pupil-respondents did no specify their learning style in terms of their overall orientation.

Relationship Between Pupil-Respondents' Learning Styles and Profile Variates

Presented in this part are the results of the correlational analysis conducted between pupil-respondents profile variates and their learning style.

Sensory preferences. Table 15 shows the correlation results using Pearson r between pupil-respondents profile and learning styles along sensory preferences.

Age and sensory preferences obtained a coefficient of correlation r of -0.047 accompanied by a Fisher's t of 0.68. This correlation is not significant since the computed Fisher's t is lower than the critical t of 1.96 at 0.05 significance level which led to acceptance of the null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their age."

Table 15

Correlation Between Pupil-Respondents' Learning Styles Along Sensory Preferences and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.047	0.68	NS
Sex	0.019	0.28	NS
Parents' Education			
Father	0.082	1.20	NS
Mother	0.179	2.65	S
Average Family Income Per Month	0.105	1.54	NS
Number of Siblings			
Boys	-0.001	0.01	NS
Girls	-0.009	0.12	NS
Birth Order	0.005	0.08	NS
Place of Dwelling	0.013	0.19	NS
Available Learning Materials at Home	0.101	1.48	NS
Years of Stay in School	0.035	0.51	NS

Legend: t_c -computed Fisher's t-value evaluated at □ = 0.05, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Pupil-respondents' sex and sensory preferences yielded an r-value of 0.019 with Fisher's t of 0.019. This Fisher's t is lower than the 1.96 critical t which imply no significant correlation between the two variables. So, the null hypothesis that says "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their sex" is accepted.

The coefficient of correlation r between the education of pupil-respondents' fathers' education and learning style in terms of sensory preferences is 0.082 and Fisher's t of 1.20. This value of the Fisher's t is lower than the 1.96 critical t indicating no significant relationship. Hence, the null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their fathers' education" is accepted.

A coefficient of correlation of 0.179 with Fisher's t of 2.65 was obtained between the mothers' education of the pupil-respondents and sensory preferences. The obtained Fisher's t is greater than the 1.96 critical t at 0.05 significance level. This observation implies significant correlation between mothers' education and sensory preferences of pupil-respondents. The null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their mothers' education" is rejected.

On the other hand, the r-values and Fisher's t-values for the other pupil-respondents' related variates and sensory preferences are: 0.105 and 1.54 for average family monthly income; -0.001 and 0.01 for number of boys in terms of number of siblings; -0.009 and 0.12 for number of girls in terms of number of siblings; 0.005 and 0.08 for birth order; 0.013 and 0.19 for place of dwelling; 0.101 and 1.48 for available learning materials at home; and 0.035 and 0.51 for years of stay in school. All these computed coefficient of correlation r's are not significant since the accompanying computed Fisher's t-values are smaller than the 1.96 critical t-value at 0.05 significance level. So, the hypotheses which say "there are no significant relationships between pupil-respondents' sensory preferences and average family monthly income; number of boys in terms of number of siblings; number of girls in terms of number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" are accepted.

Relation to others. Table 16 presents the correlation results between pupil-respondents' learning styles along their relations to others and profile variates.

A coefficient of correlation of 0.165 and Fisher's t of 2.44 was obtained between pupil-respondents' learning styles along their relations to others and average family monthly income. The correlation is significant since the Fisher's t is greater than the 1.96 critical t at 0.05 significance level. The null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of their relations to others and average family monthly income" is rejected.

For learning style along their relations to others, the r-value and Fisher's t for age are -0.018 and 0.26; an r-value of -0.054 and Fisher's t of 0.80 for sex; r-

Table 16

Correlation Between Pupil-Respondents' Learning Styles Along Their Relations to Others and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.018	0.26	NS
Sex	-0.054	0.80	NS
Parents' Education			
Father	0.039	0.57	NS
Mother	0.102	1.50	NS
Average Family Income Per Month	0.165	2.44	S
Number of Siblings			
Boys	0.083	1.22	NS
Girls	-0.006	0.09	NS
Birth Order	0.023	0.33	NS
Place of Dwelling	0.085	1.25	NS
Available Learning Materials at Home	0.065	0.95	NS
Years of Stay in School	0.038	0.56	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

value of 0.039 and Fisher's t of 0.57 for fathers' education; r-value of 0.102 and Fisher's t of 1.50 for mothers' education; r-value of 0.083 and Fisher's t of 1.22 for number of siblings according to the boys; r-value of -0.006 and Fisher's t of 0.90 for number of siblings according to the girls; r-value of 0.023 and Fisher's t of 0.33 for birth order; r-value of 0.085 and Fisher's t of 1.25 for place of dwelling; r-value of 0.065 and Fisher's t of 0.95 for available learning materials at home; and r-value of 0.083 and Fisher's t of 0.56 for years stay in school. The respective

Fisher's t are all lower than the 1.96 critical t at 0.05 significance. These observations indicate no significant relationship between the respective pairs of variables. So, the null hypothesis "there are no significant relationships between pupil-respondents' relations to others and age; sex; parents' education; number of boys in terms of number of siblings; number of girls in terms of number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" are accepted.

Relation with ideas. Table 17 shows the correlation results between pupil-respondents' learning styles along their relations with ideas and profile variates.

Table 17

Correlation Between the Pupil-Respondents' Learning Styles Along Their Relations with Ideas and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	0.022	0.32	NS
Sex	-0.027	0.40	NS
Parents' Education			
Father	-0.067	0.98	NS
Mother	-0.024	0.34	NS
Average Family Income Per Month	-0.025	0.36	NS
Number of Siblings			
Boys	0.085	1.25	NS
Girls	-0.096	1.41	NS
Birth Order	0.023	0.34	NS
Place of Dwelling	0.171	2.53	S
Available Learning Materials at Home	-0.031	0.45	NS
Years of Stay in School	0.133	1.96	S

Legend: t_c - computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

For pupil-respondents' learning styles in terms of relations with ideas and place of dwelling revealed a correlation coefficient r of 0.171 and Fisher's t of 2.53; and with years of stay in school give a Pearson r of 0.133 and Fisher's t of 1.96. These values of Pearson's r's and Fisher's t's are significant since the Fisher's t's are all greater than the critical t of 1.96 at 0.05 significance level. Hence, the null hypotheses which says ""there are no significant relationships between pupil-respondents' relations with ideas and place of dwelling; and years of stay in school" are rejected.

The computed coefficient of correlations and Fisher's t-values for the other pupil-respondents related variates are: 0.022 and 0.32 for age; -0.027 and 0.40 for sex; -0.067 and 0.98 for fathers' education; -0.024 and 0.34 for mothers' education; -0.025 and 0.36 for average family monthly income; 0.085 and 1.25 for number of siblings according to the boys; -0.096 and 1.41 for number of siblings according to the girls; 0.023 and 0.34 for birth order; and -0.03 and 0.45 for available learning materials at home. The computed coefficient of correlations and Fisher's t-values are all lower than the critical t-value of 1.96 at 0.05 significance level. This imply that no significant relationship between learning styles in terms of their relations with ideas and pupil-related variates. Hence, the null hypotheses which say "there are no significant relationships between pupil-respondents' learning styles in relations with ideas and age; sex; parents' education; average family monthly income; number of siblings according to the boys; number of siblings according to the girls; birth order; and available learning materials at home" are accepted.

Relation with learning tasks. Given in Table 18 are the correlation results between pupil-respondents' learning styles along their relations with learning tasks and profile variates.

Table 18

Correlation Between the Pupil-Respondents' Learning Styles Along Their Relations with Learning Tasks and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	0.047	0.69	NS
Sex	-0.028	0.41	NS
Parents' Education			
Father	-0.018	0.27	NS
Mother	0.053	0.77	NS
Average Family Income Per Month	-0.094	1.37	NS
Number of Siblings			
Boys	0.098	1.44	NS
Girls	-0.002	0.02	NS
Birth Order	0.002	0.03	NS
Place of Dwelling	0.061	0.90	NS
Available Learning Materials at Home	-0.072	1.05	NS
Years of Stay in School	0.046	0.67	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

The computed coefficient of correlations (r-values) and Fisher's t-values for age are 0.047 and 0.69; for sex are -0.028 and 0.41; for fathers' education are -0.018 and 0.27; for mothers' education are 0.053 and 0.77; for average family monthly income are -0.094 and 1.37; for number of siblings according to the boys are 0.098 and 1.44; for number of siblings according to girls are -0.002 and 0.02; for birth order are 0.002 and 0.03; for place of dwelling are 0.061 and 0.90; for available learning materials at home are -0.072 and 1.05; and for years of stay in school are 0.046 and 0.67, respectively. These results indicate no significant relationships between learning styles in terms of relations with learning tasks since the critical t-value of 1.96 at 0.05 significance level is higher the individual Fisher's t-values. Hence, the null hypotheses "there are no significant relationships between pupil-respondents' learning styles in relations with learning tasks and age; sex; parents' education; average family monthly income; number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" are accepted.

Overall orientation. Provided in Table 19 are the correlation results between pupil-respondents' learning styles along their overall orientation and profile variates.

A significant relationship exists between pupil-respondents' learning styles along overall orientation and birth order for an r-value of 0.134 and Fisher's t-value of 1.97 since the critical t-value of 1.96 at 0.05 significance level is lower than the computed Fisher's t. Hence, the null hypothesis ""there is no significant relationships between pupil-respondents' learning styles along overall orientation and birth order" is rejected.

Table 19

Correlation Between the Pupil-Respondents' Learning Styles Along Their Overall Orientation and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	0.016	0.23	NS
Sex	0.017	0.25	NS
Parents' Education			
Father	0.122	1.79	NS
Mother	0.023	0.33	NS
Average Family Income Per Month	0.061	0.90	NS
Number of Siblings			
Boys	0.116	1.70	NS
Girls	0.004	0.06	NS
Birth Order	0.134	1.97	S
Place of Dwelling	0.110	1.62	NS
Available Learning Materials at Home	0.008	0.12	NS
Years of Stay in School	0.014	0.21	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

As regards to other pupil-respondents related variates, the computed coefficients of correlation r between learning styles in terms of overall orientation and age is 0.016 with Fisher's t-value of 0.23; with sex, the r-value is 0.017 and Fisher's t-value of 0.25; with fathers' education, the r-value is 0.122 and Fisher's t-value of 1.79; with mothers' education, r = 0.023 and Fisher's t-value of 0.33; with average family monthly income, the r value is 0.061 and Fisher's t-value of 0.90; with number of siblings according to the boys, r-value is 0.116 and Fisher's t-value of 1.70; with number of siblings according to the girls, the r-value is 0.004

and Fisher's t-value of 0.06; with place of dwelling, the r-value is 0.110 and Fisher's t of 1.62; with available learning materials at home, the r-value is 0.008 and Fisher's t of 0.12; and with years of stay in school, the r-value is 0.014 and Fisher's t of 0.21. All these r-values have Fisher's t-values lower than the 1.96 critical t-value at 0.05 confidence level signifying no significant relationships between paired variables. The null hypotheses "there are no significant relationships between pupil-respondents' learning styles in relations with learning tasks and age; sex; parents' education; average family monthly income; number of siblings; place of dwelling; available learning materials at home; and years of stay in school" are accepted.

