THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS

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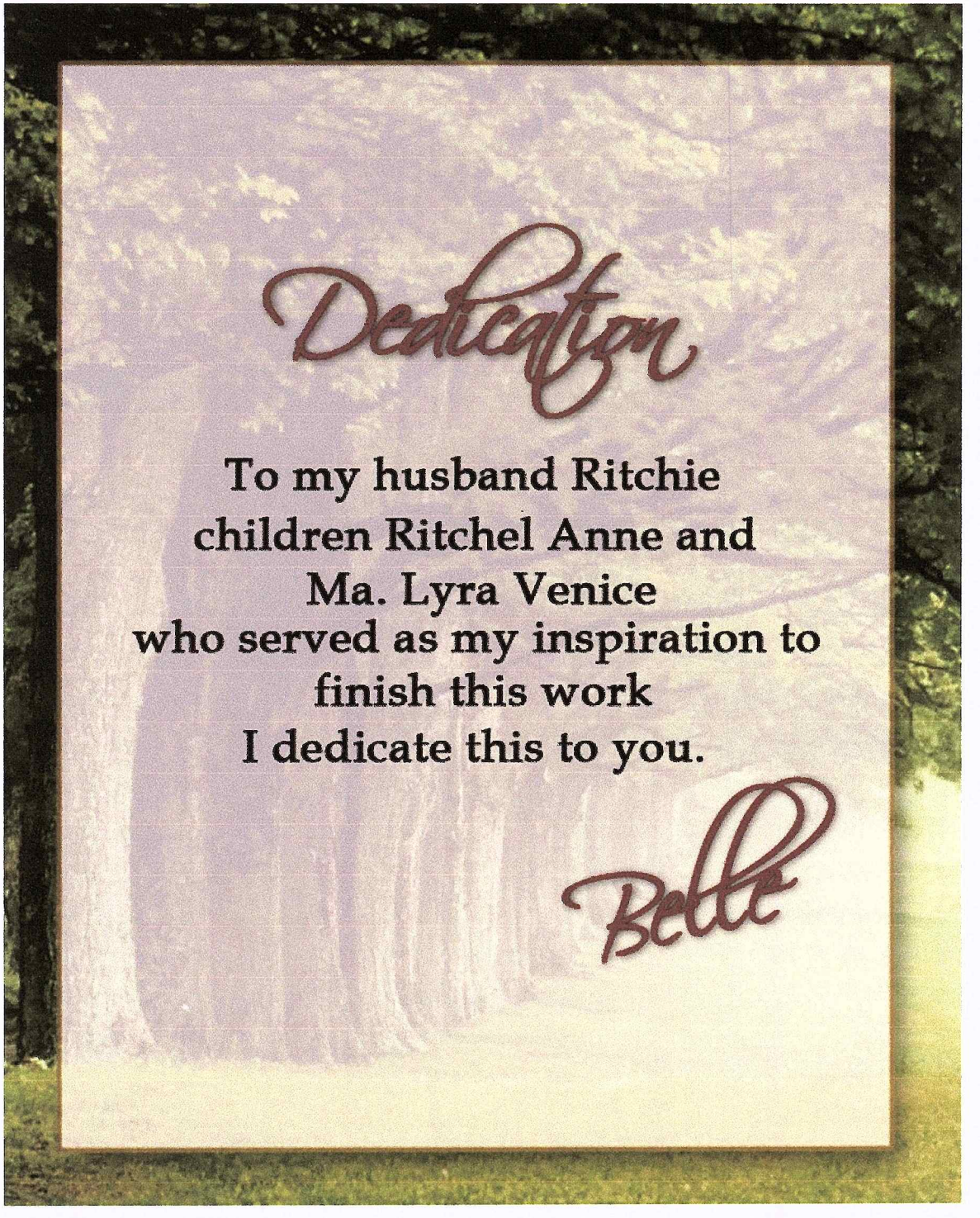
Dedication
To my husband Ritchie
children Ritchel Anne and
Ma. Lyra Venice
who served as my inspiration to
finish this work
I dedicate this to you.
Belle

ABSTRACT

This study assessed the academic performance of multi-grade classes in the District of Motiong, Samar, during the school year 2007-2008. This also aimed to provide bases for curricular redirection based on the results of this study. Using a descriptive research design, the present study assessed the academic performance of pupils in multi-grade classes in complete and incomplete elementary schools in terms of class type – two-grade levels; and three-grade levels, grade level – one; two; three; four; five; and six, and by learning areas – English, Filipino, Mathematics, Science, and Sibika at Kultura. Six (20.69 percent) teacher-respondents recited for 1090 minutes and 720 minutes, followed by five (17.24 percent) who recited for 740 times, four (13.79 percent) who recited 750 minutes, three (10.34 percent) who recited for 1110 minutes, 1100 minutes, and 760 minutes. Majority (25 or 86.21 percent) of the teacher-respondents attended district level relevant trainings/seminars, followed by two (6.89 percent) who attended division level relevant trainings/seminar, and one (3.45 percent) each who attended regional as well as national level relevant trainings/seminars. Most of the teachers-respondents earned income posted which is slightly above the poverty income threshold given by the National Statistics Office in 2004 which was estimated at Php 11,962.00 for a family of five members (two parents and three children). The teacher-respondents recited for longer number of minutes which is expected since they are handling multi-grade classes. School activities to support and maintain the pupil-respondents' favourable attitude towards schooling should be conducted among multi-grade classes.

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Chapter 1

THE PROBLEM AND ITS SETTING

Introduction

Plato believed that children are born with special talents and that their training should stress those talents (Curtis, 1959: 1). His views are consistent with modern thinking about individual differences in education. Plato's views were supported by Rousseau when he averred that children should be free to express their energies in order to develop their special talents (Houston, et al., 1983: 220). His views suggest that normal development of children occurs best in a non-restrictive, supportive environment. As such, it is best to develop the children in this kind of environment early in this life.

One of the institutions responsible for the development of children is the school. It is in this environment that the child is weaned away from home and is introduced into the larger society (Panopio, et al., 1994: 85). It is where he gets his education that enables him to harness his potentials, as espoused by Plato and Rousseau.

In the meantime, the primary education of the child is the most critical aspect of his education because it refers to the first years of formal education. It is where the child learns the core skills of reading, writing, and simple arithmetic. It is also where the child enjoys a free and compulsory education.

Considering the need to develop the whole being of the child as early as his primary education, educational psychologists continue to provide not only a major basis for the initial education of teachers, specifically in management of learning and behavior, but also a curriculum design, with special emphasis given to the needs of individual children (Microsoft Encarta Encyclopedia, 2003). Teachers are thus valuable resources that are at the forefront of the educative process. The teachers should be chosen based on their competence to address the needs of the individual pupils.

Over the years, however, there are various concerns that confront the educational system, to wit: a) paper works; b) overlapping schedules of academic and co-curricular activities; c) lacking school facilities and equipment, and d) poorly implemented school policies. On top of these problems, teachers in distant and sparsely populated areas handle different grade levels in the same classrooms where number of enrollees for each grade level does not warrant the opening of a single class.

Multi-grade teaching is an educational innovation which refers to a class consisting of two or more grades taught by one teacher (Gahite, 2003: 346). It is referred to as teaching of pupils of different ages, grades and abilities in the same group. Over the years, multi-grade classes have been instituted in developing countries such as Zambia, Peru, Colombia, Sri-Lanka and the Philippines.

In the Philippines, the institution of multi-grade classes was only one aspect of the Instructional Management by Parents, Community and Teachers

(IMPACT), which was innovated by the Regional Center for Education Innovation and Technology (INNOTECH) in the 1970s. This educational innovation sought to address the problems of mass primary education. It stemmed out of the observation that one-half of the rural children in Southeast Asia do not complete more than four to five years of school and, due to a projected rapid population growth rate, this situation is likely to worsen.

With the increasing development of multi-grade teaching, there are perceptions that they are poor substitute for single-grade classes. The 1989 UNESCO/APEID report summarized the experiences of the countries with multi-grade classes such as a) lists of minimum learning competencies are not specifically designed for use by teachers in multi-grade schools; b) school plans, instructional materials and methodological guidelines are often difficult to apply to multi-grade teaching situations; c) shortage of support materials for teachers and individualized instructional materials for learners; d) need for more work on the kind of evaluation, diagnostic testing, remediation and feedback which would best assist multi-grade teaching, and e) few multi-grade teachers have developed special training curricula for multi-grade teaching.

The District of Motiong has instituted multi-grade teaching in some complete and incomplete elementary schools. Just like the multi-grade teachers of the different school districts in the Division of Samar, the multi-grade teachers of this district experience difficulties in teaching multi-grade classes. The problems that are predominantly experienced by the teachers are related to the

preparation of instructional materials such as lesson plans, visual aids and audio-visual aids, use of motivational techniques such as storytelling, games, group work and flash cards, and use of evaluation techniques such as posttest, summative tests and others. The teachers stress that these factors may have influence on how pupils fare in school. The Consolidated Pretest and Posttest Result of the District of Motiong for school year 2006-2007, specific for schools with multi-grade classes, revealed the following mean percentage scores (MPS): 58.78 percent (Filipino), 55.55 percent (English), 56.42 percent (Math), 45.39 percent (Science), and 59.45 percent (HEKASI).

These results show that they are below the proficiency levels of 75 percent in all the learning areas. As such, there should be effort to achieve the best results for multi-grade classes in every administration of the National Achievement Test or any similar public examination. As such, as a multi-grade teacher in the District of Motiong, the researcher became interested in assessing the academic performance of the pupils in all the learning areas.

Statement of the Problem

This study assessed the academic performance of multi-grade classes in the District of Motiong, Samar, during the school year 2007-2008. This also aimed to provide bases for curricular redirection based on the results of this study.

More specifically, this study sought answers to the following questions:

1. What is the profile of the multi-grade pupils in terms of the following:

1.1 age and sex;

1.2 grade level;

1.3 physical health;

1.4 attitude towards schooling, and

1.5 study habits?

2. What is the profile of the multi-grade teachers in terms of the following:

2.1 age and sex;

2.2 civil status;

2.3 average monthly income;

2.4 highest educational attainment;

2.5 grade level(s) taught;

2.6 teaching experience;

2.7 teaching load, and

2.8 relevant trainings/seminars attended?

3. What are the performance levels of the pupils in multi-grade classes in terms of:

3.1 class type;

3.1.1 two-grade levels, and

3.1.2 three-grade levels;

3.2 grade level;

3.2.1 one;

3.2.2 two;

3.2.3 three;

3.2.4 four;

3.2.5 five, and

3.2.6 six;

3.3 learning areas;

3.3.1 English;

3.3.2 Filipino;

3.3.3 Mathematics;

3.3.4 Science, and

3.3.5 Sibika at Kultura?

4. Is there a significant difference in the performance levels of pupils in multi-grade classes in the aforecited categories?

5. Is there a significant relationship between the pupil-respondents' performance in the five learning areas and the following:

5.1 pupil-related variates, and

5.2 teacher-related variates?

6. What are the expected and actual mean percentage scores (MPS) of the pupils in multi-grade classes based on the District Achievement Test (DAT) by:

5.1 class type;

5.1.1 two-grade levels; and

5.1.2 three-grade levels;

5.2 grade level;

5.2.1 one;

5.2.2 two;

5.2.3 three;

5.2.4 four;

5.2.5 five, and

5.2.6 six;

5.3 learning areas;

5.3.1 English;

5.3.2 Filipino;

5.3.3 Mathematics;

5.3.4 Science, and

5.3.5 Sibika at Kultura?

6. Is there a significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid categories?

7. What are the problems encountered by the teachers in the implementation of the multi-grade program?

8. What implications for curricular redirections may be derived from the findings of this study?

Hypotheses

The following hypotheses were tested in this study:

1. There is no significant difference in the performance levels of pupils in multi-grade classes in terms of:

1.1 class type;

1.1.1 two-grade levels, and

1.1.2 three-grade levels;

1.2 grade level;

1.2.1 one;

1.2.2 two;

1.2.3 three;

1.2.4 four;

1.2.5 five, and

1.2.6 six;

1.3 learning areas;

1.3.1 English;

1.3.2 Filipino;

1.3.3 Mathematics;

1.3.4 Science, and

1.3.5 Sibika at Kultura.

2. There is no significant relationship between the pupil-respondents' performance in the five learning areas and the following:

2.1 pupil-related variates, and

2.2 teacher-related variates.

3. There is no significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid categories.

Theoretical Framework

The present study found theoretical basis in the theory of behaviorism espoused by Watson, as cited by Gregorio (1988: 94-96). The said theory maintains that learning is any change in behavior of an organism. Such change may range from the acquisition of knowledge, simple skill, specific attitude and opinions. It may also include innovation, elimination or modification of response. He believed on the pre-conceived end to which the child is made to conform. To him, learning is the process of fixation.

The theorist emphasizes that the response most frequently associated with stimulus will be elicited by that same stimulus. To him, the unit of stimulus and response become the basic building blocks of behavior. As such, the teacher chooses the pattern according to which he is going to mold the pupil and then goes to work. He sets up situation in which the child can successfully

accomplish the task. A competent teacher provides a particular situation which offers constancy of stimulation sufficient to form bonds and habits and provides adequate practice of them. Thus, the teacher's success is mirrored in the performance of the learner.

This study also found theoretical basis in Bandura's (Atkinson, et al., 2000: 128) Social-Cognitive Theory. The theory says that external determinants and internal determinants are parts of a system of interacting influences that affect both behavior and other parts of the system. It means that the relationship is based on reciprocity wherein the environment affects behavior and behavior affects the environment. It also means that through the observation of the behavior of others, which were rewarded and punished, people learn how to behave when caught in varied situations (Atkinson, et al., 2000: 128).

When applied to this study, it means that pupils, through observation from their teachers, parents, and classmates, acquire learning styles and study habits which may have been rewarded and have been practiced since then. The environment in multi-grade classes may not be supportive of healthy learning styles and study habits which may help them in improving their academic performance. It is upon this premise that the present study was conducted which aimed to make an assessment of the academic performance of pupils in multi-grade classes which are not the usual learning environment.

Finally, the present study finds basis on the Functional-Structural Theory by Solomon (www.logic.Stanford.edu). The said theory stresses out that the role

of education is to equip the individuals with the necessary skills and knowledge that will make them functioning members of the society. In addition, this theory emphasizes that it is the society's structure that makes it possible for members to interact with one another and eventually gather as much knowledge and skills as possible.

Based on the theory, the performance of a person in a particular field is what he does in it. It is one of the determining factors of his being a person in relation to the society as a whole. There are various factors that contribute to a person's performance in any field. Generally, motivation, learning and socio-economic background are some of the factors that influence a person's performance.

The question then becomes that the performance of a person in a particular field may be influenced by problems that he encounters in school – especially when the learning environment is not the usual one as in the case of multi-grade classes. The pupils may experience the problems related to the teachers' preparation of instructional materials, use of motivation techniques and utilization of evaluation techniques, and school facilities, reward system for teachers, and participation of parents and teachers that determine their level of academic performance in school.

It is in this respect that the researcher thought of this study which aimed to make an assessment of the academic performance of the pupils in multi-grade

classes in complete and incomplete elementary schools in the District of Motiong, Division of Samar.

Conceptual Framework

Figure 1 shows the conceptual framework of the study.

Shown in the base frame are the respondents of the study, the elementary grade pupils in multi-grade classes in complete and incomplete elementary schools in the District of Motiong, Division of Samar, during the school year 2007-2008. It is linked to a bigger frame, which shows the research process, by a single-directional arrow.

As it is indicated, the research was a descriptive study about the academic performance of pupils in multi-grade classes by class type - two-grade levels; and three-grade levels, grade level - one; two; three; four; five; and six, and by learning areas - English; Filipino; Mathematics; Science; and Sibika at Kultura, shown in the first two boxes at the left of the bigger frame.

It also shows that the study determined the difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in terms of class type, grade level and by learning areas, shown in the last two boxes at the right of the bigger frame. The results of the study are expected to be used as bases for policy redirection in order to improve the performance levels of the pupils in multi-grade classes, as shown by the fourth and fifth higher frames, respectively.

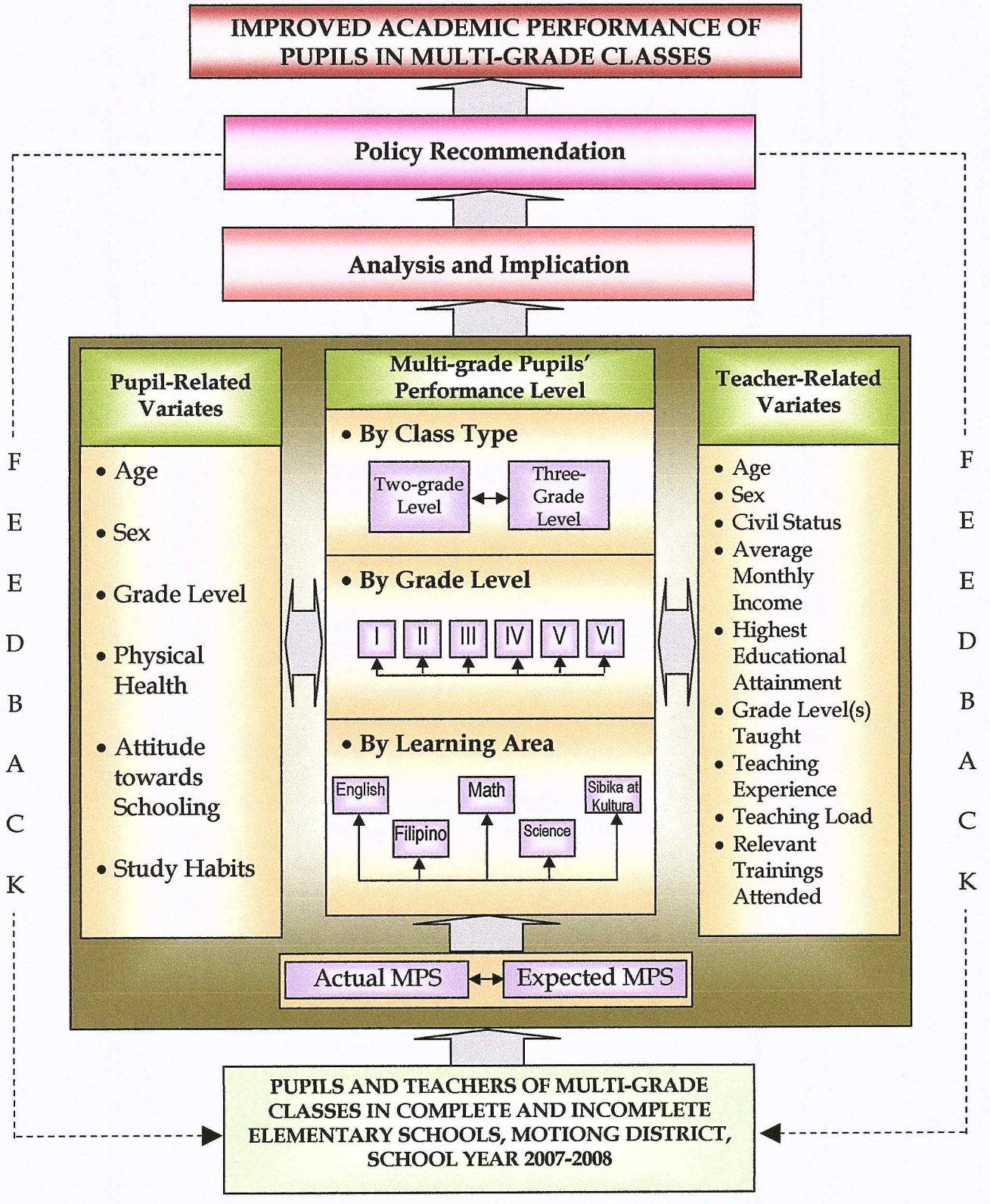

Figure 1. Conceptual Framework of the Study

Significance of the Study

This study would be beneficial to the pupils and teachers of multi-grade classes, school administrators, education stakeholders, and to the community.

To the pupils. The pupils are the direct beneficiaries of this study in terms of having baseline information as to their level of academic performance in all the learning areas. With a working knowledge of how they perform in school, they would be able to develop means by which they can either improve and/or maintain their academic performance. Ultimately, they would be able to improve their academic performance in all the learning areas studied here.

To the teachers. Teaching different grade levels under the same roof is not easy. Being a multi-grade teacher requires the ability to develop adaptive mechanisms to overcome the problems of preparing instructional materials, using motivation techniques and evaluation techniques for different pupils in the same classroom. As such, this study would help them to re-assess their competencies as multi-grade teachers in order to find answers to the question of how their pupils perform in all the learning areas. Having the answer to the said question, they would be able to create teaching styles attuned to the learning ability of the pupils.

To the school administrators. Being at the forefront of the implementation of educational policies, they would be able to be more considerate and understanding of the situation in multi-grade classes. They would be more liberated in making assessments of academic performance of the

pupils by considering the situation of multi-grade classes. They would also be more objective in assessing the competence of teachers handling multi-grade classes. As such, with the findings of this study, they would be able to make recommendations as to how to improve the academic performance of the pupils in multi-grade classes.

To the parents. This study would help the parents know the academic performance of their children who are in multi-grade classes. Having baseline information on their academic performance, they would be able to give their children the appropriate attention such as remedial classes at home.

To the education stakeholders. Since they are involved in proposing, enacting and deciding on policies for the education sector, the results of this study would give them baseline information regarding the level of academic performance of the pupils in multi-grade classes. Having such knowledge, they would be able to propose policies that aim to address the possible problems influencing academic performance of pupils in said classes.

To the community. This study would benefit the community in terms of productive and responsible elementary pupils whose academic performance in school would assure them a brighter future.

To the future researchers. The results of this study would give the future researchers insights into what study to conduct in the future. This would give them idea to conduct studies related to the levels of academic performance of the

pupils in multi-grade classes not only in the District of Motiong but also in other districts in the Division of Samar.

Scope and Delimitation

At the outset, this study utilized a descriptive research design in assessing the academic performance of pupils in multi-grade classes in complete and incomplete elementary school in the District of Motiong, Division of Samar in terms of class type - two-grade levels; and three-grade levels, grade level - one; two; three; four; five; and six, and by learning areas - English; Filipino; Mathematics; Science; and Sibika at Kultura.

Descriptive analysis was made in order to explain the personal profile of the two groups of respondents in terms of their age and sex, grade level, physical health, attitude towards schooling, study habits and general interest (academic/non-academic), civil status, average monthly income, highest educational attainment, grade level(s) taught, teaching experience, teaching load, and relevant trainings/seminars attended, the performance levels of the pupils in multi-grade classes in terms of class type, grade level and learning areas, the expected and actual mean percentage scores (MPS) of the pupils in multi-grade classes based on the District Achievement Test (DAT) by class type, grade level and learning areas and the problems encountered by the administrators and teachers in the implementation of the multi-grade program.

Also, comparative analysis was conducted in order to determine the significant difference in the performance levels of pupils in multi-grade classes in terms of class type, grade level and learning areas and the significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid categories.

Using a questionnaire and District Achievement Test (DAT) as data gathering instruments, this research involved as respondents the teachers and pupils in multi-grade classes of four complete elementary schools such as Bayog Elementary School, Calantawan Elementary School, Caranas Elementary School, and New Minanog Elementary School and five incomplete elementary schools such as Angyap Primary School, Beri Primary School, Caluyahan Primary School, Canwa-is Primary School, and Malobago Primary School.

Descriptive as well as inferential statistical tools were used in the computation, analysis and interpretation of data of the study. Finally, this study was conducted during the school year 2007-2008.

Definition of Terms

For the readers to have a clearer understanding of the study, the following terms are given their conceptual as well as operational definitions.

Academic performance. This term refers to the actual accomplishment as distinguished from potential ability, capacity or attitude (Sevilla, 1997: 85). In

this study, the term is defined as the actual accomplishment of the pupil-respondents in terms of mean percentage scores in English, Mathematics, Science and Health, Filipino, Edukasyon Pantahanan at Pangkabuhayan (EPP) and Musika, Sining at Edukasyon Pangkatawan in the District Achievement Test.

Actual MPS. This refers to the true score transmuted into mean percentage scores (MPS) of the pupil-respondents in the District Achievement Test.

Class type. As applied to this study, this term refers to the type of class organization a multi-grade class is such as a two-grade class or a three-grade class.

Complete elementary schools. This term referred to the public elementary schools in the District of Motiong which offers all the grade levels – that is, from Grade I to Grade VI – which had multi-grade classes, including Bayog Elementary School, Calantawan Elementary School, Caranas Elementary School, and New Minanog Elementary School.

Curricular redirection. This term refers to the reforms in the curriculum, particularly elementary education which may be derived from the results of this study.

Evaluation techniques. They refer to the methods or procedures used in assessing the performance of persons in their respective fields, including diagnostic evaluation, (Ornstein, 1990: 23). In this study, the term refers to the methods or procedures used by teachers in assessing the academic performance

in English, Mathematics, Science and Health, Filipino, Edukasyon Pantahanan at Pangkabuhayan (EPP) and Musika, Sining at Edukasyon Pangkatawan of pupils in multi-grade classes in the District of Motiong, Samar, such as through their final grades in all these learning areas.

Expected MPS. This term refers to the targeted proficiency level of 75 percent as prescribed in the NESC.

Grade level. Operationally, this term refers to the grade placement of certain pupils in a certain school year usually caused by promotion such as grade I, grade II, and grade III and so on.

Incomplete elementary school. This term referred to the public elementary schools in the District of Motiong which offers only selected grade levels which had multi-grade classes, including Angyap Primary School, Beri Primary School, Caluyahan Primary School, Canwa-is Primary School, and Malobago Primary School.

Learning areas. In this study, this term pertains to the different subjects taught in the primary grades which will be considered in this study, to wit: Mathematics, English, Filipino, Science and Health, and Sibika at Kultura.

MPS. This is the acronym for mean percentage score which is obtained by dividing the mean by the highest possible score and multiplying by 100.

Multi-grade teaching. It refers to a class consisting of two or more grades handled by one teacher (Gahite, 2003: 346). In this study, the term will be taken in the same context as it is defined above, except that this study will specifically

refer to classes in selected complete and incomplete elementary schools in the District of Motiong such as Bayog Elementary School, Calantawan Elementary School, Caranas Elementary School, New Minanog Elementary School, Angyap Primary School, Beri Primary School, Caluyahan Primary School, Canwa-is Primary School, and Malobago Primary School.

Multi-grade teachers. The term pertains to the teachers who are handling classes consisting of two or more grade levels (Gahite, 2003: 346). In this study, the term will refer to the teachers of Bayog Elementary School, Calantawan Elementary School, Caranas Elementary School, New Minanog Elementary School, Angyap Primary School, Beri Primary School, Caluyahan Primary School, Canwa-is Primary School, and Malobago Primary School which have multi-grade classes.

Study habits. They refer to actions or behavior patterns in studying that are regular, repetitive, and often unconscious (Microsoft Encarta Dictionary, 2002). As applied to this study, they referred to the actions or behavior patterns manifested by pupils in the different learning areas included in this study that have become regular, repetitive and often unconscious.

Chapter 2

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents and discusses ideas about academic performance and multi-grade teaching taken published materials such as books, journals and periodicals which are relevant to the present study. This also includes excerpts from unpublished materials such as master's theses that are related to the present study.

Related Literature

The following literature sheds light to the present study.

Education is essential in an individual's development in that it harnesses a person's potential and eventually produces a complete whole. It is the school that presents a more comprehensive social environment than the average home or neighborhood. It is also an avenue whereby the individual is weaned from the homes and are introduced into the larger society (Panopio, et al., 1994: 85).

With the depressing poverty situation in the country as validated by the report of the Asian Development Bank (ADB) in 2004 that regional disparities are still large and some indicators have widened and the number of poor families has equally increased, the country's ultimate goal to compete with its neighbors in Asia remains unrealized. Amid this dilemma that confronts the country, education is seen to be one of the means by which the Philippines will be able to

compete globally. As such, reforms to improve the quality of education should be installed and focus, although not exclusively, in making progressive and responsive curricular programs to equip the graduates with right knowledge, appropriate skills and work values. Therefore, there must be a strong support in education especially in tertiary level.

One of the important levels of the educational system of the Philippines is the primary education in that it determines the future of the children in higher-level education. In fact, Article XIV, Section 2 (1) of the 1987 Philippine Constitution provides that "the State shall establish, maintain, and support a complete, adequate, and integrated system of education relevant to the needs of the people and society". This constitutional provision calls for a periodic evaluation of the curriculum in order to know the needs of the learners that should be integrated. Thus, the school should consistently keep itself attuned not only to the needs of the learners but also that of the society.

Briggs (1952: 229) stated that educational improvement must be a continuous organic process and not a series of separate, unrelated reforms. He added that educational continuity and integration must be maintained. This implies that the curriculum of the school must be supervised and integrated in order to equip the learners with the needed skills for acquiring knowledge and to increase their level of competence and competitiveness.

Article XIV, Section 5 (1) provides that "the State shall take into account regional and sectoral needs and conditions and shall encourage local planning in

the development of educational policies and programs. De Leon (1997: 20) stated that it is very significant to have advanced and holistic educational programs in order to attain the quest of producing graduates in all educational levels that are at par with those of the rest of the world. This statement implies that a school must direct its effort to the development of the ability to learn.

Myrdal (1991: 231-234) commented that education in lower levels should be strengthened in order to raise the quality of graduates tertiary programs. The caliber of candidates of tertiary courses should possess the necessary skills as well as content in order to be efficient and effective career persons in the future. This means that the kind of education should prepare learners with the necessary skills as well as mastery of content. There is a need to device programs that would answer these needs.

Unfortunately, Giron (1991: 235) pointed out that the present educational system is "inadequate" in that at present most schools produce graduates, which have difficulty getting employment. One of the more obvious reasons is the lack of know-how and do-how skills necessary to train students well then they are still in school. One of the ways envisioned to address the education needs of the country is to conduct researches that address the needs of students.

One of the ways envisioned to address the education needs of the country is the existence of multi-grade classes. Multi-grade teaching refers to the teaching of students of different ages, grades and abilities in the same group. Gahite (2003: 346) stressed that teaching multi-grade classes is not an easy task.

It requires skills and expertise in classroom management. The impact is great on the part of the teachers. It is so because teachers are burdened with paper work, experience conflicts of overlapping schedules of academic and non-academic activities, render community service and have other commitments.

Multi-grade programs are beneficial to pupils. Effective multi-grade programs provide pupils with opportunities for increased achievement and promote good socialization patterns. There are certain requirements for effective multi-grade teaching, namely: systematic and well-organized and planned instructional delivery and grouping, a well-managed classroom that is conducive to learning because the necessary resources are available and the necessary discipline among the students has been developed so that they can focus on learning, a cooperative learning environment were self-directed learning is balanced with teacher-directed activities, peer teaching and group work, a teacher who is well-prepared to actually serve as a facilitator of learning rather than as the only source of knowledge in the classroom and who is well-prepared to apply a variety of instructional strategies and techniques, and a well-assigned curriculum that allows and encourage integration of subject matter areas and variety of activities as learning experiences for the students.

Pupils in multi-grade classes must also achieve competence in all learning areas, including Mathematics, English, Science, Filipino, Sibika at Kultura and others. As such, education stakeholders should not implement poor quality of instruction in multi-grade programs. Considering the benefits that multi-grade

teaching can offer, the present research is being conducted in order to validate this claim by assessing the academic performance of the pupils in multi-grade classes.

Related Studies

In the course of the research, the researchers gathered and reviewed several studies that have bearing with the present study.

In a study entitled "The Academic Performance of Multi-grade Classes: An Assessment," Monteros (2002) found out that by class type, the three-grade class combination obtained a higher mean which posted at 10.14 over the two-grade class combination with 9.30.