Pupil-Respondents' Academic Performance

In this section, the level of academic performance of pupil-respondents in the five learning areas during the second grading period are presented and discussed in several tables.

English. Table 20 shows the distribution of pupil-respondents according to their level of academic performance in English.

About 57 or 26.51 percent of the pupil-respondent's grades in English are within the 81-82 range. This is followed by 51 or 23.72 percent with grades of 83 to 84, 45 or 20.93 percent at 79 to 80, and 28 or 13.02 percent of them at 85 to 86.

Table 20

Pupil-Respondents' Level of Academic Performance in English in the Second Grading Period

Grade in English	f	Percent
91 - 92	2	0.93
89 - 90	2	0.93
87 - 88	4	1.86
85 - 86	28	13.02
83 - 84	51	23.72
81 - 82	57	26.51
79 - 80	45	20.93
77 - 78	17	7.91
75 - 76	9	4.19
Total	**215**	**100.00**
Mean	**81.90**	-
SD	**2.86**	-

The lowest performance level is at 75 to 76 by nine or 4.19 percent of the pupil-respondents. The highest performance level is at 91 to 92 obtained by two or 0.93 percent of the pupil-respondents.

The mean academic performance level obtained by pupil-respondents is at 81.90 with a standard deviation of 2.86.

Science. Table 21 shows the distribution of pupil-respondents in terms of their academic performance level in Science.

Sixty-five or 30.23 percent of the pupil-respondents have grades in science at 83 to 84. This is seconded by 45 or 20.93 percent with grades at 81 to 82, then 34 or 15.81 percent at 85 to 86 and 29 or 13.49 percent with grades at 79 to 80.

Table 21

Pupil-Respondents' Level of Academic Performance in Science in the Second Grading Period

Grade in Science	f	Percent
93 - 94	2	0.93
91 - 92	1	0.47
89 - 90	3	1.40
87 - 88	14	6.51
85 - 86	34	15.81
83 - 84	65	30.23
81 - 82	45	20.93
79 - 80	29	13.49
77 - 78	16	7.44
75 - 76	6	2.79
Total	**215**	**100.00**
Mean	**81.90**	-
SD	**2.86**	-

The lowest academic performance level is at 75 to 76 exhibited by six or 2.79 percent of the total pupil-respondents. On the other hand, the highest academic performance level is at 93 to 94 was obtained by two or 0.95 percent of the pupil-respondents.

The mean academic performance in Science is pegged at 81.90 with a standard deviation of 2.86.

Mathematics. Shown in Table 22 is the distribution of pupil-respondents in terms of their academic performance level in Mathematics.

Table 22

Pupil-Respondents' Level of Academic Performance in Mathematics in the Second Grading Period

Grade in Mathematics	f	Percent
91 - 92	1	0.47
89 - 90	7	3.26
87 - 88	13	6.05
85 - 86	54	25.12
83 - 84	56	26.05
81 - 82	38	17.67
79 - 80	26	12.09
77 - 78	10	4.65
75 - 76	10	4.65
Total	**215**	**100.00**
Mean	**82.98**	-
SD	**3.19**	-

The academic performance in Mathematics aggregated at 83 to 84 by 56 or 26.05 percent of the pupil-respondents, at 85 to 86 by 54 or 25.12 percent of them, 81 to 82 by 38 or 17.67 percent of the respondents, 79 to 80 by 26 or 12.09 percent of the respondents.

The lowest academic performance in Mathematics is 75 to 76 obtained by 10 or 4.65 percent of the respondents while the highest academic performance is at 91 to 92 obtained by one or 0.47 percent pupil-respondent.

The overall academic performance in Mathematics is 82.98 accompanied by a standard deviation of 3.19.

Filipino. Provided in Table 23 is the distribution of pupil-respondents in terms of their academic performance level in Filipino.

Table 23

Pupil-Respondents' Level of Academic Performance in Filipino in the Second Grading Period

Grade in Filipino	f	Percent
91 - 92	1	0.47
89 - 90	7	3.26
87 - 88	12	5.58
85 - 86	48	22.33
83 - 84	73	33.95
81 - 82	17	7.91
79 - 80	35	16.28
77 - 78	14	6.51
75 - 76	7	3.26
Not Specified	1	0.47
Total	**215**	**100.00**
Mean	**82.96**	-
SD	**3.18**	-

Of the 215 pupil-respondents, 73 or 33.95 percent of them received grade of 83 to 84, 48 or 22.33 percent at 85 to 86, 35 or 16.28 percent at 79 to 80, and 17 or 7.91 percent at 81 to 82. Further, about 14 or 6.51 percent of the pupil-respondents obtained grades of 77 to 78 while 12 or 5.58 percent at 87 to 88. One or 0.47 percent of the pupil-respondents did not specify his or her grade in Filipino.

The highest grade is 91 to 92 which was obtained by one or 0.47% among the pupil-respondents while the lowest is 75 to 76 received by seven of 3.26% of the pupil-respondents.

The mean grade of the whole pupil-respondents population is 82.96 with a standard deviation of 3.18.

Makabayan. Table 24 reflects the distribution of pupil-respondents in terms of their academic performance level in Makabayan.

Table 24

Pupil-Respondents' Level of Academic Performance in Makabayan in the Second Grading Period

Grade in Makabayan	f	Percent
95 - 96	1	0.47
93 - 94	3	1.40
91 - 92	6	2.79
89 - 90	10	4.65
87 - 88	33	15.35
85 - 86	76	35.35
83 - 84	44	20.47
81 - 82	25	11.63
79 - 80	12	5.58
77 - 78	5	2.33
Total	**215**	**100.00**
Mean	**84.96**	-
SD	**3.07**	-

About 76 or 35.35 percent of the pupil-respondents obtained grades of 85 to 86, 44 or 20.47 percent of them at 83 to 84, 33 or 15.35 percent at 87 to 88, and 25 or 11.63 percent at 81 to 82. Next are 12 or 5.58 percent getting grades of 79 to 80 and 10 or 4.65 percent at 89 to 90.

The highest obtained is 95 to 96 by one or 0.47 percent of the pupil-respondents compared to the lowest grade of 77 to 78 by five or 2.33 percent of them.

The mean grade obtained by pupil-respondents is 84.96 accompanied by a standard deviation of 3.07

Relationship Between Pupil-Respondents' Level of Academic Performance and Profile Variates

This part discusses the relationships between pupil-respondents' level of academic performance and their profile variates.

English. The computed coefficient of correlations between pupil-respondents' academic performance in English and profile variates are presented in Table 25.

For academic performance in English, the computed coefficient of correlations and Fisher's t-values are 0.174 and 2.58 for fathers' education, 0.225 and 3.37 for mothers' education, 0.184 and 2.74 for average family monthly income, -0.133 and 1.96 for place of dwelling, and 0.218 and 3.26 for available

Table 25

Correlation Between the Pupil-Respondents' Level of Academic Performance in English and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.029	0.42	NS
Sex	0.030	0.44	NS
Parents' Education			
Father	0.174	2.58	S
Mother	0.225	3.37	S
Average Family Income Per Month	0.184	2.74	S
Number of Siblings			
Boys	-0.020	0.29	NS
Girls	-0.006	0.09	NS
Birth Order	-0.056	0.82	NS
Place of Dwelling	-0.133	1.96	S
Available Learning Materials at Home	0.218	3.26	S
Years of Stay in School	0.009	0.13	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

learning materials at home. These r-values and accompanying Fisher's t-values indicate significant relationships the computed Fisher's t-values are higher than the critical t-value of 1.96 at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in English and fathers' education; mothers' education; average family monthly income; place of dwelling; and available learning materials at home" are rejected.

On the other hand, no significant relationships were found out between academic performance in English and the following pupil-respondents variates: an r-value of -0.029 and Fisher's t of 0.42 for age, r=0.030 and Fisher's t of 0.44 for sex, r-value equal to -0.020 and Fisher's t of 0.29 for number of siblings according to the boys, r-value of -0.006 and Fisher's t of 0.09 for number of siblings according to girls, and r-value of -0.056 and Fisher's t of 0.82 for birth order. The different Fisher's t-values are all lower than the critical t-value of 1.96 at 0.05 significance level. These results lead to the acceptance of the hypotheses which say "there are no significant relationships between pupil-respondents' academic performance in English and age; sex; for number of siblings according to the boys; number of siblings according to girls; and birth order."

Science. Table 26 reflects the computed coefficient of correlations between pupil-respondents' academic performance in Science and their profile variates.

As regards to pupil-respondents' academic performance in Science, the computed coefficients of correlation r and Fishers' t with fathers' education are 0.205 and 3.06; mothers' education are 0.239 and 3.59; average family monthly income are 0.202 and 3.01; place of dwelling are -0.172 and 2.56; and available learning materials are 0.286 and 4.36. All the r-values have Fisher's t-values greater than the 1.96 critical t-value at 0.05 confidence level signifying no significant relationships. The null hypotheses "there are no significant relationships between pupil-respondents' academic performance in Science and fathers' education; mothers' education; average family monthly income; place of dwelling; and available learning materials" are rejected.