It also found out that the performance of the multi-grade classes by grade level in terms of mean scores was as follows: Grade I – 8.10, Grade II – 8.47, Grade III – 10.11, Grade IV – 10.41, Grade V – 12.77, and Grade VI – 14.22. In addition, in the division level test, the performance level of multi-grade classes along the five learning areas tested in terms of mean scores were the following: Filipino – 10.23, HEKASI – 9.74, Science – 9.61, Mathematics – 9.28, and English – 9.04. The over-all mean was 9.58. In the district level test, the mean scores of each learning area were the following: Filipino – 21.52, HEKASI – 20.47, Science – 20.58, Mathematics – 19.75, and English – 19.57.

Inasmuch as the study dealt with the levels of academic performance of pupils in multi-grade classes in terms of class type - two-grade levels and three-

grade levels, grade level – one, two, three, four, five and six, learning areas – English, Filipino, Mathematics, Science and Sibika at Kultura, it is thus similar to the present study which will also deal with the levels of academic performance of pupils in multi-grade classes in terms of class type - two-grade levels and three-grade levels, grade level – one, two, three, four, five and six, learning areas – English, Filipino, Mathematics, Science and Sibika at Kultura. They differed only in terms of respondents involved, levels of test used, research environment and other variates involved.

Odevilas (1998) conducted a study entitled "The Academic Performance of Multigrade and Monograde Classes: A Comparative Study." The said study came up with several findings, including that the problems present in relation to elementary grades instruction were found to be manageable since the teachers assessed these problems to be its "moderate" level.

This study finds similarity with the present study in the sense that both focused on assessment of academic performance in all learning areas and multi-grade classes. They differ, however, because the previous study made a comparative study of the performance of pupils in multi-grade and mono-grade classes.

Tabones (2003), in a study entitled "Correlates of Performance of Pupils in the Monograde and Multigrade Classes in the Districts of Wright I and II," attempted to determine the factors related to the performance of pupils in the monograde and multigrade classes in Wright I and II.

The study revealed that the monograde pupils had a mean age of 9.76 years with a SD of 2.20 years while the multigrade pupils registered an average age of 9.52 years with SD of 2.26 years. Both the monograde and multigrade pupils had a favorable attitude towards schooling as indicated by their agreement with seven out of ten attitude indicators resulting to grand means of 3.91 and 3.90, respectively. Both the monograde and multigrade pupils assessed themselves to have "often practiced" nine out of 10 study habits resulting to grand means of 3.85 and 3.72, respectively.

The study also revealed that both monograde and multigrade teachers were "undecided" on the attitude indicators as they assessed themselves with grand means of 3.26 and 3.42, respectively, interpreted as neutral attitude. Both the monograde and multigrade teachers assessed themselves to have "high mastery" on the lessons they taught, as indicated by the grand means of 3.80 and 3.77, respectively. Monograde schools had school facilities, equipment and instructional materials. Multigrade schools had the following facilities, equipment and instructional materials such as classrooms, comfort rooms, playground and garden, stage, library and others.

Moreover, in multigrade classes, Grades IV and V topped them all with MPS of 44.18 and 45.79, respectively. The lowest were Grades I and II which got 40.48 and 41.77, respectively. Across learning areas, still Sibika/HKS and Filipino had the greatest MPS of 47.17 and 45.31, respectively. MSEP and Math obtained the lowest MPS of 40.74 and 40.66, respectively.

The two studies found similarities in terms of subject studied – that is, multigrade classes. They also found relationship in terms of some variates used such as learning areas and achievement. However, they differed in the sense that the previous study compared the achievement of pupils in monograde and multigrade classes.

Galono (2003), in his study entitled "Multi-Grade School Teachers' Competence in the Department of Education (DEPEd), Palapag District, Palapag, Northern Samar," assessed the competence of the multi-grade teachers in terms of their personal factors, professional factors, and teaching competence.

The findings revealed that the majority of multi-grade teachers were Bachelor's degree holders, had no training on multi-grade program, and had a very satisfactory teaching competence. The physical facilities were found to be "fairly adequate" to "very inadequate." The pupils had average performance on the district pre- and posttests. Time management, the multi-grade curriculum and social mobilization were found to be "very satisfactory." The level of teaching competence of the multi-grade teachers as rated by the district supervisors, teachers themselves, pupils and researcher was "very satisfactory". It also found out that the degree earned, in-service trainings attended, pupils' performance and social mobilization were found to be significantly related to the teaching competence of the multi-grade teachers.

The two studies find similarity in the nature of the study since both are assessment of multi-grade teaching-learning situation. However, the previous

study assessed the competence of the multi-grade teachers in the District of Palapag, Northern Samar, whereas the present study will assess the academic performance of pupils in multi-grade classes in the District of Motiong, Samar.

Likewise, Gorgonia (2003) conducted a study on the problems encountered by the multi-grade classes in the District of Palapag, Northern Samar.

The study disclosed that majority of the respondents had permanent employment status, bachelor's degree holders, had not attended trainings on multi-grade program, a teaching experience of 6-10 years, and PBET eligibilities. It also revealed the following: a) the administration and supervision of multi-grade classes was "sometimes done," b) the classes had adequate instructional materials, utilized the prescribed time allotment in each subject area which they considered adequate in teaching, had large class size, were located far from the district office, had inadequate physical facilities, and were often involved in co-curricular activities and community allied services; c) significant relationship existed between educational attainment, time allotment and distance and the degree of seriousness of the problems, and d) problems encountered were on the utilization of time allotted in teaching and the distance of the multi-grade classes to the district classes.

The two studies are similar in some respects: a) both deal with multi-grade classes, and b) both are descriptive of the multi-grade teaching-learning situation. Yet, they differ in some aspects since the previous study dealt with the

difficulties encountered by multi-grade classes whereas the present study will only focus on an assessment of the academic performance of the pupils in complete and incomplete elementary schools with multi-grade classes in the District of Motiong. They also differ in respondents involved, research environment and nature of the study.

Inasmuch as Billones (2000) determined the relationships between mathematical performance, high school mathematics ratings, and study habits of the students in the University of San Agustin in Iloilo City, it thus finds similarity with the present study which intends to make an assessment of the academic performance of the pupils in multi-grade classes in Motiong District.

The results of the study revealed the following: 1) generally, the college freshmen in the University of San Agustin had average high school mathematics ratings, and had good study habits; 2) They had average mathematical performance in College Algebra, and 3) high school mathematics ratings may be used as predictor of students' mathematical performance in College Algebra.

They differ because the previous study correlated study habits with mathematics performance of the high school student-respondents whereas the present study will determine the level of academic performance of the pupil-respondents in multi-grade classes in Motiong District. It is, however, cited here inasmuch as it dealt with an assessment of academic performance.

Carcellar (2000) determined the extent of influence of teacher-related, school-related, and home-related factors on the teaching effectiveness of teachers

in the district of Zumarraga, Samar. Using the descriptive-correlational method and questionnaire, documentary analysis, interview schedule, and observation as instruments, it was established that the teacher related factors were "highly influential" to the effectiveness in teaching, which implies that teachers play important role in the teaching-learning process towards pupils achievement.

Administrators' and teachers' perceptions were in agreement, that the teacher-related, pupil-related, school-related, and home-related factors highly influence the teaching effectiveness of teachers. It is recommended that all above-mentioned factors related to the teaching-learning process be given enough attention, provided for, supervised and facilitated.

In the previous study, the emphasis was on the extent of influence of teacher-related, school-related, and home-related factors on the teaching effectiveness of teachers in the district of Zumarraga, Samar. In the present study, the emphasis will be on the academic performance in English, Mathematics, Science and Health, Filipino, and HEKASI of the pupils in multi-grade classes in complete and incomplete elementary schools in the District of Motiong.

Baldecasa (1998) aimed to correlate the grade six pupils' mathematics achievement with pupil factors such as attitude towards mathematics, socio-economic status and teacher factors such as educational attainment, length of service in teaching mathematics and performance rating.

The findings showed that students with average aptitude in mathematics have positive altitudes towards mathematics, the socio-economic status of the family greatly affects the grade six pupils' learning capacity in mathematics, a big percentage of the grade six mathematics teachers were educationally qualified, with more than 10 years experience and rated "very satisfactory" performance, and the teachers length of service in teaching mathematics, educational attainment and performance rating affects the achievement of pupils in mathematics.

In the study of Baldecasa, the researcher used the Grade VI pupils' attitude towards Mathematics to correlate with their achievement in the same subject. In the present research, the researcher will only use attitude towards schooling in order to describe the profile of the pupil-respondents of the study.

In 2004, Arcueno conducted a study entitled "Socio-Economic Status of Parents and Pupils' Academic Performance in the District of Mondragon, Northern Samar: Basis for Instructional Redirections" which revealed that type of dwelling and extended family household moderately affect pupils' performance due to lack of privacy for study.

It also found out that presence of some learned household members have good effect on the study habits of children. Type of food, style of preparation, kind and amount of food intake, availability of educational facilities and supplies such as books, teaching materials, references, supply of water and electrical facilities "moderately affect" academic performance of the children. Poor

clothing, shoes and sports wear deprive their participation in extra and co-curricular activities and medical aid was also inadequate.

The study also found out that ventilation and access to educational media positively affected academic performance, recreational activities are but done on off hours hence less felt by students, and so has little effect on their academic performance, pupils, parents and teachers were of similar perceptions on the effect of socio-economic factors on pupils' academic performance, and irregular attendance of pupils was generally caused by low income, unemployment, etc.

The study of Arcueno is similar to the present study because it dealt with pupils' academic performance in school. But, it is different with the present research because it dealt with socio-economic status alone as variate for the determination of the pupils' academic achievement. In the present study, the researchers will correlate the pupils' personal characteristics such as their age, sex, parents' educational attainment, parents' occupation, teacher-related factors such as their personal profile, preparation of instructional materials, use of motivation techniques and use of evaluation techniques, and school-related factors with their academic performance.

The present study also finds relationship with the study of Bade (2003) entitled "Correlates of Low Performance of Teachers in the Revised Appraisal System for Teacher (RPAST)." The study revealed that educational qualification and major/specialization of the teachers, students' attendance in school, and parents' educational attainment were found to highly affect the teachers'

performance.

Teacher-related factors, student-related factors and home-related factors were revealed to have significant correlation with teacher performance, while learners' achievement was found to be influenced by teachers' performance.

In some respect, the present study will try to find the correlates of the academic performance of the pupils in English, Mathematics, Science and Health, Filipino, Edukasyon Pantahanan at Pangkabuhayan (EPP) and Musika, Sining at Edukasyon Pangkatawan. However, the two studies differ in that the previous study focused on the teachers' performance.

Espiña (1996), in her study entitled "Correlates of Mathematics Performance of Fourth Year Students in Public and Private Secondary School in Northern Samar," found out that the student-respondents had a below average mental ability. Although their attitudes toward mathematics were favorable, and they had good study habits, their performance in mathematics IV proved to be below average. However, the personal attributes of the student-respondents found to be slightly related to Math IV performance were attitudes toward mathematics, study habits and mental ability as the strongest.

Other major findings of the study were: a) the math IV teachers of this study, though majors in the subject, had an average of ten years teaching experience but with few trainings in math; b) type of school facilities and mathematics teaching facilities were found to be significantly related with mathematics IV performance while trainings in math and class schedule were

not, and (c) a significant difference existed between the level of math IV performance of the student-respondents in private and barangay high schools and between vocational and barangay high schools.

Since the study of Espiña focused on finding the correlates of mathematics performance of the student-respondents, this study is thus similar which will also try to assess the factors which relate to the academic performance of the pupil-respondents.

In a study entitled "The Relationship of Mathematics Performance of the Second Year Students to their Level of Anxiety in Mathematics," Cunanan (1999) showed that 75 percent of the respondent had poor mental ability with high level of anxiety in the area of social responsibility and high level of anxiety emotionally, and high level of anxiety in numerical test.

It also found out that the mathematics performance of the students was significantly related to their levels of mathematics anxiety in the three areas. The study showed that the poor performance of students in mathematics is due to their high level of mathematical anxiety.

On the basis of the research findings, the researcher recommended that school administrators together with mathematics teacher should formulate and provide activities that will lessen the mathematics anxiety of the students.

Given that the previous study aimed to determine only the relationship of the mathematics performance of second year students with their levels of anxiety in mathematics in the areas of social responsibility, emotional and numerical test

anxiety, it is therefore different from the present study. The present study will correlate the pupil-respondents' academic performance in all the learning areas, including not only mathematics but also English, Science and Health, Filipino, Edukasyon Pantahanan at Pangkabuhayan (EPP) and Musika, Sining at Edukasyon Pangkatawan.

In addition to the foregoing, Cunanan's study also differed in terms of respondents of the study, instruments used in gathering the needed data as well as in terms of statistical tools used. Yet, it is cited here as it provides baseline information how academic performance may be correlated with some factors which the study will delve into.

Although the studies cited here differed with the present study in terms of nature of research, respondents involved, and research environment, they are nevertheless cited here as they provide insights into the nature of the present study.

Chapter 3

METHODOLOGY

The present chapter enumerates and discusses the procedures used in the computation, analysis and interpretation of the data of this study. This includes the research design, instrumentation, validation of the instrument, sampling procedure, data gathering procedure, and statistical treatment of data.

Research Design

Using a descriptive research design, the present study assessed the academic performance of pupils in multi-grade classes in complete and incomplete elementary schools in terms of class type - two-grade levels; and three-grade levels, grade level - one; two; three; four; five; and six, and by learning areas – English, Filipino, Mathematics, Science and Sibika at Kultura.

Descriptive analysis were made in order to explain the personal profile of the two groups of respondents in terms of their age and sex, grade level, physical health, attitude towards schooling, study habits and general interest (academic/non-academic), civil status, average monthly income, highest educational attainment, grade level(s) taught, teaching experience, teaching load, and relevant trainings/seminars attended, the performance levels of the pupils in multi-grade classes in terms of class type, grade level and learning areas – English, Filipino, Mathematics, Science and Sibika at Kultura, the expected and

actual mean percentage scores (MPS) of the pupils in multi-grade classes based on the District Achievement Test (DAT) by class type, grade level and learning areas, and the problems encountered by the administrators and teachers in the implementation of the multi-grade program.

Comparative analysis were conducted in order to determine the significant difference in the performance levels of pupils in multi-grade classes in terms of class type, grade level and learning areas, and the significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid categories.

Also, correlation analysis was conducted in order to determine the relationship between academic performance of pupils in multi-grade classes and their profile variates such as their age and sex, grade level, physical health, attitude towards schooling and study habits, and teacher-related variates such as age and sex, civil status, average monthly income, highest educational attainment, grade level taught, teaching experience, teaching load, and relevant trainings/seminars attended.

Finally, descriptive as well as inferential statistical tools were used such as frequency count, percentage, means, weighted mean, Pearson r, t-test for independent samples, One-Way Analysis of Variance, and Scheffe's test.

Instrumentation

Questionnaire, District Achievement Test and documentary analysis were used in gathering the needed data.

Questionnaire. There were two sets of questionnaire for the two groups of respondents, namely, a) teachers and b) pupils of multi-grade classes. The first of questionnaire were for the teacher-respondents while the second set of questionnaire was for the pupil-respondents.

The first set of the questionnaire for the teacher-respondents had one part – the personal profile of the teacher-respondents. The second set of the questionnaire for the pupil-respondents had three main parts. The first part asked about the pupil-respondents' personal profile such as their age and sex, grade level, physical health, attitude towards schooling, study habits and general interest (academic/non-academic).

The second part of the questionnaire contained 10 statements reflecting attitude of pupil-respondents towards schooling. The last part of the questionnaire for the pupil-respondents consisted of items about their study habits.

The respondents' responses in the second part of the questionnaire were computed using a five-point summated ratings, as follows: 5 for "strongly agree" (SA); 4 for "agree" (A); 3 for "undecided" (U); 2 for "disagree" (D), and 1 for "strongly disagree" (SD). On the other hand, the respondents' responses in the third part of the questionnaire were computed using a five-point summated

ratings, as follows: 5 for "always" (A); 4 for "often" (O); 3 for "sometimes" (S); 2 for "rarely" (R), and 1 for "never" (N).

District achievement test. This was used to determine the performance levels of the pupil-respondents.

Documentary analysis. This supplemented the collection of data using the questionnaire.

Validation of Instrument

The instrument was validated using expert validation and test-retest method.

A copy of the draft of the questionnaire was shown for suggestions and recommendations to the research adviser and three other experts in the fields of research, elementary education, and psychology. After their suggestions and recommendations have been incorporated, the questionnaire was finalized.

Upon the finalization of the questionnaire, the researcher personally administered the questionnaire to 10 teachers and 20 pupils at Catalina Elementary School, Motiong, Samar, simultaneously and during class hours to ensure 100 percent retrieval. The first administration of the questionnaire was made on January 2008. After a period of two days, the questionnaire was administered to the same respondents. If the computed r value is high, then the questionnaire is both valid and reliable.

Sampling Procedure

There were two groups of respondents in this study, to wit: a) teachers, and b) pupils of multi-grade classes in complete and incomplete elementary schools in Motiong District, Division of Samar.

With the elementary schools with multi-grade classes identified, take-all sampling was used to determine the teacher-respondents since there were less than 30 of them. To determine the sample size of the pupil population in the District of Motiong, Sloven's (Santos, et al., 1998: 11) formula, as follows:

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

where μ refers to the sample size

N refers to the total population

e refers to the margin of error set at 0.05

After the sample size was determined, the individual pupil-respondents were selected using stratified random sampling through fishbowl technique where their names were written in small pieces of paper, rolled and drawn.

Data Gathering Procedure

Initially, the researcher secured a letter of approval to administer the questionnaire and conduct the study from the Schools Division Superintendent of the Department of Education (DEPEd), Division of Samar. Upon his approval, the same letter was shown to the District Supervisor of Motiong, Samar.

When the two were approved, the letter was now presented to the principals/head teachers/teachers-in-charge of the different respondent-schools to administer the questionnaire of the study. The administration of the questionnaire to the teachers as well as the pupils was done simultaneously and during classes to ensure 100 percent retrieval.

Finally, the researcher proceeded to the computation, analysis and interpretation of the gathered data.

Statistical Treatment of Data

To give quantitative analyses to the study, the researcher utilized both descriptive as well as inferential statistical tools such as frequency count, percentage, mean, weighted mean, and t-test for independent samples.

Frequency count. This was used in reporting the number of pupil- as well as teacher-respondents of the same age, sex, civil status, and others.

Percentage. This was used in the analysis and interpretation of data on sex, age, civil status, and others.

Mean. This statistical measure was used to determine the quantitative characteristics or profile of the respondents like age, teaching experience, average family monthly income.

Weighted mean. This was used to express the collective perceptions of the pupil-respondents' attitude towards schooling and study habits. In interpreting the weighted means, the following were used:

4.51-5.00 – Strongly Agree (SA)/ Always (A)

3.51-4.50 – Agree (A)/Often (O)

2.51-3.50 – Undecided (U)/Sometimes (S)

1.51-2.50 – Disagree (D)/Rarely (R)

1.00-1.50 – Strongly Disagree (SD)/Never (N)

t-test for independent samples. This statistical tool will be used to test the hypothesis that there is no significant difference in the performance levels of pupils in multi-grade classes in terms of class type - two-grade levels and three-grade levels, grade level – one, two, three, four, five and six, learning areas – English, Filipino, Mathematics, Science and Sibika at Kultura, and there is no significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid.

The following t-test formula by Bartz (1981: 382) will be used:

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - 0}{\sqrt{\frac{N_1 S_1^2 + N_2 S_2^2}{N_1 + N_2 - 2}\left[\frac{1}{N_1} + \frac{1}{N_2}\right]}}$$

Where:

t = refers to the computed t- value

$\bar{X}_1$ = refers to the mean of the perceptions of the teachers with respect to the extent by which some factors influence academic performance of pupils

$\bar{X}_2$ = refers to the mean of the perceptions of the pupil-respondents with respect to the extent by which some factors influence the academic performance of the pupils

S_1 = refers to the standard deviation of the of the perceptions of the teachers

S_2 = refers to the standard deviation of the of the perceptions of the pupil-respondents

N_1 = refers to the number of teacher-respondents

N_2 = refers to the number of pupils-respondents.

One-Way Analysis of Variance. This will be used to statistically test whether there is a significant difference in the performance levels of pupils in multi-grade classes in terms of class type, grade level and learning areas and the significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT) in the aforesaid categories.

Table 1

Computation Formula for One-Way ANOVA

Source of Variations (S.V.)	Degree of Freedom (df)	Sum of Squares (SS)	Mean Squares (MS)	Computed F
Between Groups	K - 1	$SSB = \frac{\sum X^2}{Ng} - CF$	$MSB = \frac{SSB}{K-1}$	$F = \frac{MSB}{MSW}$
Within Groups	N - k	$SSW = \sum X^2 - CF$	$MSW = \frac{SSW}{N-k}$	
Total	N - 1	$SST = \frac{\sum X_{ij}^2}{N-1} - CF$		

Scheffe's test. When the hypothesis which will be tested using ANOVA is rejected, it will necessarily mean further tests to find exactly where the significant difference lies when comparing the means of the groups.

The Scheffe's method of multiple comparisons (Padua, 1976:234) will be used as follows:

$$\text{Computed } F' = \frac{(X_A - X_B)^2}{MS_{within}(n_A + n_B)/n_A n_B}$$

Where:

F	=	Scheffe's test ratio
MS_{within}	=	within group sum of squares
$\bar{X}_i$	=	Mean of the i group
X_j	=	Mean of the j group
n_i	=	Number of cases of the i group
n_j	=	Number of cases of the j group

Chapter 4

PRESENTATION, ANALYSES AND INTERPRETATION OF DATA

This chapter presents the computation, analysis and interpretation made to the data gathered. This includes the profile of the multi-grade pupils in terms of their age and sex, grade level, physical health, attitude towards schooling and study habits, the profile of the multi-grade teachers in terms of their age and sex, civil status, average monthly income, highest educational attainment, grade level(s) taught, teaching experience, teaching load and relevant trainings/seminars attended, the performance levels of the pupils in multi-grade classes in terms of class type, grade level, learning areas, the test of hypothesis as to the significant difference in the performance levels of pupils in multi-grade classes, the test of hypothesis as to significant relationship between the pupil-respondents' performance in the five learning areas and pupil-related variates and teacher-related variates, the expected and actual mean percentage scores (MPS) of the pupils in multi-grade classes based on the District Achievement Test (DAT) by class type and learning areas, the test of hypothesis as to the significant difference between the actual and expected mean percentage scores (MPS) of pupils in multi-grade classes based on the District Achievement Test (DAT), and the problems encountered by the teachers in the implementation of the multi-grade program.

Profile of the Pupil-Respondents

Tables 1-6 present the pupil-respondents' profile in terms of their age and sex, grade level, physical health, attitude towards schooling and study habits.

Age and sex. Table 1 presents the pupil-respondents' profile as to their age and sex.

Table 1

Age and Sex Distribution

Age (In Years)	Sex				Total	Percent
	Female		Male			
	f	Percent	f	Percent		
17	4	0.87	2	0.38	6	0.60
16	0	0.00	2	0.38	2	0.20
15	1	0.22	5	0.94	6	0.60
14	15	3.25	27	5.08	42	4.23
13	30	6.49	38	7.14	68	6.84
12	30	6.49	38	7.14	68	6.84
11	63	13.64	93	17.48	156	15.69
10	86	18.61	73	13.72	159	15.99
9	45	9.74	69	12.97	114	11.47
8	74	16.02	41	7.71	115	11.57
7	64	13.85	71	13.35	135	13.58
6	50	10.82	73	13.72	123	12.37
Total	**462**	**46.48**	**532**	**53.52**	**994**	**100.00**
Mean					**9.50 years**	
SD					**2.40 years**	

As it can be seen from the said table, most (532 or 53.52 percent) of the pupil-respondents males whose ages ranged from six to 17 years old. Of the 532 male pupil-respondents, 93 (17.48 percent) were aged 11 years old, followed by

73 (13.72 percent) who were aged 6 and 10 years old, 71 (13.35 percent) aged seven years old, 69 (12.97 percent) aged nine years old. Meanwhile, the oldest male pupil-respondents were aged 17 years old whereas the youngest male pupil-respondents were aged six years old.

On the other hand, the table shows that only 462 (46.48 percent) were female pupil-respondents whose ages ranged from six to 17 years old. Of the 462 female pupil-respondents, 86 (18.61 percent) were aged 10 years old. This was followed by 74 (16.02 percent) who were aged eight years old, 64 (13.85 percent) aged seven years old, 63 (13.64 percent) aged 11 years old, and 50 (10.82 percent) aged six years old. The oldest female pupil-respondents were aged 17 years old whereas the youngest female pupil-respondents were aged six years old.

The mean age for both the male and female pupil-respondents was 9.50 years old, with a standard deviation of 2.40, indicating a relatively young pupil-respondent population.

Grade level. Table 2 presents the distribution of the pupil-respondents in terms of their grade levels.

As gleaned from the table, 269 (27.06 percent) of the pupil-respondents were in Grade II, followed by 238 (23.94 percent) who were in Grade I. The remaining pupil-respondents were distributed as follows: 165 (16.59 percent) in Grade III, 152 (15.29 percent) in Grade IV, 87 (8.75 percent) in Grade VI and 83 (8.35 percent) in Grade V. This implied that majority of the pupil-respondents who were sampled belonged to Grade II.

Table 2

Pupil-Respondents' Distribution as to Grade Level

Grade Level	Total	Percent
Grade I	238	23.94
Grade II	269	27.06
Grade III	165	16.59
Grade IV	152	15.29
Grade V	83	8.35
Grade VI	87	8.75
Total	**994**	**100.00**

Physical health. Tables 3 and 4 show the distribution of the pupil-respondents in terms of their physical health based on their height and weight.

It is shown in Table 3 that most (136 or 13.7 percent) of the pupil-respondents measured 41 centimeters in height, followed by 121 (12.2 percent) who measured 47 centimeters in height. Other respondents were distributed as follows: 109 (11 percent) were measured at 44 centimeters, 95 (9.6 percent) were measured 40 centimeters, and 93 (9.4 percent) were measured 45 centimeters.

Meanwhile, the table shows that the tallest pupil-respondents were measured at 88 centimeters whereas the shortest pupil-respondent was measured at 30 centimeters. The mean of the height of the pupil-respondents was posted at 50.55 centimeters with a standard deviation of 11.96. This meant further that the pupil-respondents was relatively tall.

Table 3

Pupil-Respondents' Distribution as to Physical Health (Height)

Height [In Centimeters (cm)]	Total	Percent
88.00	5	0.005
84.00	5	0.005
80.00	11	1.10
78.00	5	0.005
76.00	4	0.004
75.00	43	4.30
74.00	13	1.30
70.00	12	1.20
69.00	19	1.90
68.00	7	0.007
67.00	38	3.80
66.00	8	0.008
65.00	18	1.80
64.00	11	1.10
61.00	12	1.20
60.00	15	1.50
59.00	52	5.20
58.00	12	1.20
57.00	4	0.004
55.00	2	0.002
52.00	1	0.001
51.00	19	1.90
50.00	13	1.30
49.00	3	0.003
48.00	16	1.60
47.00	121	12.20
45.00	93	9.40
44.00	109	11.00
42.00	45	4.50
41.00	136	13.70
40.00	95	9.60
39.00	36	3.60
38.00	2	0.002
37.00	8	0.008
30.00	1	0.001
Total	**994**	**100.00**
Mean	-	**50.56**
SD	-	**11.96**

On the other hand, Table 4 shows the distribution of the pupil-respondents in terms of their weight.

As shown in the said table, 80 (8.0 percent) of the pupil-respondents weighed 55 kilograms. This was followed by 61 (6.1 percent) who weighed 47 kilograms, 60 (6.0 percent) who weighed 34 kilograms, 56 (5.6 percent) who weighed 44 kilograms, 54 (5.4 percent) who weighed 60 kilos, 49 (4.9 percent) who weighed 54 kilograms, 47 (4.7 percent) who weighed 65 kilograms, 44 (4.4 percent) who weighed 58 kilograms, and 42 (4.2 percent) who weighed 48 kilograms.

Table 4

Pupil-Respondents' Distribution as to Physical Health (Weight)

Weight [In Kilograms (kgs)]	Total	Percent
84.00	11	1.10
78.00	10	1.00
77.00	8	0.008
74.00	4	0.004
70.00	5	0.005
68.00	13	1.30
67.00	8	0.008
66.00	21	2.10
65.00	47	4.70
64.00	4	0.004
63.00	1	0.001
62.00	1	0.001
60.00	54	5.40
59.00	37	3.70
58.00	44	4.40

Table 4 continued

Weight [In Kilograms (kgs)]	Total	Percent
57.00	38	3.80
56.00	18	1.80
55.00	80	8.00
54.00	49	4.90
53.00	9	0.009
52.00	11	1.10
51.00	11	1.10
50.00	12	1.20
49.00	1	0.001
48.00	42	4.20
47.00	61	6.10
46.00	3	0.003
45.00	39	3.90
44.00	56	5.60
43.00	16	1.60
42.00	1	0.001
41.00	23	2.30
40.00	32	3.20
39.00	12	1.20
38.00	21	2.10
37.00	22	2.20
36.00	1	0.001
34.00	60	6.00
32.00	2	0.002
31.00	22	2.20
30.00	31	3.10
29.00	11	1.10
28.00	22	2.20
27.00	10	1.00
26.00	10	1.00
Total	**994**	**100.00**
Mean	-	**49.45**
SD	-	**12.35**

It also showed that the heaviest pupil-respondents weighed 84 kilograms whereas the lightest pupil-respondents weighed 26 kilograms. The mean weight of the pupil-respondents was posted at 49.45 kilograms with a standard deviation of 12.35, which meant further that they were healthy as shown by their weight.

Attitude towards schooling. Table 5 is a presentation of the pupil-respondents' attitude towards schooling.

Majority of the attitude statements were rated "strongly agree" by the pupil-respondents. Among these statements, "knowing how I fare in all the subject areas give me a sense of confidence" got the highest weighted mean posted at 4.86. This was followed by "going to school is rewarding" with 4.84 and "I enjoy learning all the subject areas – English, Filipino, Mathematics, Science and Sibika at Kultura" with 4.79. Other statements were rated as follows: "I love going to school to learn all the subjects even if we are many in the class" and "I want to go to school everyday" – 4.67, "Being in multi-grade classes helps me learn lessons in their simplified form because the teacher makes it understandable for us" – 4.65, and "I am fulfilled when I am attending classes because I am able to help others in their assignments and projects" – 4.56.

The other two statements rated as "strongly agree" were: "I can get good grades in the entire subject even if I am enrolled in multi-grade class" – with 4.53 and "Going to school allows me to learn ideas which are relevant to my life" with 4.51.