Table 26

Correlation Between the Pupil-Respondents' Level of Academic Performance in Science and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.016	0.24	NS
Sex	0.045	0.66	NS
Parents' Education			
Father	0.205	3.06	S
Mother	0.239	3.59	S
Average Family Income Per Month	0.202	3.01	S
Number of Siblings			
Boys	-0.055	0.80	NS
Girls	0.029	0.42	NS
Birth Order	-0.007	0.10	NS
Place of Dwelling	-0.172	2.56	S
Available Learning Materials at Home	0.286	4.36	S
Years of Stay in School	0.002	0.03	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

The r-values and Fisher's t obtained between pupil-respondents' academic performance in Science and age are -0.016 and 0.24; 0.045 and 0.66 for sex; -0.055 and 0.80 for number of siblings according to the boys; 0.029 and 0.42 for number of siblings according to girls; -0.007 and 0.10 for birth order; and 0.002 and 0.03 for years of stay in school. The Fisher's t-values for all computed r-values are below the 1.96 critical t-value at 0.05 confidence level implying no significant relationships between said variables and independent category. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Science and age; sex; number of siblings according to the boys; number of siblings according to girls; birth order; and years of stay in school" are accepted.

Mathematics. Table 27 reflects the computed coefficient of correlations between pupil-respondents' academic performance in Mathematics and their profile variates.

Table 27

Correlation Between the Pupil-Respondents' Level of Academic Performance in Mathematics and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.071	1.04	NS
Sex	0.031	0.45	NS
Parents' Education			
Father	0.167	2.47	S
Mother	0.320	4.93	S
Average Family Income Per Month	0.051	0.75	NS
Number of Siblings			
Boys	-0.118	1.74	NS
Girls	-0.179	2.66	S
Birth Order	-0.142	2.10	S
Place of Dwelling	-0.121	1.78	NS
Available Learning Materials at Home	0.187	2.77	S
Years of Stay in School	0.143	2.11	S

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Academic performance in Mathematics and fathers' education yielded an r-value of 0.167 and Fisher's t of 2.47; an r value of 0.320 and Fisher's t of 4.93 for mothers' education; r value of -0.179 and Fisher's t of 2.66 for number of siblings according to girls; r value of -0.142 and Fisher's t of 2.10 for birth order; r value of 0.187 and Fisher's t of 2.77 for available learning materials at home; and r value of 0.143 and Fisher's t of 2.11 for years of stay in school. These values of Fisher's r are higher than the 1.96 critical t value at 0.05 significance level which imply significant values of the coefficient of correlations. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Mathematics and fathers' education; mothers' education; number of siblings according to girls; birth order; available learning materials at home; and years of stay in school" are rejected.

On the other hand, no significant relationship were found out between academic performance in Mathematics and the following pupil-related variates: age (r=-0.071 and Fisher's t=1.04); sex (r=0.031 and Fisher's t=0.45); average family monthly income (r=0.051 and Fisher's t=0.75); number of siblings according to boys (r=-0.118 and Fisher's t=1.74); and place of dwelling (-0.121 and Fisher's t=1.78). All Fisher's t values are lower than the 1.96 critical t value at 0.05 significance level. So, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Mathematics and age; sex; average family monthly income; number of siblings according to boys; and place of dwelling" are accepted.

Filipino. In Table 28 is presented the statistical tests conducted between pupil-related variates and academic performance in Filipino.

Table 28

Correlation Between the Pupil-Respondents' Level of Academic Performance in Filipino and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.059	0.87	NS
Sex	0.058	0.85	NS
Parents' Education			
Father	0.153	2.26	S
Mother	0.204	3.03	S
Average Family Income Per Month	-0.016	0.23	NS
Number of Siblings			
Boys	-0.097	1.42	NS
Girls	-0.208	3.11	S
Birth Order	-0.196	2.92	S
Place of Dwelling	-0.071	1.04	NS
Available Learning Materials at Home	0.071	1.04	NS
Years of Stay in School	0.010	0.15	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Significant relationships exist between academic performance in Filipino and pupil-related variates such as fathers' education (r of 0.153 and Fisher's t of 2.26); mothers' education (r of 0.204 and Fisher's t of 3.03); number of siblings according to the girls (r of -0.208 and Fisher's t of 3.11); and birth order (r of -0.196 and Fisher's t of 2.92). Compared to the 1.96 critical t value at 0.05

significance level, all calculated Fisher's t values are very much higher. These findings led to the rejection of the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and fathers' education; mothers' education; number of siblings according to the girls; and birth order."

No significant relationships were found out between academic performance in Filipino and pupil-related variates such as age (r of -0.059 and Fisher's t of 0.87); sex (r of 0.058 and Fisher's t of 0.85); number of siblings according to boys (r of -0.097 and Fisher's t of 1.42); place of dwelling (r of -0.071 and Fisher's t of 1.04); available learning materials at home (r of 0.071 and Fisher's t of 1.04); and years of stay in school (r of 0.010 and Fisher's t of 0.15) since all Fisher's t values are lower than the critical t of 1.96 at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and age; sex; number of siblings according to boys; place of dwelling; available learning materials at home; and years of stay in school" are accepted.

Makabayan. Shown in Table 29 are the statistical tests conducted between pupil-related variates and academic performance in makabayan.

Regarding pupil-respondents' academic performance in Makabayan, the computed coefficients of correlation r with fathers' education is 0.250 and Fisher's t of 3.77; mothers' education is 0.361 and Fisher's t of 5.65; place of dwelling is -0.179 and Fisher's t of 2.66; and available learning materials at home is 0.247 and Fisher's t of 3.73. The accompanying Fisher's t values are greater than the 1.96 critical t value at 0.05 significance level implying significant relationships between paired variables. So, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Makabayan and fathers' education; mothers' education; place of dwelling; and available learning materials at home" are rejected.

Table 29

Correlation Between the Pupil-Respondents' Level of Academic Performance in Makabayan and Their Profile

Profile	r_{xy}	Fisher's t_c	Evaluation
Age	-0.079	1.16	NS
Sex	0.097	1.42	NS
Parents' Education			
Father	0.250	3.77	S
Mother	0.361	5.65	S
Average Family Income Per Month	0.115	1.69	NS
Number of Siblings			
Boys	-0.107	1.57	NS
Girls	-0.088	1.29	NS
Birth Order	-0.097	1.42	NS
Place of Dwelling	-0.179	2.66	S
Available Learning Materials at Home	0.247	3.73	S
Years of Stay in School	0.017	0.25	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Academic performance in Makabayan was not significantly related with the following pupil-related variates due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: age with r=-0.079 and Fisher's t of 1.16; sex with an r of 0.097 and Fisher's t of 1.42; average family monthly income of r=0.115 and Fisher's t of 1.69; number of siblings according to boys at an r value of 0.107 and Fisher's t of 1.57; number of siblings according to girls at an r value of -0.088 and Fisher's t of 1.29; birth order with r of -0.097 and Fisher's t of 1.42; and years of stay in school at an r value of 0.017and Fisher's t of 0.25. All Fisher's t values are indeed lower than the critical t value, so the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Makabayan and age; sex; average family monthly income; number of siblings according to boys; number of siblings according to girls; birth order; and years of stay in school" are accepted.

Relationship Between Pupil-Respondents' Learning Styles and Level of Academic Performance

This section presents the discussion of the correlations between pupil-respondents' learning styles and level of academic performance in the five identified learning areas.

English. Table 30 shows the Pearson r values and Fisher's t values of the correlations between pupil-respondents academic performance in English and learning styles.

Table 30

Correlation Between the Pupil-Respondents' Level of Academic Performance in English and Their Learning Styles

Learning Styles	r_{xy}	Fisher's t_c	Evaluation
Sensory Preferences	0.081	1.18	NS
Relations with Others	0.002	0.03	NS
Relations with Ideas	-0.041	0.60	NS
Orientation to Learning Task	0.125	1.83	NS
Overall Orientation	-0.040	0.58	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Academic performance in English correlated to sensory preferences obtained and r of 0.081 and Fisher's t of 1.18; r of 0.002 and Fisher's t of 0.03 with relations with others; r of -0.041 and Fisher' t of 0.60 for relations with ideas; r of 0.125 and Fisher's t of 1.83 for orientation to learning task; and r of -0.040 and Fisher's t of 0.58 for overall orientation. These findings suggest that no significant relationship between academic performance in English and pupil-related variates exist since the computed Fisher's t values are lower than the 1.96 critical t value at 0.05 significance level. Because of these, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in English and their learning styles according to sensory preferences; relations with others; relations with ideas; orientation to learning task; and overall orientation" are accepted.

Science. The correlation coefficients and Fisher's t values between academic performance of pupil-respondents and their learning styles are presented in Table 31.

Table 31

Correlation Between the Pupil-Respondents' Level of Academic Performance in Science and Their Learning Styles

Learning Styles	r_{xy}	Fisher's t_c	Evaluation
Sensory Preferences	0.158	2.34	S
Relations with Others	0.006	0.09	NS
Relations with Ideas	-0.027	0.39	NS
Orientation to Learning Task	0.086	1.27	NS
Overall Orientation	-0.039	0.57	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

A coefficient of correlation of 0.158 and Fisher's t of 2.34 was obtained between pupil-respondents' academic performance in Science and sensory preferences. The Fisher's t is higher than the critical t of 1.96 at 0.05 significance implying significant correlation between the two variables. So, the hypothesis "there is no significant relationship between the academic performance of the pupil-respondents in Science and their learning styles according to sensory preferences" is rejected.

Pupil-respondents' academic performance in Science and learning styles in terms of relation with others give an r value of 0.006 and Fisher's t of 0.09; r of

-0.027 and Fisher's t of 0.39 for relations with ideas; r of 0.086 and Fisher's t of 1.27 for orientation to learning task; and r of -0.039 and Fisher's t of 0.57 for overall orientation. All the computed Fisher's t values are lower than the 1.96 critical t value at 0.05 significance imply no significant relationships between paired variables. This led to the acceptance of the hypotheses which say "there are no significant relationships between pupil-respondents' academic performance in Science and their learning styles according to relation with others; relations with ideas; orientation to learning task; and overall orientation."

Mathematics. Table 32 shows the Pearson r and Fisher's t values between pupil-respondents' academic performance in Mathematics and the different learning styles.

Table 32

Correlation Between the Pupil-Respondents' Level of Academic Performance in Mathematics and Their Learning Styles

Learning Styles	r_{xy}	Fisher's t_c	Evaluation
Sensory Preferences	0.227	3.40	S
Relations with Others	-0.054	0.79	NS
Relations with Ideas	0.069	1.00	NS
Orientation to Learning Task	0.252	3.80	S
Overall Orientation	0.008	0.11	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

The coefficient of correlations r between pupil-respondents' academic performance in Mathematics and sensory preferences yielded a Pearson r of 0.227 and Fisher's t of 3.40, and Pearson r of 0.252 and Fisher's t of 3.80 for orientation to learning task. There is significant relationship between paired variables since the computed Fisher's t values are greater than the 1.96 critical t value at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Mathematics and their learning styles according to sensory preferences; and orientation to learning task" are rejected.