Table 5

Attitude Towards Schooling

Attitude Statements	Responses					Total	W. Mean	Inter-pre-tation
	SA 5	A 4	U 3	D 2	SD 1			
1. I enjoy learning all the subject areas – English, Filipino, Mathematics, Science and Sibika at Kultura.	903 (4515)	26 (104	31 (93	24 (48)	10 (10)	994 (4770	4.79	SA
2. Knowing how I fare in all the subject areas give me a sense of confidence.	912 (4560)	51 (204	16 (48)	7 (14)	8 (8)	994 (4834)	4.86	SA
3. I love going to school to learn all the subjects even if we are many in the class.	717 (3585)	249 (996)	16 (48)	4 (8)	8 (8)	994 (4645)	4.67	SA
4 I am fulfilled when I am attending classes because I am able to help others in their assignments and projects.	612 (3060)	352 (1408)	17 (51)	4 (8)	9 (9)	994 (4536)	4.56	SA
5. Being in multi-grade classes helps me learn lessons in their simplified form because the teacher makes it understandable for us.	747 (3735)	162 (648)	73 (219)	4 (8)	8 (8)	994 (4618)	4.65	SA
6. Going to school is rewarding.	892 (4460)	60 (276)	19 (57)	4 (8)	10 (10	994 (4811)	4.84	SA
7. Going to school allows me to learn ideas which are relevant to my life.	615 (3075)	288 (1152)	77 (231)	6 (12)	8 (8)	994 (4223)	4.51	SA
8. I would like to continue to go to school even after I graduate from college.	685 (3425)	39 (156)	110 (330)	152 (304)	8 (8)	994 (4223)	4.25	A
9. I can get good grades in the entire subject even if I am enrolled in multi-grade class.	697 (3485)	147 (588)	138 (414)	4 (8)	8 (8)	994 (4503)	4.53	SA
10. I want to go to school everyday.	795 (3975)	86 (344)	101 (303)	4 (8)	8 (8)	994 (4638)	4.67	SA
Total	-	-	-	-	-	46062	-	-
Grand Mean	-	-	-	-	-	-	4.63	SA

Legend:
4.51-5.00 – Strongly Agree (SA)
3.51-4.50 – Agree (A)
2.51-3.50 – Undecided (U)
1.51-2.50 – Disagree (D)
1.00-1.50 – Strongly Disagree (SD)

Only one statement was rated "agree" by the pupil-respondents, as follows: "I would like to continue to go to school even after I graduate from college" – with 4.25 weighted mean, interpreted as "agree."

The grand mean obtained was posted at 4.63, interpreted as "strongly agree" which further indicated a very favorable attitude towards schooling among the pupil-respondents.

Study habits. Table 6 shows the pupil-respondents' study habits.

As it is shown in Table 6, majority of the study habits were rated as "always", indicating that they always practiced these habits when studying. Among the study habits which were always practiced, the statement "I ask questions from my teachers for clarification" obtained the highest weighted mean posted at 4.71, followed by "I read my textbook before I come to class" with 4.65 and "I study in a place with study table and chair" with 4.63.

Other statements which were rated "always" were as follows: "I begin with the easy questions first" – 4.62, "I study every day" - 4.60, "I have a specific time to study my lessons" and "I review for the test" – 4.59, "I take notes in class" – 4.57, "I memorize and scan concepts in all the subject areas" – 4.56, "I study where there is less noise" – 4.52, and "I have a specific place to study" – 4.51.

Table 6

Pupil-Respondent's Study Habits

Study Habits	Responses					Total	W. Mean	Inter-pre-tation
	AP (5)	OP (4)	SP (3)	RP (2)	NP (1)			
1. I study every day.	767 (3835)	100 (400)	99 (297)	15 (30)	13 (13)	994 (4575)	4.60	A
2. I have a specific time to study my lessons.	796 (3980)	68 (272)	74 (222)	39 (78)	17 (17)	994 (4569)	4.59	A
3. I have a specific place to study.	792 (3960)	13 (52)	105 (315)	71 (142)	13 (13)	994 (4482)	4.51	A
4. I choose a well-equipped study room.	791 (3955)	14 (56)	16 (48)	161 (322)	12 (12)	994 (4393)	4.42	O
5. I study in a room with electric fan.	747 (3735)	41 (164)	25 (75)	161 (322)	20 (20)	994 (4316)	4.34	O
6. I study in a place with study table and chair.	789 (3945)	78 (312)	105 (315)	13 (26)	9 (9)	994 (4607)	4.63	A
7. I study where there is less noise.	797 (3985)	23 (92)	88 (264)	65 (130)	21 (21)	994 (4492)	4.52	A
8. I take notes in class.	773 (3865)	45 (180)	154 (462)	18 (36)	4 (4)	994 (4547)	4.57	A
9. I review my notes before answering assignments in all the subjects.	759 (3795)	21 (84)	184 (552)	16 (32)	14 (14)	994 (4477)	4.50	O
10. I memorize and scan concepts in all the subject areas.	776 (3880)	20 (80)	183 (549)	11 (22)	4 (4)	994 (4535)	4.56	A
11. I ask questions from my teachers for clarification.	778 (3890)	152 (608)	58 (174)	2 (4)	4 (4)	994 (4680)	4.71	A
12. I read my textbook before I come to class.	780 (3900)	86 (344)	122 (366)	2 (4)	4 (4)	994 (4618)	4.65	A
13. I review for the test.	776 (3880)	46 (184)	152 (474)	8 (16)	12 (12)	994 (4566)	4.59	A
14. I make notes as formulae.	778 (3890)	5 (20)	57 (171)	130 (260)	24 (24)	994 (4365)	4.39	O
15. I begin with the easy questions first.	767 (3835)	139 (556)	57 (171)	3 (6)	27 (27)	994 (4595)	4.62	A
Total	-	-	-	-	-	-	67817	-
Grand Mean	-	-	-	-	-	-	4.79	A

Legend:
4.51-5.00 – Always (A)
3.51-4.50 – Often (O)
2.51-3.50 – Sometimes (S)
1.51-2.50 – Rarely (R)
1.00-1.50 – Never (N)

The remaining four statements were rated as "often" by the pupil-respondents, indicating that they often practiced these habits when studying. Among these four statements, the statement "I review my notes before answering assignments in all the subjects" obtained the highest weighted mean posted at 4.50, followed by "I choose a well-equipped study room" with a weighted mean of 4.42, "I make notes as formulae" with a weighted mean of 4.39, and "I study in a room with electric fan" with a weighted mean of 4.34.

On the whole, the pupil-respondents rated their study habits with a weighted mean of 4.79 interpreted as "always" which implied that they frequently practiced all the abovementioned habits when studying.

Profile of the Teacher-Respondents

Tables 7-13 present the profile of the teacher-respondents in terms of their age and sex, civil status, average monthly income, highest educational attainment, grade level(s) taught, teaching experience, teaching load and relevant trainings/seminars attended.

Age and sex. Table 7 is a presentation of the distribution of the teacher-respondents according to their age and sex.

As can be seen in the same table, majority (27 or 93.10 percent) of the teacher-respondents were females, with only two (6.89 percent) who were males. Of the 27 female teacher-respondents, five (18.52 percent) of them were aged 39

Table 7

Age and Sex Distribution

Age(In Years)	Sex				Total	Percent
	Female		Male			
	f	Percent	f	Percent		
60	2	7.41	0	0.00	2	6.89
59	2	7.41	0	0.00	2	6.89
57	1	3.70	0	0.00	1	3.45
56	1	3.70	0	0.00	1	3.45
55	1	3.70	0	0.00	1	3.45
52	1	3.70	0	0.00	1	3.45
46	1	3.70	0	0.00	1	3.45
42	0	0.00	1	50.00	1	0.00
41	0	0.00	1	50.00	1	0.00
40	2	7.41	0	0.00	2	6.89
39	5	18.52	0	0.00	5	17.24
38	1	3.70	0	0.00	1	3.45
36	2	7.41	0	0.00	2	6.89
33	1	3.70	0	0.00	1	3.45
32	1	3.70	0	0.00	1	3.45
31	1	3.70	0	0.00	1	3.45
30	2	7.41	0	0.00	2	6.89
28	1	3.70	0	0.00	1	3.45
27	1	3.70	0	0.00	1	3.45
24	1	3.70	0	0.00	1	3.45
Total	**27**	**93.10**	**2**	**6.89**	**29**	**100.00**
Mean	**42.00 years**					
SD	**2.40 years**					

years old. The other female teacher-respondents were distributed as to age as follows: two female teacher-respondents each who were aged 60 years old, 59 years old, 40 years old, 36 years old, and 30 years old, and one female teacher-respondent each who were aged 57 years old, 56 years old, 55 years old, 52 years

old, 46 years old, 38 years old, 33 years old, 32 years old, 31 years old, 28 years old, 27 years old and 24 years old. The oldest female teacher-respondents were aged 60 years old whereas the youngest teacher-respondent was aged 24 years old.

Of the two male teacher-respondent, one (50 percent) was aged 42 years old whereas the other one (50 percent) was aged 41 years old. As such, the oldest male teacher-respondent was aged 42 years old while the youngest male teacher-respondent was aged 41 years old.

Meantime, the mean age for both female and male teacher-respondents was posted at 42 years old, with a standard deviation of 2.40, indicating that they are in their middle adult life.

Civil status. The distribution of teacher-respondents according to their civil status is given in Table 8.

Table 8

Civil Status of the Teacher-Respondents

Civil Status	Frequency	Percent
Single	4	13.79
Married	25	86.21
Widowed	0	0.00
Separated	0	0.00
Total	**29**	**100.00**

As shown in Table 2, majority (25 or 86.21 percent) of the teacher-respondents were married whereas only four (13.79 percent) teacher-respondents were single.

Average monthly income. Table 9 shows the distribution of the teacher-respondents according to average monthly family income.

Table 9

Average Monthly Family Income of the Teacher-Respondents

Average Monthly Income (In Pesos)	Frequency	Percent
13,774.00	1	3.45
13,440.00	1	3.45
13,112.00	1	3.45
12,997.00	1	3.45
12,544.00	2	6.89
12,478.00	1	3.45
12,371.00	2	6.89
12,284.00	1	3.45
11,774.00	1	3.45
11,589.00	1	3.45
11,486.00	6	20.69
11,207.00	2	6.89
10,933.00	10	34.48
Total	**29**	**100.00**
Mean	-	**PhP12,135.79**

As can be seen in Table 9, most (10 or 34.48 percent) of the teacher-respondents earned PhP10,933.00, followed by six (20.69 percent) who earned

PhP1,486.00. The remaining teacher-respondents were distributed as follows: two (6.89 percent) each earned PhP12,544.00, PhP12,371.00 and PhP11,207.00, and one (3.45 percent) each earned PhP13,774.00, PhP13,440.00, PhP13,112.00, PhP12,997.00, PhP12,284.00, PhP11,774.00 and PhP11,589.00.

The mean income posted at PhP12,135.79 which is slightly above the poverty income threshold given by the National Statistics Office in 2004 which was estimated at PhP11,962.00 for a family of five members (two parents and three children).

Highest educational attainment. Table 10 is a presentation of the teacher-respondents' highest educational attainment.

Table 10

Educational Attainment of the Teacher-Respondents

Educational Attainment	Frequency	Percent
Bachelor's Degree	2	6.89
With MA/MS/MAEd. Units	20	68.97
With MA/MS/MAEd. CAR	4	13.79
With MA/MS/MAEd Degree	2	6.89
With Ph.D./Ed.D./D.A. Units	1	3.45
With Ph.D./Ed.D./D.A. CAR	0	0.00
With Ph.D./Ed.D./D.A. Degree	0	0.00
Total	**29**	**100.00**

As can be seen in the same table, majority (20 or 68.97 percent) of the teacher-respondents held MA/MS/MAEd units, followed by four (13.79 percent) who held certificates of completion of academic requirements, two (6.89 percent) each who had MA/MS/MAEd. degree and graduates of bachelor's degree, and one (3.45 percent) who had units in Ph.D./Ed.D./D.A. This implied that the teacher-respondents aimed to further their knowledge on their subject matter.

Grade level taught. Table 11 shows the distribution of the teacher-respondents as to their grade level(s) taught.

As shown in Table 11, 18 (62.07 percent) of the teacher-respondents taught two-grade levels whereas 11 (37.93 percent) taught three-grade levels.

Table 11

Grade Level(s) Taught of the Teacher-Respondents

Educational Attainment	Frequency	Percent
Two-Grade Level	18	62.07
Three-Grade Level	11	37.93
Total	**29**	**100.00**

Teaching experience. Table 12 reveals the distribution of teacher-respondents as to their teaching experience measured in terms of their number of years in the teaching profession.

Table 12

Teacher-Respondents' Teaching Experience

Teaching Experience (In Years)	Frequency	Percent
38	1	3.45
35	1	3.45
34	2	6.89
33	1	3.45
26	1	3.45
20	2	6.89
16	2	6.89
12	3	10.34
9	3	10.34
8	1	3.45
7	1	3.45
5	6	20.69
2	3	10.34
1	3	10.34
Total	**29**	**100.00**
Mean	-	**13.41**

As it is shown, six (20.69 percent) teacher-respondent had served for a period of five years, followed by three (10.34 percent) teacher-respondents who served for 12 years, nine years, two years and one year, and one (3.45 percent) who served for 38 years, 35 years, 33 years, 26 years, eight years and seven years.

One teacher-respondent had served for 38 years which is considered to be the longest number of teaching years, whereas three (10.34 percent) teacher-respondent taught for only a year considered to be the shortest number of teaching experience.

The mean of the teacher-respondents' teaching experience was posted at 13.41 years, indicating that they are relatively young in the teaching profession.

Teaching load. Table 13 presents the distribution of the teacher-respondents in terms of their teaching load based on the number of minutes that they recite their classes.

As shown in the same table, six (20.69 percent) teacher-respondents recited for 1090 minutes and 720 minutes, followed by five (17.24 percent) who recited for 740 minutes, four (13.79 percent) who recited for 750 minutes, three (10.34 percent) who recited for 1110 minutes, 1100 minutes, and 760 minutes.

Table 13

Teacher-Respondents' Teaching Load

Teaching Load (In Number of Minutes)	Frequency	Percent
1110	3	10.34
1100	3	10.34
1090	6	20.69
760	3	10.34
750	4	13.79
740	5	17.24
720	6	20.69
Total	**29**	***100.00***
Mean	-	**13.41**

Relevant trainings/seminars attended. Table 14 presents the distribution of the teacher-respondents as to their attendance in trainings/seminars relevant to their teaching profession.

Table 14

Distribution of Teacher-Respondents as to Attendance in Relevant Trainings/Seminars

Level/Number of Seminars/Trainings Attended (In Years)	Frequency	Percent
National	1	3.45
Regional	1	3.45
Division	2	6.89
District	25	86.21
Total	**29**	**100.00**

As shown in the same table, majority (25 or 86.21 percent) of the teacher-respondents attended district level relevant trainings/seminars, followed by two (6.89 percent) who attended division level relevant trainings/seminars, and one (3.45 percent) each who attended regional as well as national level relevant trainings/seminars.

Performance Levels of the Pupil-Respondents in Multi-grade Classes

Tables 15 to 18 reveal the performance levels of the pupil-respondents in multigrade classes based on class type, grade levels, and learning areas.

Class type. Table 15 shows the performance of pupil-respondents by class type-two grade level and three grade level in the five learning areas tested. There were 651 pupils involved in the two-grade level and 343 pupils in the three grade level.

Table 15

Performance Level of the Pupils in the Multigrade Classes based on the Division Achievement Test by Class Type (Pretest)

Scores	LEARNING AREAS (Pretest)										PRETEST (Ave.)	
	ENGLISH		FILIPINO		MATH		SCIENCE		HEKASI			
	2	3	2	3	2	3	2	3	2	3	2	3
9	6	10		3	6	7	6	8	6	6	1	1
10	4	10	2	6	5	18	5	10	4	8	4	9
11	22	20	10	5	20	22	26	20	21	14	16	11
12	26	29	12	11	25	29	27	29	21	22	21	25
13	33	22	15	12	30	21	30	21	25	17	29	27
14	71	41	65	44	72	42	72	43	71	44	76	47
15	52	28	52	39	54	33	52	29	56	33	52	34
16	40	16	43	21	40	11	42	15	46	17	36	15
17	27	26	27	36	27	29	29	32	25	26	19	27
18	41	17	44	17	41	14	40	19	41	16	53	18
19	38	13	47	14	40	11	40	15	45	14	40	18
20	54	19	45	19	55	16	63	21	57	20	55	18
21	57	30	52	28	56	23	59	30	62	34	73	28
22	37	24	46	25	38	28	38	25	36	22	34	24
23	25	10	31	14	25	11	22	6	22	9	33	14
24	21	8	31	15	21	8	16	6	17	13	15	11
25	21	2	27	4	23	2	18	1	18	3	22	6
26	12	7	18	9	16	8	11	3	12	10	16	2
27	19	3	22	6	16	2	18	3	15	4	15	3
28	12	4	14	7	9	4	10	3	12	5	9	3
29	13	0	17	4	8	0	11	1	14	2	12	0
30	6	2	7	2	5	2	6	2	5	2	8	2
31	4	2	8	2	4	2	3	1	4	2	3	2
32	3		4		4		2		4		2	
33	2		3		3		2		3		2	
34	1		2		2		1		2		1	
35	1		2		2		1		2		2	
36	1		2		2		0		2		1	
37	2		3		2		1		3		1	
Grand Total	651	343	651	343	651	343	651	343	651	343	651	343

As can be gleaned from the table, as to the pretest result, the two grade level group had the highest frequency in terms of mean scores for mean score of 14 with a frequency of 76 followed by mean score of 21 with a frequency of 73. The lowest mean score was nine and the highest was 37.

The mean scores obtained by the two grade level respondents was pegged at 18.10 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly lower implying that the respondents in the two-grade level did not perform better in the pretest of the district achievement test.

Looking closely it appears that the respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for Grade 1 and 2 are 30, for Grade 3 and 4 is 40 and Grade 5 and 6 with 50 items each for every learning area.

For each learning area it appears that the frequencies of the scores obtained by the respondents in the two–grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right is noticed.

As to the pretest result, of the three grade level group, the highest frequency in terms of mean scores 14 with a frequency of 47 followed by mean score of 15 with a frequency of 34. The lowest mean score was nine and the highest was 31.

Table 16

Performance Level of the Pupils in the Multi-grade Classes (three-grade levels) Based on the Division Achievement Test

Scores	Learning Areas POSTTEST										Posttest Mean	
	ENGLISH		FILIPINO		MATH		SCIENCE		HEKASI			
	2	3	2	3	2	3	2	3	2	3	2	3
14	1						1		1	1		
15	0											
16	0						2					
17	9	1		2	2	4	5	1	4	1		1
18	13	18	2	6	37	30	25	31	33	28		1
19	34	34	8	8	93	47	76	65	26	22	18	28
20	47	41	43	28	50	37	47	32	41	40	74	49
21	40	36	38	28	42	29	49	26	29	26	83	48
22	40	34	57	47	39	36	53	32	51	38	60	47
23	42	31	60	25	20	14	24	13	45	25	48	24
24	49	29	61	47	16	19	17	17	49	32	5	12
25	18	9	19	24	5	7	4	5	18	6	3	9
26	7	4	3	5	5	5	4	6	7	5		5
27	5	5		5	4	4	14	7	6	8	3	8
28	3	4		8	3	3	15	4	18	16	8	8
29	7	9	3	7	5	5	33	13	44	20	17	13
30	15	9	10	10	48	27	40	25	64	30	48	19
31	50	19	51	17	42	32	32	10	13	18	69	36
32	54	20	53	22	39	15	34	22	22	8	46	20
33	26	12	36	16	23	9	12	11	19	3	8	1
34	14	6	28	12	14	5	2	7	3	2	3	
35	14	6	19	10	7	1	5	2	2		2	
36	7	2	4	2	1		1					
37	0			0	2							
38	0		1	0	3			1				
39	1		0	1	4		2					
40	4		3	0	5	1	4		3			
41	5	2	3	2	6		6	1	4	2	1	
42	15	1	2	0	12	1	11	1	11	2	5	1
43	7	0	3	0	6	2	20	2	16	2	23	3
44	26	4	8	4	38	6	34	5	35	5	33	9
45	32	4	28	4	29	3	28	4	21	3	39	1
46	51	3	39	3	37		36		42		42	
47	15		33		14	1	15		16		13	
48			35						7			
49			1						1			
Total	651	343	651	343	651	343	651	343	651	343	651	343

The mean scores obtained by the three grade level respondents was pegged at 18.57 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly higher implying that the respondents in the three-grade level did perform better in the pretest of the district achievement test.

It is expected that scores of the majority of the pupils in three-grade classes will cluster from nine the (lowest score) to 31 (the highest score). For each learning area it appears that the frequencies of the scores obtained by the respondents in the three–grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right in some cases.

Looking closely it appears that the three-grade level respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for Grade level 1 and 2 are 30, for Grade 3 and 4 is 40 and Grade 5 and 6 with 50 items each for every learning area. For each learning area it appears that the frequencies of the scores obtained by the respondents in the two–grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right is noticed.

As can be gleaned from the table, as to the pretest result, the two grade level group had the highest frequency in terms of mean scores for mean score of 14 with a frequency of 76 followed by mean score of 21 with a frequency of 73.

The lowest mean score was nine and the highest was 37. The mean scores obtained by the two grade level respondents was pegged at 18.10 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly lower implying that the respondents in the two-grade level did not perform better in the pretest of the district achievement test.

Looking closely it appears that the respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for Grade level 1 and 2 are 30, for Grade 3 and 4 is 40 and Grade 5 and 6 with 50 items each for every learning area.

For each learning area it appears that the frequencies of the scores obtained by the respondents in the two-grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right in some cases.

Learning area. Table 17 depicts the performance level of the pupils in multigrade classes according to five learning areas, namely: English, Filipino, Math, Science and HEKASI.

Using the District Achievement Test as posttest, the following were obtained: For English – the lowest score obtained in English by the total 994 respondents from multigrade classes, the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 16 respondents. The score with the highest frequency of 71 respondents is 14. This is followed by a score of 21 with a frequency of 57 and a score of 20 with a frequency of 54. The

Table 17

Performance Level of the Pupils in the Multi-grade Classes Based on the Division Achievement Test

Scores	Learning Areas PRETEST					Mean Scores
	English	Filipino	Math	Science	HEKASI	
9	16	3	13	14	12	2
10	14	8	23	15	12	13
11	42	15	42	46	35	27
12	55	23	54	56	43	46
13	55	27	51	51	42	56
14	112	109	114	115	115	123
15	80	91	87	81	89	86
16	56	64	51	57	63	51
17	53	63	56	61	51	46
18	58	61	55	59	57	71
19	51	61	51	55	59	56
20	73	64	71	84	77	73
21	87	80	79	89	96	101
22	61	71	66	63	58	58
23	35	45	36	28	31	47
24	29	46	29	22	30	26
25	23	31	25	19	21	28
26	19	27	24	14	22	18
27	22	28	18	21	19	18
28	16	21	13	13	17	12
29	13	21	8	12	16	12
30	8	9	7	8	7	10
31	6	10	6	4	6	5
32	3	4	4	2	4	2
33	2	3	3	2	3	2
34	1	2	2	1	2	1
35	1	2	2	1	2	2
36	1	2	2	1	2	1
37	2	3	2	1	3	1
Grand Total	**994**	**994**	**994**	**994**	**994**	**994**
Grand Mean	**18.19**	**19.47**	**18.15**	**17.93**	**18.51**	**18.45**
SD	**5.16**	**5.12**	**5.23**	**4.92**	**5.18**	**4.89**

scores with lowest frequencies are 34, 35, and 36 with a score of one. The table shows that the mean score for English is 18.19 which indicates that majority of the respondents have scores that clusters from 11 to 25. The SD obtained is 5.16 which show that there is a slight dispersion of their scores from the mean score.

In Filipino the highest score obtained was 37 by three respondents while the lowest score is nine obtained by three respondents. The score with the highest frequency of 109 respondents is 14. This is followed by a score of 15 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and nine with frequency of three each. The table shows that the mean score for Filipino is 19.49 which indicates that majority of the respondents have scores that clusters from 14 to 27. The SD obtained is 5.12 which show that there is a slight dispersion of their scores from the mean score.

In Math the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 13 respondents. The score with the highest frequency of 114 respondents is 14. This is followed by a score of 15 with a frequency of 87 and a score of 21 with a frequency of 79. The scores with lowest frequencies are 34, 35, 36 and 37 with a frequency of two. The table shows that the mean score for Math is 18.15 which show that majority of the respondents have scores from 11 to 25. The SD obtained is 5.23 which shows that there is a slight dispersion of their scores from the mean score.

In Science the highest score obtained was 37 by one of the respondents while the lowest score is nine obtained by 14 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and nine with frequency of three each. The table shows that the mean score for Filipino is 17.93 which indicates that majority of the respondents have scores that clusters from 11 to 24. The SD obtained is 4.92 which show that there is a slight dispersion of their scores from the mean score.

In HEKASI the highest score obtained was 37 by three of the respondents while the lowest score is nine obtained by 12 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 96. The scores with lowest frequencies are 34, 35 and 36 with a frequency of two, followed by 33, and 37 with frequency of three each. The table shows that the mean score for HEKASI is 18.51 which indicates that majority of the respondents have scores that clusters from 11 to 26. The SD obtained is 5.18 which show that there is a slight dispersion of their scores from the mean score.

To summarize in the five learning areas, the lowest mean was obtained by Science-17.93 and the highest mean was in Filipino. The respondents scored higher in Filipino, and HEKASI. The respondents got lower mean scores in Science and Mathematics. These results were expected since based on

observation, pupils perform better in Filipino and Filipino-taught subjects, like HEKASI. This is because Filipino is our national language and therefore, spoken in more speech communities and in media. In addition, it is easier to learn by Samareños, particularly because of the similarity in the sound system of Tagalog and Waray languages.

Considering their average scores in the five learning areas (mean of their pretest), the table reveals that in HEKASI the highest average score obtained was 37 by one respondent while the lowest score is nine obtained by two respondents. The average score with the highest frequency of 123 respondents is 14. This is followed by a score of 21 with a frequency of 101 and a score of 15 with a frequency of 86. The average scores obtained with lowest frequencies are 34, 36 and 37 with a frequency of one respondent, followed by 32, 33, and 35 with frequency of two each. The table shows that the mean score for their average scores in the pretest is 18.45 which shows that majority of the respondents have scores that clusters from 11 to 25 which is nearer the mean age. The SD obtained is 4.89 which show that there is a slight dispersion of their scores from the mean score.

Using the District Achievement Test as posttest, the following were obtained: For English, the lowest score obtained in English by the total 994 respondents from multigrade classes, the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 16 respondents. The score with the highest frequency of 71 respondents is 14. This is followed by a

Table 18

Performance Level of the Pupils in the Multi-grade Classes Based on the Division Achievement Test (Posttest)

Scores	Learning Areas POSTTEST					Mean Scores
	English	Filipino	Math	Science	HEKASI	
14	1			1	2	
15						
16				2		
17	10	2	6	6	5	1
18	31	8	67	56	61	1
19	68	16	140	141	48	46
20	88	71	87	79	81	123
21	76	66	71	75	55	131
22	74	104	75	85	89	107
23	73	85	34	37	70	72
24	78	108	35	34	81	17
25	27	43	12	9	24	12
26	11	8	10	10	12	5
27	10	5	8	21	14	11
28	7	8	6	19	34	16
29	16	10	10	46	64	30
30	24	20	75	65	94	67
31	69	68	74	42	31	105
32	74	75	54	56	30	66
33	38	52	32	23	22	9
34	20	40	19	9	5	3
35	20	29	8	7	2	2
36	9	6	1	1		
37			2			
38		1	3	1		
39	1	1	4	2		
40	4	3	6	4	3	
41	7	5	6	7	6	1
42	16	2	13	12	13	6
43	7	3	8	22	18	26
44	30	12	44	39	40	42
45	36	32	32	32	24	40
46	54	42	37	36	42	42
47	15	33	15	15	16	13
48		35			7	
49		1			1	
Grand Total	**994**	**994**	**994**	**994**	**994**	**994**
Grand Mean	**28.40**	**29.44**	**27.66**	**27.53**	**27.98**	**28.20**
SD	**8.86**	**8.83**	**9.02**	**8.98**	**8.71**	**8.68**

score of 21 with a frequency of 57 and a score of 20 with a frequency of 54. The scores with lowest frequencies are 34, 35, and 36 with a score of one.

The table shows that the mean score for English is 18.19 which indicates that majority of the respondents have scores that clusters from 11 to 25. The SD obtained is 5.16 which show that there is a slight dispersion of their scores from the mean score.

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To summarize in the five learning areas, the lowest mean was obtained in Science-17.93 and the highest mean was in Filipino-19.51. The respondents scored higher in Filipino, and HEKASI. The respondents got lower mean scores in Science and Mathematics. This result were expected since based on observation, pupils perform better in Filipino and Filipino-taught subjects, like HEKASI. This is because Filipino is our national language and therefore, spoken in more speech communities and in media. In addition, it is easier to learn by Samareños, particularly because of the similarity in the sound system of Tagalog and Waray languages.

Considering their average scores in the five learning areas (mean of their pretest), the table reveals that In HEKASI the highest average score obtained was 37 by one respondent while the lowest score is nine obtained by two respondents. The average score with the highest frequency of 123 respondents is 14. This is followed by a score of 21 with a frequency of 101 and a score of 15 with a frequency of 86. The average scores obtained with lowest frequencies are 34, 36 and 37 with a frequency of one respondent, followed by 32, 33, and 35 with frequency of two each. The table shows that the mean score for their average scores in the pretest is 18.45 which shows that majority of the respondents have scores that clusters from 11 to 25 which is nearer the mean age. The SD obtained is 4.89 which show that there is a slight dispersion of their scores from the mean score.

Differences in Performance Levels of Pupils in Multi-grade Classes with Respect to Class Type, Grade Level and Learning Areas

One-way analysis of variance (ANOVA) was utilized to test the hypothesis of no significant difference in the performance levels of pupil-respondents in multi-grade classes with respect to grade level and learning areas. The t-test was used to compare difference in the performance levels of pupil-respondents in multi-grade classes with respect to class types.

Performance levels of pupils in multi-grade classes with respect to class type. For the difference between the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination comprising 651 pupils and three-grade combination comprising 343 pupils is shown in Table 19.

With respect to the pretest scores, the two-grade combination has a higher mean score compared to the three-grade combination in their pretest score. The mean of the two-grade combination in their pretest is 95.45 interpreted as average performance while the three-grade combination is 86.21, which is interpreted as average performance in the DAT. The mean difference in the pretest is 9.25 in favor of the two-grade combination. To test if this mean difference is significant, the computed t-value of 5.77 was obtained. This computed t-value was observed to be greater than the critical t-value, which is 1.96 at 0.05 level of significance, two tail and df = 992. Thus, the hypothesis of no

significant difference in the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is rejected. This means that the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is significantly different or that it differs with the two-grade combination performing better than the three-grade combination both in the pretest and posttest. This implies that the teacher teaching two-grade combination can attend to her/his task better than the teachers in three-grade combination.

Table 19

t-test for Comparing Level of Performance of Pupil-Respondents in the Pretest of the DAT with Respect to Class Type

Statistic	Class Type	
	Two-grade	Three-grade
Mean	95.45	86.21
No. of Cases	651	343
Variance	621.94	491.60
Mean Difference	9.25	
Df	992	
t Stat	**5.77**	
t Critical two-tail, α = .05	**1.96**	
Interpretation	**Significant**	

In their posttest score the two-grade combination has a higher mean score than the three-grade combination. As to the posttest scores of the pupil-respondents, the mean of the two-grade combination is 149.43 interpreted as very high performance while the three-grade combination is 125.04 interpreted

as high performance in the DAT. The mean difference is 24.38 in the posttest in favor of the two-grade combination. To test if this mean difference is significant, the computed t-value of 8.74 was obtained. This computed t-value was observed to be greater than the critical t-value, which is 1.96 at 0.05 level of significance, two tail and df = 992. Thus, the hypothesis of no significant difference in the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is rejected. The mean difference is significant. This meant that the performance levels of the pupil-respondents in the two-grade combinations differ from the three-grade combination in the posttest of the DAT.

It can be inferred from the pretest and posttest mean scores that the pupil-respondents have gains in performance from the pretest to the posttest in the DAT.

Table 20

t-test for Comparing Level of Performance of Pupil-Respondents in the Posttest of the DAT with Respect to Class Type

Statistics	Class Type	
	Two-grade	Three-grade
Mean	95.45	86.21
No. of Cases	651	343
Variance	621.94	491.60
Mean Difference	9.25	
Df	992	
t Stat	**8.74**	
t Critical two-tail, α = .05	**1.96**	
Interpretation	**Significant**	

Performance levels of pupils in multi-grade classes with respect to grade level. Tables 21-24 present the results of the computation using the One-way ANOVA in comparing the pupil-respondents' performance in the DAT as pretest and posttest with respect to grade levels – Grade 1 to Grade 6.