Academic performance in Mathematics was not significantly related with the following learning styles due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: r=-0.054 and Fisher's t of 0.79 for relations with others; r of 0.069 and Fisher's t of 1.00 for relations with ideas; and r of 0.008 and Fisher's t of 0.11 for overall orientation. So, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Mathematics and their learning styles according to relations with others; relations with ideas; overall orientation" are accepted.

Filipino. Table 33 presents the Pearson r values and Fisher's t values of the correlations between pupil-respondents academic performance in Filipino and their learning styles.

Table 33

Correlation Between the Pupil-Respondents' Level of Academic Performance in Filipino and Their Learning Styles

Learning Styles	r_{xy}	Fisher's t_c	Evaluation
Sensory Preferences	0.153	2.26	S
Relations with Others	-0.071	1.04	NS
Relations with Ideas	0.134	1.98	S
Orientation to Learning Task	0.216	3.22	S
Overall Orientation	-0.021	0.30	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

Regarding the correlation between pupil-respondents' academic performance in Filipino and the different learning styles, the computed coefficients of correlation r and Fisher's t with sensory preferences is 0.153 and 2.26; relations with ideas is 0.134 and 1.98; and orientation to learning task is 0.216 and 3.22. The accompanying Fisher's t values are greater than the 1.96 critical t value at 0.05 significance level implying significant relationships between paired variables. So, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Filipino and their learning styles according to sensory preferences; relations with ideas; and orientation to learning task" are rejected.

Pupil-respondents' academic performance in Filipino was not significantly related with the following learning styles due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: r of -0.071 and Fisher's t of 1.04 for relations with others; and r of -0.021 and Fisher's t of 0.30 for overall orientation. All Fisher's t values are indeed lower than the critical t value, so the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and learning styles according to relations with others; and overall orientation" are accepted.

Makabayan. Table 34 provides the Pearson r values and Fisher's t values of the correlations between pupil-respondents academic performance in Makabayan and their learning styles.

Table 34

Correlation Between the Pupil-Respondents' Level of Academic Performance in Makabayan and Their Learning Styles

Learning Styles	r_{xy}	Fisher's t_c	Evaluation
Sensory Preferences	0.240	3.60	S
Relations with Others	-0.067	0.98	NS
Relations with Ideas	0.028	0.41	NS
Orientation to Learning Task	0.215	3.21	S
Overall Orientation	-0.001	0.01	NS

Legend: t_c -computed Fisher's t-value evaluated at $\alpha = 0.05$, df = 213; critical t = 1.96;
S - Significant; NS - Not Significant

It can be observed from the table that significant correlations exist between academic performance of pupil-respondents in Makabayan and learning style according to sensory preferences with an r-value of 0.240 and Fisher's t of 3.60 since the computed Fisher's t-value is greater than the 1.96 critical value at 0.05 significance level. The same is true with orientation to learning task with an r value of 0.215 and Fisher's t of 3.21. These results led to the rejection of the hypothesis "there are no significant relationships between the academic performance of the pupil-respondents in Makabayan and their learning styles according to sensory preferences; and orientation to learning task."

However, relations with others obtained an r-value of -0.067 and Fisher's t-value of 0.98 which is not significant at 0.05 significance level since the computed Fisher's t-value is lower than the critical t-value of 1.96. The same observations with relations with ideas at an r value of 0.028 and Fisher's t of 0.41; and overall orientation at r value of -0.001 and Fisher's t of 0.01. Hence, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Makabayan and their learning styles according to relations with others; relations with ideas; and overall orientation" are accepted.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of major findings, the conclusions drawn and the recommendations that were formulated based on the results of the study.

Summary of Findings

The following are the major findings of the study:

1. The oldest pupil-respondents were a boy and a girl representing 0.47 percent of the total respondents with an age of 22 years. The youngest was 10 years old consisting of two boys and two girls at 0.93 percent. Three boys and four girls at 3.36 percent did not specify their age.

2. Many of the pupil-respondents were 12 years old composed of 20 boys and 42 girls for a total of 62 or 28.84 percent. This was followed by 59 or 27.44 percent 11 years old with 26 boys and 33 girls. Next were 52 or 24.19 percent who were 13 years old consisting of 21 boys and 31 girls.

3. Of the total 215 pupil-respondents, there were more female pupils at 127 compared to 88 boys.

4. The mean age of the respondents was pegged at 12.28 years with standard deviation of 1.41 years.

5. Of the total number of parents, 78 or 36.28 percent of the fathers and 68 or 31.63 percent of the mothers did not finish their elementary schooling. This was followed by 47 or 21.86 percent of the fathers and 46 or 21.40 percent of the mothers graduated from the elementary level. Next were 29 or 13.49 percent of the fathers while 35 or 16.28 percent of the mothers reached the high school level and 26 or 12.09 percent of the fathers compared to 28 or 13.02 percent of the mothers finished their high school.

6. One or 0.47 percent of the fathers earned doctorate units with none from the mothers. Five or 2.33 percent of the fathers and three or 1.40 percent of the mothers were unschooled. Three or 1.40 percent of the fathers while eight or 3.72 percent of the mothers did not indicate their educational attainment.

7. About 145 or 67.44 percent of the fathers was either a farmer or a fisherman. Next were 17 of 7.91 percent working as welder/carpenter/construction worker. Then, 13 or 6.08 percent of them were either a businessman, a vendor or engaged in buy and sell. Fourteen or 6.51 percent of the fathers did not specify their occupation. Nine or 4.19 percent were government employees with four or 1.86 percent as local government officials.

8. About 110 or 51.16 percent of the mothers were plain housewives. Seventy-two or 33.39 percent were engaged in farming or fishing while eight or 3.72 percent were businesswomen or vendor or engaged in buy and sell. Three or 1.40 percent was either a school principal or teacher. Fifteen or 6.98 percent of the mothers did not indicate their occupation.

9. Forty-nine or 22.79 percent of pupil-respondents' parents were earning averagely per month between PhP1,000.00 to 1,999.00 while 35 or 16.28 percent between PhP2,000.00 to PhP2,999.00. Twenty or 9.30 percent of the parents were earning on average per month at PhP999.00 and below. Fifteen or 6.98 percent of the parents were earning between PhP3,000.00-PhP3,999.00 range, followed by 14 or 6.51 percent at PhP5,000.00-PhP5,999.00 range. Only seven or 3.26 percent of the parents were earning on average per month of PhP9,000.00 and above. Sixty or 27.91 percent of the pupil-respondents did not indicate the average monthly income of their parents.

10. The mean average monthly income of the parents was PhP2,793.29 and standard deviation of PhP3,275.80.

11. Fifty-eight or 26.98 percent of the boys said they have two siblings while 57 or 26.61 percent of the girls also said same number of siblings. This was followed by 46 or 21.40 percent of the boys and 47 or 21.86 percent of the girls said they have three siblings followed by 40 or 18.60 percent of the boys and 33 or 15.35 percent of the girls have one sibling. Twenty-five or 11.63 percent of the boys while 31 or 14.42 percent of the girls said they have four siblings, 18 or 8.37 of the boys and 10 or 4,65 percent of the girls admitted they have six siblings, one or 0.47 percent but none of the girls said they have eight siblings. Eleven or 5.52 percent of the boys and nine or 4.19 percent of girls said they have no sibling while three or 1.49 percent of the boys and one or 0.47 of the girls did not specify their number of siblings.

12. Forty-one or 19.07 percent of the pupil-respondents were second child from the eldest while 40 or 18.60 percent of them were first born children. Next were 27 or 12.56 percent were third child, 26 or 12.09 percent were fifth child, 18 or 8.37 percent of them were fourth child, 11 or 5.12 percent were sixth child, 10 or 4.65 percent came out as eight child, two or 0.93 percent are eight child, and one or 0.47 percent as a 12th child. Thirty-one or 14.42 percent of the pupil-respondents did not specify their birth order.

13. Of the 215 pupil-respondents, 157 or 73.02 percent lives in barangays compared to 30 or 13.95 percent who were living in towns. About 19 or 8.84 percent of the pupil-respondents dwell in sitios, three or 8.84 percent along the carline, two or 0.93 percent in mountains, and four or 1.86 percent of the respondents did not indicate their dwelling place.

14. In terms of ranking, the most available learning materials at home were books of about 182 of them and this was followed by 160 dictionaries ranked at number 2. Next was television set at 134 ranked as the third available learning materials at home. Ranked fourth as available learning materials at home was radio at 125 units. This was again followed by magazines at 94 copies ranked as the fifth available learning materials at home and seventh are journals at 15 copies. Computer set was ranked at number 8 and last one was computer with Internet connection at 3 units.

15. Of the 215 pupil-respondents, 157 or 73.02 percent had been in school for almost six years, then 31 or 14.42 percent for seven years and finally one or 0.47 percent of being eight years in school. Twenty-six or 12.09 percent of the pupil-respondents did not specify the number of years they had been in school.

16. Of the 215 pupil-respondents, 65 or 30.23 percent of them have auditory-hands-on learning style and ranked at number 1. Ranked second were visual learners exhibited by 46 or 21.40 percent pupil-respondents. Ranked third were auditory learners preferred by 34 or 15.81 percent pupil-respondents. There were also visual-auditory-hands-on learners at ranked fourth composed of 20 or 9.30 percent pupil-respondents. The fifth rank were combined visual-hands-on learners comprised by 18 or 8.37 percent pupil-respondents. Next in rank at number six were 16 or 7.44 percent pupil-respondents who were auditory-hands-on learners. Fifteen or 6.98 percent of the pupil-respondents preferred visual-auditory learning ranked at number 7. One or 0.47 percent pupil-respondent did not specify his or her sensory preference.

17. With regards to learning styles in relation to others, ranked at number 1 were 93 or 43.26 percent pupil-respondents who were extrovert and this was seconded by 76 or 35.35 percent being introvert learners, and ranked at number three were 44 or 20.47 percent pupil-respondents who were extrovert-introvert learners.