For comparing level of performance in the DAT (as pretest) with respect to grade level of the respondents, Table 21 shows this.

Table 21

Summary and Comparison of Pupil-Respondents Performance in the DAT Pretest with Respect to Grade Level

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
Grade 1	238	17736	75	AP	208.28
Grade 2	269	19910	74	AP	134.52
Grade 3	165	18700	113	AP	201.43
Grade 4	152	15600	103	AP	269.55
Grade 5	83	9752	117	AP	572.96
Grade 6	87	10012	115	AP	386.56

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	**352220.39**	**5**	**70444.08**	**290.75**	**2.22**
Within Groups	**239378.55**	**988**	**242.29**		
Total	**591598.94**	**993**			

Legend:

Grades 1&2	Grades 3&4	Grades 5&6	Interpret
121-150	161-200	201-250	VHP
91-120	121-160	151-200	HP
61-90	81-120	101-150	AP
31-60	41- 80	51-100	LP
0-30	0- 40	0- 50	VLP

As revealed in the summary table, Grade 1 to Grade 6 respondents have "average performance" in term of descriptive rating in the DAT pretest this indicated that the pupil-respondents from Grade 1 to Grade 6 have average performance in the DAT. So considering that the number of items were different for Grades 1 & 2 30 items, Grades 3 & 4, 40 items and Grades 5 & 6, 50 items the mean obtained for the grade level will differ as to their mean scores but do not differ in terms of the descriptive ratings of the mean scores. As revealed in the summary table the mean of the pretest scores of Grade 1 is 75 while the Grade 2 has a mean of 74. The Grade 3 has a mean of 113 and the Grade 4 has a mean of 103, the Grade 5 has a pretest mean of 117 while the Grade 6 has a mean of 115.

The result of the One-way ANOVA the computed F-value was 290.75, which was observed to be greater than the critical F-value of 2.22. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (pretest) of the pupil-respondents and their grade level.

This means that the level of performance in the DAT (pretest) of the pupil-respondents differ significantly with respect to their year level.

This can be explained that the number of respondents in the grade level differs. For Grade 1, it is 238 for Grade 2 it is 269 while the mean obtained as observed in the summary table differ only by one point, 75 and 74 but looking at the variance in the summary table Grade 2 has a variance of 134.52 while Grade 1 has a variance of 208.28. This mean difference between Grade 1 and Grade 2

having the same number of items is significantly different also considering that there were 269 Grade 2 as compared to 238 Grade 1.

For Grade 3 the mean obtained is 113 while the mean for Grade 4 is 103. So there is a big difference in mean obtained by these two grade levels. The variance is 201.43 for Grade 3 while the variance is 269.55 for Grade 4. Considering that there were 165 Grade 3 and there were 152 Grade 4 the distribution of the DAT pretest scores is more disperse in grade 4 than in Grade 3.

For Grade 5 and Grade 6, the Grade 5 pupil-respondents have higher mean scores 117 compared to Grade 6 which is 115. Their variance also differs with the Grade 5 more disperse (variance = 572.96) compared to the Grade 6 (variance = 386.56). Also, there were more Grade 6 pupil-respondents (87) compared with Grade 5 with 83 respondents.

The computation of the One-way ANOVA revealed a computed F-value was 290.75, with a critical F-value of 2.22. The hypothesis that "There are no significant differences in the performance in the DAT of the pupil-respondents when grouped according to their grade level" was rejected since the computed F-value was greater than the critical F-value.

This means further that the pupil-respondents differ significantly in their performance in the DAT pretest with respect to their grade level. This just indicated that the pupil-respondents although have the same descriptive rating (average performance) since, they fall in a range that their pretest mean scores is in the range for average performance the mean obtained is significantly different.

Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT pretest of the pupil-respondents and their grade level.

Table 22 presents the results of the Scheffe's test to determine the differences in the performance in the DAT pretest of the pupil-respondents' by grade level.

With respect to the performance in the DAT pretest of the pupil-respondents and their grade levels, 15 group pairs were compared. Pair 1 – Grade 1 and Grade 2 DAT performance in the pretest, the table showed a no significant difference in performance in the DAT pretest of the pupil-respondents since the computed F-value of 0.16, which was observed to be less than the critical F-value of 2.11.

Pair 2 – Grade 1 and Grade 3 performance in the DAT pretest, the table showed a significant difference since the computed F-value of 604.84 was greater than the critical F-value of 2.11. Pair 3 – Grade 1 and Grade 4 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 302.00 was greater than the critical F-value of 2.11. Pair 4 – Grade 1 and Grade 5 pupil-respondents performance in the DAT pretest revealed a significant difference since the computed F-value of 468.27 was greater than the critical F-value of 2.11. Pair 5 – Grade 1 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since

Table 22

Result of Scheffe's Test for Differences in the Performance in the DAT Pretest of the Pupil-Respondents and their Grade Level

Groups Paired (Grade Level)	*Mean Difference*	*F-value*		*Interpre-tation*
		Computed	*Tabular*	
Grade 1 & Grade 2	1	0.16	2.11	NS
Grade 1 & Grade 3	-39	604.84	2.11	S
Grade 1 & Grade 4	-28	302.00	2.11	S
Grade 1 & Grade 5	-43	468.27	2.11	S
Grade 1 & Grade 6	-41	431.86	2.11	S
Grade 2 & Grade 3	-39	653.32	2.11	S
Grade 2 & Grade 4	-29	328.98	2.11	S
Grade 2 & Grade 5	-44	495.37	2.11	S
Grade 2 & Grade 6	-41	458.05	2.11	S
Grade 3 & Grade 4	11	37.34	2.11	S
Grade 3 & Grade 5	-4	3.94	2.11	NS
Grade 3 & Grade 6	-2	0.72	2.11	S
Grade 4 & Grade 5	-15	48.87	2.11	S
Grade 4 & Grade 6	-12	35.34	2.11	S
Grade 5 & Grade 6	2	0.70	2.11	NS

the computed F-value of 431.86 was observed to be greater than the critical F-value of 2.11.

Pair 6 – Grade 2 and Grade 3 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 653.32 was greater than the critical F-value of 2.11. Pair 7 – Grade 2 and Grade 4 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 328.98 was greater than the critical F-

value of 2.11. Pair 8 – Grade 2 and Grade 5 pupil-respondents performance in the DAT pretest revealed a significant difference since the computed F-value of 495.37 was greater than the critical F-value of 2.11. Pair 9 – Grade 2 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 458.05 was observed to be greater than the critical F-value of 2.11.

Pair 10 – Grade 3 and Grade 4 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 37.34 was greater than the critical F-value of 2.11. Pair 11 – Grade 3 and Grade 5 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 3.94 was greater than the critical F-value of 2.11. Pair 12 – Grade 3 and Grade 6 pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 0.72 was lesser than the critical F-value of 2.11.

Pair 13 – Grade 4 and Grade 5 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 48.87 was observed to be greater than the critical F-value of 2.11. Pair 14 – Grade 4 and Grade 6 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 35.34 was greater than the critical F-value of 2.11.

Pair 15 – Grade 5 and Grade 6 pupil-respondents performance in the DAT pretest showed a no significant difference because the computed F-value of 0.70 was lesser than the critical F-value of 2.11.

For comparing level of performance in the DAT (as posttest) with respect to grade level of the respondents, Table 23 shows this.

Table 23

Summary and Comparison of Pupil-Respondents Performance in the DAT posttest with Respect to Grade Level

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
Grade 1	238	24240	102	HP	21.10
Grade 2	269	29615	110	HP	43.11
Grade 3	165	24620	149	AP	96.41
Grade 4	152	23685	156	HP	16.77
Grade 5	83	18182	219	VHP	15.47
Grade 6	87	19829	228	VHP	34.21

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	**1829333**	**5**	**365866.5**	**9242.99**	**2.22**
Within Groups	**39108.15**	**988**	**39.58314**	-	-
Total	**1868441**	**993**	-	-	-

Legend:

Grade 1&2	Grade 3&4	Grade 5&6	Interpret
121-150	161-200	201-250	VHP
91-120	121-160	151-200	HP
61-90	81-120	101-150	AP
31-60	41- 80	51-100	LP
0-30	0- 40	0- 50	VLP

As revealed in the summary table, Grade 1 and Grade 2 have "high performance" in term of descriptive rating in the DAT posttest, Grade 3 have average performance, Grade 4 have high performance and Grade 5 and Grade 6 have very high performance. This indicated that the pupil-respondents from Grade 1 to Grade 6 have increase in performance in the DAT posttest from the pretest. The posttest mean scores of the Grade 1 respondents is 102, Grade 2 has a posttest mean score of 110. The Grade 3 has a posttest mean of 149 and the grade 4 has a posttest mean of 156, the Grade 5 has a posttest mean of 219 while the Grade 6 has a mean of 228. Even if the grade 3 has a posttest mean score interpreted as average performance its value is very much higher compared to its pretest value.

As revealed in the summary table the variance obtained in the posttest is lower compared to the variance in the pretest showing that the results of the posttest indicated that the performance of the pupil-respondents do not vary much in the posttest or its dispersion from the mean score is not as wide as in the pretest except for the Grade 3 which has a variance value of 96.41 indicating a wide variation from the mean score.

The result of the One-way ANOVA the computed F-value was 9242.99, which was observed to be greater than the critical F-value of 2.22. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (posttest) of the pupil-respondents and their grade level.

This means that the level of performance in the DAT (posttest) of the pupil-respondents differ significantly with respect to their year level.

It is clear from the summary table that the mean values obtained differ by year level with Grade 1 obtaining the lowest mean and grade 6 the highest mean value.

The computation of the One-way ANOVA revealed a computed F-value was 9242.99, with a critical F-value of 2.22. The hypothesis that "There are no significant differences in the performance in the DAT (posttest) of the pupil-respondents when grouped according to their grade level" was rejected since the computed F-value was greater than the critical F-value.

This means further that the pupil-respondents differ significantly in their performance in the DAT posttest with respect to their grade level. This just indicated that the pupil-respondents have differ in their performance in the posttest as indicated by their descriptive rating of average performance, high performance, very high performance. The mean scores obtained is significantly different.

Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT posttest of the pupil-respondents and their grade level.

Table 24 presents the results of the Scheffe's test to determine the differences in the performance in the DAT posttest of the pupil-respondents' by grade level. With respect to the performance in the DAT posttest of the pupil-

respondents and their Grade levels, 15 group pairs were compared. Of the 15 groups pair compared the table shows that they were all significantly different as revealed by the computed F-value.

Table 24

Result of Scheffe's Test for Differences in the Performance in the DAT Posttest of the Pupil-Respondents and their Grade Level

Groups Paired (Grade Level)	Mean Difference	F-value		Interpret-ation
		Computed	Tabular	
Grade 1 & Grade 2	-8	216.82	2.11	S
Grade 1 & Grade 3	-47	5522.44	2.11	S
Grade 1 & Grade 4	-54	6826.67	2.11	S
Grade 1 & Grade 5	-117	21358.96	2.11	S
Grade 1 & Grade 6	-126	25581.83	2.11	S
Grade 2 & Grade 3	-39	3953.81	2.11	S
Grade 2 & Grade 4	-46	5130.92	2.11	S
Grade 2 & Grade 5	-109	19026.98	2.11	S
Grade 2 & Grade 6	-118	23056.74	2.11	S
Grade 3 & Grade 4	-7	87.34	2.11	S
Grade 3 & Grade 5	-70	6806.28	2.11	S
Grade 3 & Grade 6	-79	8915.05	2.11	S
Grade 4 & Grade 5	-63	5423.73	2.11	S
Grade 4 & Grade 6	-72	7265.93	2.11	S
Grade 5 & Grade 6	-9	84.22	2.11	S

Pair 1 – Grade 1 and Grade 2 DAT performance in the posttest, the table showed a significant difference in performance in the DAT posttest of the pupil-respondents since the computed F-value of 216.82, which was observed to be greater than the critical F-value of 2.11. Pair 2 – Grade 1 and Grade 3 pupils' performance in the DAT posttest, the table showed a significant difference since

the computed F-value of 5522.44 was greater than the critical F-value of 2.11. Pair 3 – Grade 1 and Grade 4 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 6826.67 was greater than the critical F-value of 2.11. Pair 4 – Grade 1 and Grade 5 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 21358.96 was greater than the critical F-value of 2.11. Pair 5 – Grade 1 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 25581.83 was observed to be greater than the critical F-value of 2.11.

Pair 6 – Grade 2 and Grade 3 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 3953.81 was greater than the critical F-value of 2.11. Pair 7 – Grade 2 and Grade 4 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 5130.92 was greater than the critical F-value of 2.11. Pair 8 – Grade 2 and Grade 5 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 19026.98 was greater than the critical F-value of 2.11. Pair 9 – Grade 2 and Grade 6 pupil-respondents performance in the DAT posttest was also found to be significantly different since the computed F-value of 23056.74 was observed to be greater than the critical F-value of 2.11.

Pair 10 – Grade 3 and Grade 4 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value

of 87.34 was greater than the critical F-value of 2.11. Pair 11 – Grade 3 and Grade 5 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 6806.28 was greater than the critical F-value of 2.11. Pair 12 – Grade 3 and Grade 6 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 8915.05 was greater than the critical F-value of 2.11.

Pair 13 – Grade 4 and Grade 5 pupil-respondents performance in the DAT posttest was also found to be significantly different since the computed F-value of 5423.73 was observed to be greater than the critical F-value of 2.11. Pair 14 – grade 4 and grade 6 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 7265.93 was greater than the critical F-value of 2.11.

Pair 15 – Grade 5 and Grade 6 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 84.22 was greater than the critical F-value of 2.11.

Performance levels of pupils in multi-grade classes with respect to learning areas. Tables 25-28 present the results of the computation using the One-way ANOVA in comparing the pupil-respondents' performance in the DAT as pretest and posttest with respect to learning areas–English, Filipino, Math, Science and HEKASI.

For comparing level of performance in the DAT (as pretest) with respect to learning areas, Table 25 shows this.

Table 25

Summary and Comparison of Pupil-Respondents Performance in the DAT Pretest with Respect to Learning Areas

SUMMARY

Groups	N	Total	Average	Inter-pret-ation	Variance
English	994	18084	18.19	AP	26.66
Filipino	994	19361	19.48	AP	26.26
Math	994	18041	18.15	AP	27.31
Science	994	17823	17.93	AP	24.21
HEKASI	994	18401	18.51	AP	26.85

ANOVA

Source of Variation	*SS*	*Df*	*MS*	*Fcomp.*	*Fcrit.*
Between Groups	**1477.23**	**4**	**369.31**	**14.06**	2.37
Within Groups	**130376.16**	**4965**	**26.26**	-	-
Total	**131853.39**	**4969**	-	-	-

Legend:

Grade 1&2	Grade 3&4	Grade 5&6	Overall	Interpret
25-30	33-40	41-50	33-40	VHP
19-24	25-32	31-40	25-32	HP
13-18	17-24	21-30	17-24	AP
7-12	9-16	11-20	9-16	LP
0-6	0-8	0-10	0-8	VLP

As revealed in the summary table, the pupil-respondents have "average performance" in the DAT pretest in the following learning areas – English, Filipino, Math, Science and HEKASI.

The following DAT pretest mean scores in the five learning areas were obtained: English -18.19, Filipino-19.48, Math-18.15, Science-17.93 and HEKASI-18.51. It is clear in the table that the highest score in DAT pretest in the learning

areas is in Filipino (19.48) and the lowest was obtained in Science (17.93). The table revealed further that since the number of items in the learning areas is 30 for Grade 1 and 2, 40 for Grade 3 & 4, and 50 for Grade 5 & 6 that the pupil – respondents were not able to obtained 50 percent of the total number of items during the pretest. Although the mean score of the pretest falls under the descriptive rating of average performance (17-24) the mean obtained for all the learning areas were nearer the lower end of the ranged of scores in the average performance scale indicating that the pupil-respondents have almost not reached the average performance.