18. In terms of relations with ideas type of learning style, ranked at number one were 155 or 72.09 percent pupil-respondents being concrete learners. Thirty-three or 15.35 percent of the pupil-respondents were intuitive learners ranked at number two. Third in rank were 25 or 11.63 percent of the pupil-respondents being both concrete-intuitive leaners. Two or 0.93 percent of the pupil-respondents did not reveal their preferred learning styles in term of their relations with ideas.

19. For orientation with learning tasks, ranked at number one, were 128 or 59.52 percent pupil-respondents exhibiting close orientation with learning tasks type of learning style. This was seconded by 53 or 24.65 percent with open orientation with learning tasks type of learning style. Thirty-four or 15.81 percent of the pupil-respondents exhibited close-open orientation with learning tasks kind of learning style.

20. For overall orientation, about 136 or 63.26 percent of the pupil-respondents have global overall orientation at number one and this was followed by 43 or 20.00 percent possessing global-analytic overall orientation at number two. Next at number three, were 30 or 13.95 percent who have analytic overall orientation. Six or 2.79 percent of the pupil-respondents did no specify their learning style in terms of their overall orientation.

21. Age and sensory preferences obtained a coefficient of correlation r of -0.047 accompanied by a Fisher's t of 0.68. This correlation was not significant since the computed Fisher's t was lower than the critical t of 1.96 at 0.05

significance level which led to acceptance of the null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their age."

22. Pupil-respondents' sex and sensory preferences yielded an r-value of 0.019 with Fisher's t of 0.019. This Fisher's t is lower than the 1.96 critical t which implied no significant correlation between the two variables. So, the null hypothesis that says "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their sex" was accepted.

23. The coefficient of correlation r between the education of pupil-respondents' fathers' education and learning style in terms of sensory preferences was 0.082 and Fisher's t of 1.20. This value of the Fisher's t was lower than the 1.96 critical t indicating no significant relationship. Hence, the null hypothesis "there is no significant relationship between the learning styles of the pupil-respondents in terms of sensory preferences and their fathers' education" was accepted.

24. A coefficient of correlation of 0.179 with Fisher's t of 2.65 was obtained between the mothers' education of the pupil-respondents and sensory preferences. The obtained Fisher's t was greater than the 1.96 critical t at 0.05 significance level. This observation implied significant correlation between mothers' education and sensory preferences of pupil-respondents. The null hypothesis "there is no significant relationship between the learning styles of the

pupil-respondents in terms of sensory preferences and their mothers' education" was rejected.

25. On the other hand, the r-values and Fisher's t-values for the other pupil-respondents' related variates and sensory preferences are: 0.105 and 1.54 for average family monthly income; -0.001 and 0.01 for number of boys in terms of number of siblings; -0.009 and 0.12 for number of girls in terms of number of siblings; 0.005 and 0.08 for birth order; 0.013 and 0.19 for place of dwelling; 0.101 and 1.48 for available learning materials at home; and 0.035 and 0.51 for years of stay in school. All these computed coefficient of correlation r's were not significant since the accompanying computed Fisher's t-values were smaller than the 1.96 critical t-value at 0.05 significance level. So, the hypotheses which say "there are no significant relationships between pupil-respondents' sensory preferences and average family monthly income; number of boys in terms of number of siblings; number of girls in terms of number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" were accepted.

26. A coefficient of correlation of 0.165 and Fisher's t of 2.44 was obtained between pupil-respondents' learning styles along their relations to others and average family monthly income. The correlation was significant since the Fisher's t was greater than the 1.96 critical t at 0.05 significance level. The null hypothesis "there is no significant relationship between the learning styles

of the pupil-respondents in terms of their relations to others and average family monthly income" was rejected.

27. For learning style along their relations to others, the r-value and Fisher's t for age were -0.018 and 0.26; an r-value of -0.054 and Fisher's t of 0.80 for sex; r-value of 0.039 and Fisher's t of 0.57 for fathers' education; r-value of 0.102 and Fisher's t of 1.50 for mothers' education; r-value of 0.083 and Fisher's t of 1.22 for number of siblings according to the boys; r-value of -0.006 and Fisher's t of 0.90 for number of siblings according to the girls; r-value of 0.023 and Fisher's t of 0.33 for birth order; r-value of 0.085 and Fisher's t of 1.25 for place of dwelling; r-value of 0.065 and Fisher's t of 0.95 for available learning materials at home; and r-value of 0.083 and Fisher's t of 0.56 for years stay in school. The respective Fisher's t were all lower than the 1.96 critical t at 0.05 significance. These observations indicated no significant relationship between the respective pairs of variables. So, the null hypothesis "there are no significant relationships between pupil-respondents' relations to others and age; sex; parents' education; number of boys in terms of number of siblings; number of girls in terms of number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" were accepted.

28. For pupil-respondents' learning styles in terms of relations with ideas and place of dwelling revealed a correlation coefficient r of 0.171 and Fisher's t of 2.53; and with years of stay in school gave a Pearson r of 0.133 and Fisher's t of 1.96. These values of Pearson's r's and Fisher's t's were significant

since the Fisher's t's were all greater than the critical t of 1.96 at 0.05 significance level. Hence, the null hypotheses which says ""there are no significant relationships between pupil-respondents' relations with ideas and place of dwelling; and years of stay in school" were rejected.

29. The computed coefficient of correlations and Fisher's t-values between relations with ideas for the other pupil-respondents related variates were: 0.022 and 0.32 for age; -0.027 and 0.40 for sex; -0.067 and 0.98 for fathers' education; -0.024 and 0.34 for mothers' education; -0.025 and 0.36 for average family monthly income; 0.085 and 1.25 for number of siblings according to the boys; -0.096 and 1.41 for number of siblings according to the girls; 0.023 and 0.34 for birth order; and -0.03 and 0.45 for available learning materials at home. The computed coefficient of correlations and Fisher's t-values were all lower than the critical t-value of 1.96 at 0.05 significance level. The results implied no significant relationship between learning styles in terms of their relations with ideas and pupil-related variates. Hence, the null hypotheses which say "there are no significant relationships between pupil-respondents' learning styles in relations with ideas and age; sex; parents' education; average family monthly income; number of siblings according to the boys; number of siblings according to the girls; birth order; and available learning materials at home" were accepted.

30. The computed coefficient of correlations (r-values) and Fisher's t-values between relations with learning tasks for age were 0.047 and 0.69; for sex were -0.028 and 0.41; for fathers' education were -0.018 and 0.27; for mothers'

education were 0.053 and 0.77; for average family monthly income were -0.094 and 1.37; for number of siblings according to the boys were 0.098 and 1.44; for number of siblings according to girls were -0.002 and 0.02; for birth order were 0.002 and 0.03; for place of dwelling were 0.061 and 0.90; for available learning materials at home were -0.072 and 1.05; and for years of stay in school were 0.046 and 0.67, respectively. These results indicated no significant relationships between learning styles in terms of relations with learning tasks since the critical t-value of 1.96 at 0.05 significance level is higher the individual Fisher's t-values. Hence, the null hypotheses "there are no significant relationships between pupil-respondents' learning styles in relations with learning tasks and age; sex; parents' education; average family monthly income; number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school" were accepted.

31. A significant relationship existed between pupil-respondents' learning styles along overall orientation and birth order for an r-value of 0.134 and Fisher's t-value of 1.97 since the critical t-value of 1.96 at 0.05 significance level was lower than the computed Fisher's t. Hence, the null hypothesis ""“there is no significant relationships between pupil-respondents' learning styles along overall orientation and birth order" was rejected.

32. As regards to other pupil-respondents' learning styles along overall orientation, the computed coefficients of correlation r with age was 0.016 with Fisher's t-value of 0.23; with sex, the r-value wa 0.017 and Fisher's t-value of 0.25;

with fathers' education, the r-value was 0.122 and Fisher's t-value of 1.79; with mothers' education, r = 0.023 and Fisher's t-value of 0.33; with average family monthly income, the r value was 0.061 and Fisher's t-value of 0.90; with number of siblings according to the boys, r-value was 0.116 and Fisher's t-value of 1.70; with number of siblings according to the girls, the r-value was 0.004 and Fisher's t-value of 0.06; with place of dwelling, the r-value was 0.110 and Fisher's t of 1.62; with available learning materials at home, the r-value was 0.008 and Fisher's t of 0.12; and with years of stay in school, the r-value was 0.014 and Fisher's t of 0.21. All these r-values have Fisher's t-values lower than the 1.96 critical t-value at 0.05 confidence level signifying no significant relationships between paired variables. The null hypotheses "there are no significant relationships between pupil-respondents' learning styles in relations with learning tasks and age; sex; parents' education; average family monthly income; number of siblings; place of dwelling; available learning materials at home; and years of stay in school" were accepted.

32. About 57 or 26.51 percent of the pupil-respondents' grades in English were within the 81-82 range. This was followed by 51 or 23.72 percent with grades of 83 to 84, 45 or 20.93 percent at 79 to 80, and 28 or 13.02 percent of them at 85 to 86. The lowest performance level was at 75 to 76 by nine or 4.19 percent of the pupil-respondents. The highest performance level was at 91 to 92 obtained by two or 0.93 percent of the pupil-respondents. The mean academic

performance level obtained by pupil-respondents was at 81.90 with a standard deviation of 2.86.

33. Sixty-five or 30.23 percent of the pupil-respondents have grades in science at 83 to 84. This was seconded by 45 or 20.93 percent with grades at 81 to 82, then 34 or 15.81 percent at 85 to 86 and 29 or 13.49 percent with grades at 79 to 80. The lowest academic performance level was at 75 to 76 exhibited by six or 2.79 percent of the total pupil-respondents while the highest academic performance level was at 93 to 94 was obtained by two or 0.95 percent of the pupil-respondents. The mean academic performance in Science is pegged at 81.90 with a standard deviation of 2.86.

34. The academic performance in Mathematics aggregated at 83 to 84 by 56 or 26.05 percent of the pupil-respondents, at 85 to 86 by 54 or 25.12 percent of them, 81 to 82 by 38 or 17.67 percent of the respondents, 79 to 80 by 26 or 12.09 percent of the respondents. The lowest academic performance in Mathematics was 75 to 76 obtained by 10 or 4.65 percent of the respondents while the highest academic performance was at 91 to 92 obtained by one or 0.47 percent pupil-respondent. The overall academic performance in Mathematics was 82.98 accompanied by a standard deviation of 3.19.

35. Of the 215 pupil-respondents, 73 or 33.95 percent of them received grade of 83 to 84 in Filipino, 48 or 22.33 percent at 85 to 86, 35 or 16.28 percent at 79 to 80, and 17 or 7.91 percent at 81 to 82. Further, about 14 or 6.51 percent of the pupil-respondents obtained grades of 77 to 78 while 12 or 5.58 percent at 87

to 88. One or 0.47 percent of the pupil-respondents did not specify his or her grade in Filipino. The highest grade was 91 to 92 which was obtained by one or 0.47 percent among the pupil-respondents while the lowest was 75 to 76 received by seven of 3.26 percent of the pupil-respondents. The mean grade of the whole pupil-respondents population was 82.96 with a standard deviation of 3.18.

36. About 76 or 35.35 percent of the pupil-respondents obtained grades Makabayan of 85 to 86, 44 or 20.47 percent of them at 83 to 84, 33 or 15.35 percent at 87 to 88, and 25 or 11.63 percent at 81 to 82. Next are 12 or 5.58 percent getting grades of 79 to 80 and 10 or 4.65 percent at 89 to 90. The highest obtained was 95 to 96 by one or 0.47 percent of the pupil-respondents compared to the lowest grade of 77 to 78 obtained by five or 2.33 percent of them. The mean grade obtained by pupil-respondents was 84.96 accompanied by a standard deviation of 3.07

37. For academic performance in English, the computed coefficient of correlations and Fisher's t-values were 0.174 and 2.58 for fathers' education, 0.225 and 3.37 for mothers' education, 0.184 and 2.74 for average family monthly income, -0.133 and 1.96 for place of dwelling, and 0.218 and 3.26 for available learning materials at home. These r-values and accompanying Fisher's t-values indicated significant relationships the computed Fisher's t-values were higher than the critical t-value of 1.96 at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in English and fathers' education; mothers' education; average

family monthly income; place of dwelling; and available learning materials at home" were rejected.

38. On the other hand, no significant relationships were found out between academic performance in English and the following pupil-respondents variates: an r-value of -0.029 and Fisher's t of 0.42 for age, r=0.030 and Fisher's t of 0.44 for sex, r-value equal to -0.020 and Fisher's t of 0.29 for number of siblings according to the boys, r-value of -0.006 and Fisher's t of 0.09 for number of siblings according to girls, and r-value of -0.056 and Fisher's t of 0.82 for birth order. The different Fisher's t-values were all lower than the critical t-value of 1.96 at 0.05 significance level. These results led to the acceptance of the hypotheses which say "there are no significant relationships between pupil-respondents' academic performance in English and age; sex; for number of siblings according to the boys; number of siblings according to girls; and birth order."

39. As regards to pupil-respondents' academic performance in Science, the computed coefficients of correlation r and Fishers' t with fathers' education were 0.205 and 3.06; mothers' education were 0.239 and 3.59; average family monthly income were 0.202 and 3.01; place of dwelling were -0.172 and 2.56; and available learning materials were 0.286 and 4.36. All the r-values have Fisher's t-values greater than the 1.96 critical t-value at 0.05 confidence level signifying no significant relationships. The null hypotheses "there are no significant relationships between pupil-respondents' academic performance in Science and

fathers' education; mothers' education; average family monthly income; place of dwelling; and available learning materials" were rejected.

40. The r-values and Fisher's t obtained between pupil-respondents' academic performance in Science and age were -0.016 and 0.24; 0.045 and 0.66 for sex; -0.055 and 0.80 for number of siblings according to the boys; 0.029 and 0.42 for number of siblings according to girls; -0.007 and 0.10 for birth order; and 0.002 and 0.03 for years of stay in school. The Fisher's t-values for all computed r-values were below the 1.96 critical t-value at 0.05 confidence level implying no significant relationships between said variables and independent category. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Science and age; sex; number of siblings according to the boys; number of siblings according to girls; birth order; and years of stay in school" were accepted.

41. Academic performance in Mathematics and fathers' education yielded an r-value of 0.167 and Fisher's t of 2.47; an r value of 0.320 and Fisher's t of 4.93 for mothers' education; r value of -0.179 and Fisher's t of 2.66 for number of siblings according to girls; r value of -0.142 and Fisher's t of 2.10 for birth order; r value of 0.187 and Fisher's t of 2.77 for available learning materials at home; and r value of 0.143 and Fisher's t of 2.11 for years of stay in school. These values of Fisher's r were higher than the 1.96 critical t value at 0.05 significance level which imply significant values of the coefficient of correlations. Hence, the hypotheses "there are no significant relationships between pupil-

respondents' academic performance in Mathematics and fathers' education; mothers' education; number of siblings according to girls; birth order; available learning materials at home; and years of stay in school" were rejected.

42. No significant relationship were found out between academic performance in Mathematics and the following pupil-related variates: age (r=-0.071 and Fisher's t=1.04); sex (r=0.031 and Fisher's t=0.45); average family monthly income (r=0.051 and Fisher's t=0.75); number of siblings according to boys (r=-0.118 and Fisher's t=1.74); and place of dwelling (-0.121 and Fisher's t=1.78). All Fisher's t values were lower than the 1.96 critical t value at 0.05 significance level. So, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Mathematics and age; sex; average family monthly income; number of siblings according to boys; and place of dwelling" were accepted.

43. Significant relationships existed between academic performance in Filipino and pupil-related variates such as fathers' education (r of 0.153 and Fisher's t of 2.26); mothers' education (r of 0.204 anf Fisher's t of 3.03); number of siblings according to the girls (r of -0.208 and Fisher's t of 3.11); and birth order (r of -0.196 and Fisher's t of 2.92). Compared to the 1.96 critical t value at 0.05 significance level, all calculated Fisher's t values were very much higher. This findings led to the rejection of the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and

fathers' education; mothers' education; number of siblings according to the girls; and birth order."

44. No significant relationships were found out between academic performance in Filipino and pupil-related variates such as age (r of -0.059 and Fisher's t of 0.87); sex (r of 0.058 and Fisher's t of 0.85); number of siblings according to boys (r of -0.097 and Fisher's t of 1.42); place of dwelling (r of -0.071 and Fisher's t of 1.04); available learning materials at home (r of 0.071 and Fisher's t of 1.04); and years of stay in school (r of 0.010 and Fisher's t of 0.15) since all Fisher's t values were lower than the critical t of 1.96 at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and age; sex; number of siblings according to boys; place of dwelling; available learning materials at home; and years of stay in school" were accepted.

45. Regarding pupil-respondents' academic performance in Makabayan, the computed coefficients of correlation r with fathers' education was 0.250 and Fisher's t of 3.77; mothers' education was 0.361 and Fisher's t of 5.65; place of dwelling was -0.179 and Fisher's t of 2.66; and available learning materials at home was 0.247 and Fisher's t of 3.73. The accompanying Fisher's t values were greater than the 1.96 critical t value at 0.05 significance level implying significant relationships between paired variables. So, the hypotheses "there are no significant relationships between pupil-respondents' academic

performance in Makabayan and fathers' education; mothers' education; place of dwelling; and available learning materials at home" were rejected.

46. Academic performance in Makabayan was not significantly related with the following pupil-related variates due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: age with r=-0.079 and Fisher's t of 1.16; sex with an r of 0.097 and Fisher's t of 1.42; average family monthly income of r=0.115 and Fisher's t of 1.69; number of siblings according to boys at an r value of 0.107 and Fisher's t of 1.57; number of siblings according to girls at an r value of -0.088 and Fisher's t of 1.29; birth order with r of -0.097 and Fisher's t of 1.42; and years of stay in school at an r value of 0.017and Fisher's t of 0.25. All Fisher's t values were indeed lower than the critical t value, so the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Makabayan and age; sex; average family monthly income; number of siblings according to boys; number of siblings according to girls; birth order; and years of stay in school" were accepted.

47. Academic performance in English correlated to sensory preferences obtained and r of 0.081 and Fisher's t of 1.18; r of 0.002 and Fisher's t of 0.03 with relations with others; r of -0.041 and Fisher' t of 0.60 for relations with ideas; r of 0.125 and Fisher's t of 1.83 for orientation to learning task; and r of -0.040 and Fisher's t of 0.58 for overall orientation. These findings suggested that no significant relationship between academic performance in English and pupil-related variates exist since the computed Fisher's t values were lower than the

1.96 critical t value at 0.05 significance level. Because of these, the hypotheses "there are no significant relationships between pupil-respondents' academic performance in English and their learning styles according to sensory preferences; relations with others; relations with ideas; orientation to learning task; and overall orientation" were accepted.

48. A coefficient of correlation of 0.158 and Fisher's t of 2.34 was obtained between pupil-respondents' academic performance in Science and sensory preferences. The Fisher's t was higher than the critical t of 1.96 at 0.05 significance implying significant correlation between the two variables. So, the hypothesis "there is no significant relationship between the academic performance of the pupil-respondents in Science and their learning styles according to sensory preferences" was rejected.

49. Pupil-respondents' academic performance in Science and learning styles in terms of relation with others give an r value of 0.006 and Fisher's t of 0.09; r of -0.027 and Fisher's t of 0.39 for relations with ideas; r of 0.086 and Fisher's t of 1.27 for orientation to learning task; and r of -0.039 and Fisher's t of 0.57 for overall orientation. All the computed Fisher's t values were lower than the 1.96 critical t value at 0.05 significance imply no significant relationships between paired variables. This led to the acceptance of the hypotheses which say "there are no significant relationships between pupil-respondents' academic performance in Science and their learning styles according to relation with others; relations with ideas; orientation to learning task; and overall orientation."

50. The coefficient of correlations r between pupil-respondents' academic performance in Mathematics and sensory preferences yielded a Pearson r of 0.227 and Fisher's t of 3.40, and Pearson r of 0.252 and Fisher's t of 3.80 for orientation to learning task. There was significant relationship between paired variables since the computed Fisher's t values were greater than the 1.96 critical t value at 0.05 significance level. Hence, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Mathematics and their learning styles according to sensory preferences; and orientation to learning task" were rejected.

51. Academic performance in Mathematics was not significantly related with the following learning styles due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: r=-0.054 and Fisher's t of 0.79 for relations with others; r of 0.069 and Fisher's t of 1.00 for relations with ideas; and r of 0.008 and Fisher's t of 0.11 for overall orientation. So, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Mathematics and their learning styles according to relations with others; relations with ideas; overall orientation" were accepted.

52. The correlation between pupil-respondents' academic performance in Filipino and the different learning styles, the computed coefficients of correlation r and Fisher's t with sensory preferences was 0.153 and 2.26; relations with ideas was 0.134 and 1.98; and orientation to learning task was 0.216 and

3.22. The accompanying Fisher's t values were greater than the 1.96 critical t value at 0.05 significance level implying significant relationships between paired variables. So, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Filipino and their learning styles according to sensory preferences; relations with ideas; and orientation to learning task" were rejected.

53. Pupil-respondents' academic performance in Filipino was not significantly related with the following learning styles due to smaller Fisher's t values compared to the 1.96 critical t value at 0.05 significance level: r of -0.071 and Fisher's t of 1.04 for relations with others; and r of -0.021 and Fisher's t of 0.30 for overall orientation. All Fisher's t values were indeed lower than the critical t value, so the hypotheses "there are no significant relationships between pupil-respondents' academic performance in Filipino and learning styles according to relations with others; and overall orientation" were accepted.

54. Significant correlations existed between academic performance of pupil-respondents in Makabayan and learning style according to sensory preferences with an r-value of 0.240 and Fisher's t of 3.60 since the computed Fisher's t-value was greater than the 1.96 critical value at 0.05 significance level. The same is true with orientation to learning task with an r value of 0.215 and Fisher's t of 3.21. These results led to the rejection of the hypothesis "there are no significant relationships between the academic performance of the pupil-

respondents in Makabayan and their learning styles according to sensory preferences; and orientation to learning task."

55. However, relations with others obtained an r-value of -0.067 and Fisher's t-value of 0.98 which was not significant at 0.05 significance level since the computed Fisher's t-value was lower than the critical t-value of 1.96. The same observations with relations with ideas at an r value of 0.028 and Fisher's t of 0.41; and overall orientation at r value of -0.001 and Fisher's t of 0.01. Hence, the hypotheses "there are no significant relationships between the academic performance of the pupil-respondents in Makabayan and their learning styles according to relations with others; relations with ideas; and overall orientation" are accepted.

Conclusions

The following conclusions were drawn based on the findings of the study.

1. Majority of the grade 1 pupil were 12 years old; dominated by girls; whose parents did not finish their elementary schooling whose fathers were either engaged in fishing or farming and mothers just plain housewives; many of the parents were earning averagely per month between PhP1,000.00 to 1,999.00; with mostly two siblings in the family according to the pupil-respondents, who are mostly a second child and living in barangays; where the most available learning materials at home were books; and mostly had been in school for almost six years.

2. Majority of pupil-respondents were auditory-hands-on learners.

3. With regards to learning styles in relation to others, the pupil-respondents were mostly extrovert.

4. In terms of relations with ideas type of learning style, majority of the pupil-respondents were concrete learners.

5. For orientation with learning tasks, majority of the pupil-respondents exhibited close orientation with learning tasks type of learning style.

6. For overall orientation, majority of the pupil-respondents have global overall orientation.

7. Pupil-respondents' learning style along sensory preferences was significantly related to their mothers' education but not with age; sex; fathers' education; average family monthly income; number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school.

8. Learning styles along their relations to others was significantly related to average family monthly income but not with their age; sex; parents' education; number of siblings; birth order; place of dwelling; available learning materials at home; and years stay in school.

9. Learning styles in terms of relations with ideas was significantly related to place of dwelling; and with years of stay in school but not with age; sex; parents' education; average family monthly income; number of siblings; birth order; and available learning materials at home.

10. Pupil-respondents' learning styles along relations with learning tasks was not significantly related to their age; sex; parents' education; average family monthly income; number of siblings; birth order; place of dwelling; available learning materials at home; and years of stay in school.

11. Significant relationship existed between pupil-respondents' learning styles along overall orientation and birth order but not with their age; sex; parents' education; average family monthly income; number of siblings; place of dwelling; available learning materials at home; and years of stay in school.

12. Many of the pupil-respondents' grades in English were 81 to 82; 83 to 84 grades in Science, Mathematics, and Filipino; and 85 to 86 in Makabayan.

13. Pupil-respondents' academic performance in English was significantly related to their parent's education; average family monthly income; place of dwelling and available learning materials at home but not with their age; sex; number of siblings; and birth order.

14. Academic performance in Science was significantly related to pupil-respondents' parents' education; average family monthly income; place of dwelling; and available learning materials but not with age; sex; number of siblings; birth order; and years of stay in school.

15. Academic performance in Mathematics of pupil-respondents was significantly related to their parents' education; number of siblings according to girls; birth order; available learning materials at home; and years of stay in

school but not to their age; sex; average family monthly income; and number of siblings according to the boys.

16. Significant relationships existed between academic performance in Filipino and pupil-related variates such as parents' education; number of siblings according to the girls; and birth order but with age; sex; number of siblings according to boys; place of dwelling; available learning materials at home; and years of stay in school.

17. Pupil-respondents' academic performance in Makabayan was significantly related to their parents' education; place of dwelling; and available learning materials at home but not with age; sex; average family monthly income; number of siblings; number of siblings' birth order and years of stay in school.

18. Academic performance in English was significantly related to pupil-respondents' learning styles along to sensory preferences; relations with others; relations with ideas; orientation to learning task; and overall orientation.

19. There was significant relationship between pupil-respondents' grades Science and sensory preferences but not with relation with others; relations with ideas; orientation to learning task; and overall orientation.

20. Pupil-respondents' grades in Mathematics was significantly related with sensory preferences and orientation to learning task but not with relations with others; relations with ideas; and overall orientation.

21. Grades in Filipino of pupil-respondents was significantly related with their learning styles along sensory preferences; relations with ideas; and orientation to learning task but not with their relations with others; and overall orientation.

22. Significant correlations existed between academic performance of pupil-respondents in Makabayan and learning style according to sensory preferences; and orientation to learning task but not with relations with others; relations with ideas; and overall orientation.

Recommendations

In view of the foregoing findings and conclusions, the following recommendations are advanced:

1. The result of the study revealed that the academic performances of pupil-respondents in the five identified learning contents were significantly related to their learning styles along sensory preferences. In this regard, teachers must employ different teaching strategies that are in consonance with this learning style of their pupils. They should understand pupils' learning styles so that they can stimulate pupils' motivation and get students actively involved in the learning process.

2. Teachers should provide pupils with opportunities to maintain healthy pupil competition and high expectations in learning, such as announcing

mean scores of class tests for comparison and setting clear expectations for assignments and tests.

3. Pupil-respondents' academic performance in the different learning areas were significantly related to the availability learning materials at home. Since most of them live in barangays, it is suggested that parents should provide their children with plenty of learning print materials like old or new books and magazines which can be obtained through solicitation from acquaintances or borrowing from the school library.

4. Intensify the textbook exchange project of the department by negotiating with district and division supply officers for books and other instructional materials that are excess in other schools within the district and division.

5. Construct or provide a space in the school for a library hub which can serve as a textbook exchange or distribution center. The principals may solicit donation of books and materials from Asia Book Foundation, other government agencies such as Department of Health, Agriculture, Tourism for Agency Flyers, successful alumni of the school, and the like.

6. Local library be organized with the help of the community, barangay officials and other benefactors. This should offer children's books, games, songs, etc. to enhance favorable attitude reading being a basic skill needed in any learning situation.

7. The study revealed a significant correlation between pupil-respondents' learning styles along average family monthly income and indirectly learning styles affects academic achievement. Since pupils' parents' average family income below the poverty threshold, the following activities are recommended to augment their family income: a) value reorientation may be advocated during the parent learning action cell (PLAC) sessions towards improving their lives, attitude towards education and livelihood and the like; b) mobilize PTAs, school and district alternative learning systems (ALS) to conduct livelihood training skills such as small-scale business activities, entrepreneurship, cooperativism and others.

8. Since most fathers and mothers have not graduated elementary and the result of the study revealed that mother's education was significantly related to the academic performance of their children, it is suggested that seminars be conducted towards improving favorable attitude towards the value of education among their children.

9. It is recommended that pupils also should examine their learning styles to be successful in their learning. In essence, teachers should encourage pupils to become active learners by providing opportunities that will cater to the different learning styles of their pupils. This will help assure pupil success in learning.

10. This study did not include any data about participants' self-reflections about their learning preferences. Therefore, this study can be

extended to further explore the associations between learning styles and attitudes towards learning or motivation to learn from a qualitative paradigm.

11. Future research that is longitudinal in nature should be conducted for the important reason that one style or mode of learning may not surface as the favorite at a particular grade level, it allows the educator to peer into the way their pupils change their thinking and processing information from one year level to another as an effect of teachers teaching style. This better understanding of pupils' learning will allow teachers and clinical educators to better perform their responsibilities of shaping better pupils.

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APPENDICES

APPENDIX A

APPROVAL OF THE THESIS PROPOSAL

Samar State University
COLLEGE OF GRADUATE STUDIES
Catbalogan City

(Date)

MARILYN D. CARDOSO, Ph.D.
College of Graduate Studies
Samar State University
Catbalogan City

Madam:

In my desire to start writing my thesis, may I have the honor to submit for approval one of the following research problem of my thesis preferably No. 1

1. THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR;
2. Teaching Strategies and Learning Styles of Teachers and Elementary Pupils in the District of Motiong;
3. Performance of Grade VI Pupils in the National Achievement Test (NAT), District of Motiong.

I am anticipating favorable approval on this request.

Thank you.

Very truly yours,

(SGD.) ROSALIE B. DACUTANAN
Researcher

Approved:

(SGD.) MARILYN D. CARDOSO, Ph. D.
Dean, College of Graduate Studies

APPENDIX B

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City, Samar
Telephone Numbers: (055)-543-8394/(055)-251-2139
Website: www.ssu.edu.ph

ASSIGNMENT OF ADVISER

(Date)

DR. LETECIA R. GUERRA
Education Supervisor I
DepEd, Samar Division
Catbalogan, Samar

Madam:

Please be informed that you have been designated as adviser of **MS. ROSALIE B. DACUTANAN** candidate for the degree **Master of Arts in Education Major in Elementary Education** who proposes to write a thesis entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR".**

Thank you for your cooperation.

Very truly yours,

(Sgd.)MARILYN D. CARDOSO, Ph. D.
Dean, College of Graduate Studies

CONFORME:

LETECIA R. GUERRA, Ph. D.
Adviser

1st copy – Dean's Office
2nd copy – Adviser
3rd copy – Researcher

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City

December 6, 2011

MRS. ZENAIDA L. CABUTIN
Principal
Jiabong Central Elementary School
Jiabong, Samar

Madam:

The undersigned is presently conducting a research entitled **THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR** as part of requirements for the degree Master of Arts in Education Major in Elementary Education.

In this regard, I would like to request permission from your good office to conduct the try-out of my proposed questionnaire to the Grade VI pupils of your school.

Thank you very much and may the good Lord shower you more blessings.

Very truly yours,

ROSALIE B. DACUTANAN
Researcher

APPROVED:

ZENAIDA L. CABUTIN
Principal

Republic of the Philippines
Samar State University
COLLEGE OF GRADUATE STUDIES
Catbalogan City

December 6, 2011

MRS. REMEDIOS A. JABIÑAR
District Supervisor
Jiabong District
Jiabong, Samar

Madam:

I have the honor to request permission from your good office to make a dry run of my questionnaire to the Grade VI Pupils of Jiabong Central Elementary School for my study entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR."**

Approval of this request is earnestly sought.

Thank you and more power.

Very truly yours,

ROSALIE B. DACUTANAN
Researcher

Recommending Approval:

MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

Approved:

REMEDIOS A. JABIÑAR
District Supervisor

Republic of the Philippines
Samar State University
COLLEGE OF GRADUATE STUDIES
Catbalogan City

December 6, 2011

DR. PONCIANO A. GABIETA
District Supervisor
Motiong District
Motiong, Samar

Sir:

I have the honor to request permission from your good office to field my questionnaire to the Grade VI Pupils of Motiong District for my study entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR."**

Approval of this request is earnestly sought.

Thank you and more power.

Very truly yours,

ROSALIE B. DACUTANAN
Researcher

Recommending Approval:

MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

Approved:

PONCIANO A. GABIETA, Ph. D.
District Supervisor

Republic of the Philippines
Samar State University
COLLEGE OF GRADUATE STUDIES
Catbalogan City

December 6, 2011

DR. EDITA S. DE VEYRA
Assistant Schools Division Superintendent
Officer-in-Charge
Division of Samar
Catbalogan, Samar

Madam:

I have the honor to request permission from your good office to dry run and field my questionnaire to the Grade VI Pupils in the District of Motiong for my study entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR."**

Approval of this request is earnestly sought.

Thank you and more power.

Very truly yours,

ROSALIE B. DACUTANAN
Researcher

Recommending Approval:

MARILYN D. CARDOSO, Ph.D.
Dean, College of Graduate Studies

Approved:

EDITA S. DE VEYRA, Ph.D.
Assistant Schools Division Superintendent

LETTER/REQUEST FOR THE CONDUCT OF THE STUDY AND TO ADMINISTER THE SURVEY QUESTIONNAIRES TO THE PUPILS

Republic of the Philippines
SAMAR STATE UNIVERSITY
COLLEGE OF GRADUATE STUDIES
Catbalogan City

December 6, 2011

Dear Pupil-Respondents,

Mabuhay!

The undersigned is presently conducting a study entitled **"THE LEARNING STYLES AND ACADEMIC PERFORMANCE OF GRADE SIX PUPILS IN THE DISTRICT OF MOTIONG, DIVISION OF SAMAR"** as a requirement to complete my degree leading to Master of Arts in Education (MAEd) at the Samar State University (SSU), Catbalogan City.

In that connection, may I seek your help to answer the attached questionnaire with honesty and sincerity. Rest assured that your responses will be treated with confidentiality for the purpose of this research activity.

Thank you very much.

Very truly yours,

ROSALIE B. DACUTANAN
Researcher

A QUESTIONNAIRE
(For Grade Six Pupils)

Part I. PROFILE OF PUPIL-RESPONDENTS

Direction: Kindly supply with the information asked from you in the space provided for your answer or place a check mark (/) where it is needed.

Name: ____ (1)Age: ____________
(Optional)
(2) Sex: ( ) Male
( ) Female

(3) Parents' Educational Attainment (Please check below)

Father		**Mother**
( )	Ph.D./Ed.D. Graduate	( )
( )	MA/MS Graduate with Ph.D./Ed.D. units	( )
( )	MA/MS Graduate	( )
( )	College Graduate with MA/MS units	( )
( )	College Graduate	( )
( )	College Level	( )
( )	High School Graduate	( )
( )	High School Level	( )
( )	Elementary Graduate	( )
( )	Elementary Level	( )
( )	No Schooling	( )

(4) Parents' Occupation/Work/Profession

4.1 Mother's Occupation: ____
4.2 Father's Occupation: ____

(5) Average family income per month: PhP____________________

(6) Number of Children in the Family: _______ Boys _______ Girls

(7) Birth Order: ____First ____Second ____Third ____Other (Pls specify) ______

(8) Place Where You Live (Please check one)

__________ Town
__________ Seacoast
__________ Barangay
__________ Carline
__________ Sitio
__________ Mountain

(9) Available Learning Materials at Home (Please check the material you have)

__________ Books
__________ Magazines
__________ Journals
__________ Computer Set
__________ Newspapers
__________ Dictionary
__________ Computer with internet Access
__________ Others (Please specify) _______________
__________ TV
__________ Radio

(10) Number of years in school: ________ (Include repeating grades)

Part II. DIFFERENT LEARNING STYLES

Direction: Kindly describe on how you learned in school or off school. Use the scale below by checking opposite each statement.

2	-	Always	(A)
1	-	Sometimes	(S)
0	-	Never	(N)

STATEMENTS	(N) 0	(S) 1	(A) 2
I. Your Sensory Preferences			
1. I learn when there are variates of visual aids/audio gadgets.			
2. I remember things better if I write them down.			
3. I can visualize pictures, numbers, words, or pages in my head.			
4. I learn when I'm ready to learn.			
5. I learn through memorization.			
6. I prefer listening to a lecture or tape, rather than reading a textbook.			
7. I remember things better if I study aloud or discuss them with someone.			
8. I remember better what people say than what they look like.			
9. I learn when instructions are clearly given.			
10. I learn when repeated questions are made.			

STATEMENTS	(N) 0	(S) 1	(A) 2
11. I use my fingers to count and or I move my lips when I read.			
12. I learn when I manipulate objects/apparatus.			
13. I learn when I'm directly involved in any activity.			
14. I learn to put together parts to make an object complete.			
15. I learn through series of exercises.			
II. Your Sensory Relations with Others			
1. I easily make new friends.			
2. At parties or gatherings, I feel energized and have fun.			
3. In social groups, I easily keep up with news or gossip about other people.			
4. I prefer to research in the library with my friends.			
5. I learn when I solve problems with help.			
6. I am rather shy and quiet most of the time.			
7. It is hard for most people to get to know me.			
8. In a large group, I listen rather than speak unless I know people well.			
9. I prefer to learn alone rather than in groups.			
10. I do nor ask other's help when doing my task/project/assignment.			
III. Your Relation with Ideas			
1. In learning, I like things presented in step-by-step way.			
2. I like concrete facts, not speculations or hidden meanings.			
3. I like to discover major principles that might not be clear at first, rather than being told.			
4. I use to locate meanings from the dictionaries when I'm not sure.			
5. I like to come up with lots of new ideas or options.			
6. I prefer to avoid too many options from which to choose.			
7. Step-by-step learning often bores me.			
8. I don't need to use dictionary in locating meanings.			

STATEMENTS	**(N) 0**	**(S) 1**	**(A) 2**
9. I prefer to read fiction novels rather than books.			
10. I easily believe some fictitious beliefs from other people.			
IV. Your Overall Orientation			
1. I do not listen to music when I'm studying.			
2. I learn when I'm in a pleasant/organized environment.			
3. I don't take snacks when I'm studying.			
4. I learn with bright light and formal seating.			
5. I learn in a quiet environment.			
6. I learn anywhere anytime of the day.			
7. I learn when there is music.			
8. I prefer to take snacks when I'm studying.			
9. I learn with soft lighting and informal seating.			
10. I learn to appreciate and judge things/arts finish products.			

Name: ____

STATEMENTS	(N) 0	(S) 1	(A) 2
V- Your Orientation to Learning Tasks			
1. I reach decisions quickly.			
2. I make lists of things that I need to do and I generally follow through.			
3. I start early so that I can finish before the deadline.			
4. I set deadlines on every task that I do.			
5. I like to work with specific tasks complemented with objectives.			
6. I put off making decisions as long as I reasonably can.			
7. I am spontaneous person and do not like to plan ahead too much.			
8. I like to just let things happen.			
9. I consider learning as a game to be enjoyed.			
10. I dislike deadlines.			

CURRICULUM VITAE

CURRICULUM VITAE

Name : ROSALIE BALABAT DACUTANAN

Address : Motiong, Samar

Birth Place : Catbalogan, Samar

Date of Birth : December 29, 1979

Station : Bayog Elementary School

Present Station : Elementary Grade Teacher II

Civil Status : Married

Husband : Dennis A. Dacutanan

Children : Queennie Rose, Andrea Pearl, Denielle Julius

EDUCATIONAL BACKGROUND

Elementary : Bliss Elementary School
Bliss, Catbalogan, Samar
1986-1992

Secondary : Samar National High School
Catbalogan, Samar
1992-1996

College : Bachelor in Elementary Education
Samar College
1996-2000

Graduate Studies : Master of Arts in Education (MAEd)
Major in Elementary Education
Samar State University

PROFESSIONAL WORK EXPERIENCE

Regular Permanent Teacher

Teacher I	2000-2009	District of Motiong
Teacher II	2009-present	District of Motiong

ELIGIBILITY

Licensure Examination for Teachers (LET)
August 27, 2000
Tacloban City

TRAININGS/SEMINARS ATTENDED

Seminar-Workshop on Communicative Language Teaching SRAe Kit Utilization and Multi-Level Strategies in Teaching Science, October 24-26, 2009, Motiong Central School, Motiong, Samar

Workshop on the IM's Construction SRA Laboratory Kit Utilization and Card Using Exemplar Utilization, October 28-30, 2008, Motiong Central School, Motiong, Samar

First Disrtict Education Summit/District Re-Echo Seminar Workshop on Mathematical Strategies in Teaching Science August 31-September 1, 2007, Motiong Central School, Motiong, Samar

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