The result of the One-way ANOVA for comparing means obtained by learning areas in the pretest, the computed F-value was 14.06, which was observed to be greater than the critical F-value of 2.37. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (pretest) of the pupil-respondents in the learning areas.

This means that the level of performance in the DAT (pretest) of the pupil-respondents differ significantly with respect to the learning areas. The difference in the mean scores obtained by learning areas is significant.

Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT pretest of the pupil-respondents in the learning areas.

Table 26 presents the results of the Scheffe's test to determine the differences in the performance in the DAT pretest of the pupil-respondents' by learning areas.

Table 26

Result of Scheffe's Test for Differences in the Performance in the DAT pretest of the Pupil-Respondents in the Learning Areas

Groups Paired (Learning Areas)	Mean Difference	F-value		Interpret-ation
		Computed	Tabular	
English & Filipino	-1.29	31.49	2.18	S
English & Math	0.04	0.03	2.18	NS
English & Science	0.26	1.28	2.18	NS
English & HEKASI	-0.32	1.94	2.18	NS
Filipino & Math	1.33	33.48	2.18	S
Filipino & Science	1.55	45.47	2.18	S
Filipino & HEKASI	0.97	17.81	2.18	S
Math & Science	0.22	0.92	2.18	NS
Math & HEKASI	-0.36	2.45	2.18	S
Science & HEKASI	-0.58	1.69	2.18	NS

With respect to the performance in the DAT pretest of the pupil-respondents in the learning areas, 10 group pairs were compared. Pair 1 – English and Filipino DAT performance in the pretest, the table showed a significant difference in performance in the DAT pretest of the pupil-respondents since the computed F-value of 31.49, which was observed to be greater than the critical F-value of 2.18. Pair 2 – English and Math performance in the DAT pretest, the table showed a no significant difference since the computed F-value

of 0.03 was less than the critical F-value of 2.18. Pair 3 – English and Science pupil-respondents performance in the DAT pretest showed a no significant difference because the computed F-value of 1.28 was less than the critical F-value of 2.18. Pair 4 – English and HEKASI pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 1.94 was lesser than the critical F-value of 2.18.

Pair 5 – Filipino and Math pupil-respondents performance in the DAT pretest was found to be significantly different since the computed F-value of 33.48 was observed to be greater than the critical F-value of 2.18. Pair 6 – Filipino and Science pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 45.47 was greater than the critical F-value of 2.18. Pair 7 – Filipino and HEKASI pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 17.81 was greater than the critical F-value of 2.18.

Pair 8 – Math and Science pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 0.92 was less than the critical F-value of 2.18. Pair 9 – Math and HEKASI pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 2.45 was observed to be greater than the critical F-value of 2.18.

Pair 10 – Science and HEKASI pupil-respondents performance in the DAT pretest was found to be not significantly different given that the computed F-value of 1.69 was less than the critical F-value of 2.18.

For comparing level of performance in the DAT (as posttest) with respect to the five learning areas, Table 27 shows this.

Table 27

Summary and Comparison of Pupil-Respondents Performance in the DAT Posttest with Respect to Learning Areas

SUMMARY

Groups	N	Total	Average	Interpret-ation	Variance
English	994	28233	28.40	HP	78.52
Filipino	994	29265	29.44	HP	77.91
Math	994	27498	27.66	HP	81.40
Science	994	27365	27.53	HP	80.58
HEKASI	994	27810	27.98	HP	75.79

ANOVA

Source of Variation	SS	Df	MS	Fcomp.	Fcrit.
Between Groups	**2354.12**	**4**	**588.53**	**7.46**	**2.37**
Within Groups	**391447.22**	**4965**	**78.84**	-	-
Total	**393801.34**	**4969**	-	-	-

Legend:

Grade 1&2	Grade 3&4	Grade 5&6	Overall	Interpret
25-30	33-40	41-50	33-40	VHP
19-24	25-32	31-40	25-32	HP
13-18	17-24	21-30	17-24	AP
7-12	9-16	11-20	9-16	LP
0-6	0-8	0-10	0-8	VLP

As revealed in the summary table, the pupil-respondents have "high performance" in the DAT posttest in the following learning areas – English, Filipino, Math, Science and HEKASI. The following DAT posttest mean scores in the five learning areas were obtained: English -28.40, Filipino-29.44, Math-27.66, Science-27.53 and HEKASI-27.98. It is clear in the table that the highest score in DAT posttest in the learning areas is in Filipino (29.44) and the lowest was obtained in Science (27.53).

The table revealed further that since the number of items in the learning areas is 30 for Grade 1 and 2, 40 for Grade 3 & 4, and 50 for Grade 5 & 6 that the majority of Grade 1 & 2 pupil –respondents have high scores in the posttest to obtained a very high mean scores of 27, 28 and 29 in the five learning areas during the posttest. The mean score of 27 or higher in the posttest which falls under the descriptive rating of high performance (25-32) for all the learning areas implies that majority of the Grade 1 & 2 pupil-respondents have high scores in the posttest to pull the average up since, there were 238 + 269 or a total of 507 which constituted more than one –half of the total 994 respondents. This would also implies that the 83 grade 5 and the 87 Grade 6 pupil –respondents have obtained high scores such as 40 and more than 40 to pull the posttest average up since their total number of items in the learning areas is 50 each.

The result of the One-way ANOVA for comparing means obtained by learning areas in the posttest, the computed F-value was 7.46, which was observed to be greater than the critical F-value of 2.37. This led to the rejection

of the hypothesis that there is no significant difference in the level of performance in the DAT (posttest) of the pupil-respondents in the learning areas.

This means that the level of performance in the DAT (posttest) of the pupil-respondents differ significantly with respect to the learning areas. The difference in the mean scores obtained by learning areas is significant.

Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT posttest of the pupil-respondents in the learning areas.

Table 28 presents the results of the Scheffe's test to determine the differences in the performance in the DAT posttest of the pupil-respondents' by learning areas.

Table 28

Result of Scheffe's Test for Differences in the Performance in the DAT pretest of the Pupil-Respondents in the Learning Areas

Groups Paired (Grade Level)	Mean Difference	F-value		Interpret-ation
		Computed	Tabular	
English & Filipino	-1.29	31.49	2.18	S
English & Math	0.04	0.03	2.18	NS
English & Science	0.26	1.28	2.18	NS
English & HEKASI	-0.32	1.94	2.18	NS
Filipino & Math	1.33	33.48	2.18	S
Filipino & Science	1.55	45.47	2.18	S
Filipino & HEKASI	0.97	17.81	2.18	S
Math & Science	0.22	0.92	2.18	NS
Math & HEKASI	-0.36	2.45	2.18	S
Science & HEKASI	-0.58	1.69	2.18	NS

With respect to the performance in the DAT posttest of the pupil-respondents in the learning areas, 10 group pairs were compared. Pair 1 – English and Filipino DAT performance in the posttest, the table showed a significant difference in performance in the DAT posttest of the pupil-respondents since the computed F-value of 6.82, which was observed to be greater than the critical F-value of 2.18. Pair 2 – English and Math performance in the DAT posttest, the table showed a significant difference since the computed F-value of 3.45 was greater than the critical F-value of 2.18. Pair 3 – English and Science pupil-respondents performance in the DAT posttest showed significant difference because the computed F-value of 4.77 was greater than the critical F-value of 2.18. Pair 4 – English and HEKASI pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 1.11 was lesser than the critical F-value of 2.18.

Pair 5 – Filipino and Math pupil-respondents performance in the DAT posttest was found to be significantly different since the computed F-value of 19.97 was observed to be greater than the critical F-value of 2.18. Pair 6 – Filipino and Science pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 23.00 was greater than the critical F-value of 2.18. Pair 7 – Filipino and HEKASI pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 13.44 was greater than the critical F-value of 2.18.

Pair 8 – Math and Science pupil-respondents performance in the DAT posttest revealed a no significant difference since the computed F-value of 0.11 was less than the critical F-value of 2.18. Pair 9 – Math and HEKASI pupil-respondents performance in the DAT posttest was also found to be not significantly different since the computed F-value of 0.65 was observed to be less than the critical F-value of 2.18.

Pair 10 – Science and HEKASI pupil-respondents performance in the DAT posttest was found to be not significantly different given that the computed F-value of 0.34 was less than the critical F-value of 2.18.

For comparing level of performance in the DAT (as posttest) with respect to the five learning areas, Table 13 shows this.

Relationship between the Pupil-Respondents Performance in the Learning Areas and Pupils and Teachers-related Variates

This section presents the correlation analyses made between: 1) the pupil-respondents performance in the learning areas and pupil-related variates and 2) the pupil-respondents performance in the learning areas and teacher-related variates.

Performance in the learning areas and pupil-related variates. Represented in Tables 29 - 35 are the results of the correlation analyses made between the performance (average of the pretest and posttest) of the pupil-respondents' in the learning areas (English, Filipino, Math, Science and HEKASI)

in the DAT and their pupil-related variates (age, sex, grade level, height, weight, attitude and study habits).

As to age, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' age, the computed r-value was 0.775, with a Fisher's t-value of 38.62, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT in the five learning areas and the pupil-respondents' age."

This meant that the performance in the DAT (over-all) in the five learning areas is significantly related to age of the pupils. This implies that older and more mature pupils have better performance in the DAT (over-all) in the five learning areas that the much younger one.

Table 29

Relationship between Pupil-respondents Performance in All the Learning Areas and Pupil-related Variates

Pupil-related Variates	r-value	t-value	Interpret
Age	.775	38.62	S
Sex	-.014	-0.44	NS
Grade level	.923	75.55	S
Height	.738	34.45	S
Weight	.771	38.13	S
Attitude	.022	0.69	NS
Study habits	.001	0.03	NS

t_{crit} = 1.96, 0.05 level of significance (two tailed)

As to sex, a correlation coefficient of -.014, with a Fisher's t-value of -0.44 was obtained between the pupil-respondents' performance in the DAT (over-all) in the five learning areas and the pupil-respondents' sex. The negative correlation indicate that since the female is coded as 1 and the male 2, that the male pupils have low performance in the DAT (over-all) in the five learning areas compared to the females. The obtained Fisher's t t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their sex. This meant that the male and female pupils obtained the same performance in the DAT in the five learning areas. This must be because the multi-grade class is a combination of both sexes, so since they were under the same teachers so their performance in the DAT in the five learning areas will not differ.

As to grade level, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' grade level, the computed r-value was 0.923, with a Fisher's t-value of 75.55, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT (over-all) in the five learning areas and the pupil-respondents' grade level." This meant that the relationship is significant, that the higher the grade level the better is the performance in the DAT (over-all) in the five learning areas.

As to height, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' height, the computed r-value was 0.738, with a Fisher's t-value of 34.45, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT (over-all) in the five learning areas and the pupil-respondents' height." This meant that taller pupils have better performance in the DAT (over-all) in the five learning areas than those who are low in height (shorter).

As to weight, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' weight, the computed r-value was 0.771, with a Fisher's t-value of 38.13, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT in the five learning areas and the pupil-respondents' weight" This meant that pupils weight is significantly related to his/her performance in the DAT (over-all) in the five learning areas. Pupils' who are normal weight or who exceed the normal weight for their age and height have better performance than the underweight. Underweight is usually associated with malnourish and undernourished which implies that performance in the DAT (over-all) in the five learning areas is influenced by the pupil's nutrition.

As to attitude towards schooling, a correlation coefficient of 0.022, with a Fisher's t-value of 0.69 was obtained between the pupil-respondents'

performance in the DAT (over-all) in the five learning areas and the pupil-respondents' attitude towards schooling. The obtained Fisher's t t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their attitude towards schooling. This meant that the pupils with positive and those with negative attitude towards schooling have the same performance in the DAT in the five learning areas.

As to study habits, a correlation coefficient of -0.001, with a Fisher's t-value of 0.03 was obtained between the pupil-respondents' performance in the DAT (over-all) in the five learning areas and the pupil-respondents' study habits. The obtained Fisher's t t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their study habits. This meant that pupils with better study habits and those with poor study habits obtained the same performance in the DAT (over-all) in the five learning areas.

Implications

The following implications were derived from the results of this study:

1. Since the performance levels of the pupils in multi-grade classes vary, there is a need to make a re-assessment of the feasibility of multi-grade classes in the Division of Samar.

2. The performance levels of pupils in multi-grade classes should be measured not only through the pretest and posttest results of the District Achievement Test (DAT) but through other tests such as those that are made by the researcher in the five learning areas.

3. The teachers should look into other variates which may have influence on the performance levels of the pupils in multi-grade classes aside from the teacher- and pupil-related variates.

4. Since the pupil-respondents' attitude towards schooling is favorable, the teachers should also seek their attitude towards multi-grade classes and relate it to their performance levels.

5. The performance levels of pupils and teachers in multi-grade classes should also be studied not only in terms of class type, grade levels, and learning areas but also as to participation in non-academic and academic activities within the district.

Chapter 5

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of the major findings, the conclusions made therein as well as the recommendations derived from the conclusions.

Summary of Findings

As a result of the computation, analysis and interpretation of data, the following were salient findings of the study:

1. Most (532 or (53.52 percent) of the pupil-respondents males whose ages ranged from six to 17 years old. Of the 532 male pupil-respondents, 93 (17.48 percent) were aged 11 years old, followed by 73 (13.72 percent) who were aged six and 10 years old, 71 (13.35 percent) aged seven years old, 69 (12.97 percent) aged 9 years old. Meanwhile, the oldest male pupil-respondents were aged 17 years old whereas the youngest male pupil-respondents were aged six years old. On the other hand, only 462 (46.48 percent) were female pupil-respondents whose ages ranged from six to 17 years old. Of the 462 female pupil-respondents, 86 (18.61 percent) were aged 10 years old. This was followed by 74 (16.02 percent) who were aged eight years old, 64 (13.85 percent) aged seven years old, 63 (13.64 percent) aged 11 years old, and 50 (10.82 percent) aged six years old. The oldest female pupil-respondents were aged 17 years old whereas the youngest female pupil-respondents were aged six years old. The

mean age for both the male and female pupil-respondents was 9.50 years old, with a standard deviation of 2.40, indicating a relatively young pupil-respondent population.

2. Two hundred sixty-nine (27.06 percent) of the pupil-respondents were in Grade II, followed by 238 (23.94 percent) who were in Grade I. The remaining pupil-respondents were distributed as follows: 165 (16.59 percent) in Grade III, 152 (15.29 percent) in Grade IV, 87 (8.75 percent) in Grade VI and 83 (8.35 percent) in Grade V. This implied that majority of the pupil-respondents who were sampled belonged to Grade II.

3. Most (136 or 13.7 percent) of the pupil-respondents measured 41 centimeters in height, followed by 121 (12.2 percent) who measured 47 centimeters in height. Other respondents were distributed as follows: 109 (11 percent) were measured at 44 centimeters, 95 (9.6 percent) were measured 40 centimeters, and 93 (9.4 percent) were measured 45 centimeters. Meanwhile, the tallest pupil-respondents were measured at 88 centimeters whereas the shortest pupil-respondent was measured at 30 centimeters. The mean of the height of the pupil-respondents was posted at 50.55 centimeters with a standard deviation of 11.96. This meant further that the pupil-respondents was relatively tall.

4. Eighty (8.0 percent) of the pupil-respondents weighed 55 kilograms. This was followed by 61 (6.1 percent) who weighed 47 kilograms, 60 (6.0 percent) who weighed 34 kilograms, 56 (5.6 percent) who weighed 44 kilograms, 54 (5.4 percent) who weighed 60 kilos, 49 (4.9 percent) who weighed

54 kilograms, 47 (4.7 percent) who weighed 65 kilograms, 44 (4.4 percent) who weighed 58 kilograms, and 42 (4,2 percent) who weighed 48 kilograms. The heaviest pupil-respondents weighed 84 kilograms whereas the lightest pupil-respondents weighed 26 kilograms. The mean weight of the pupil-respondents was posted at 49.45 kilograms with a standard deviation of 12.35, which meant further that they were healthy as shown by their weight.

5. Majority of the attitude statements were rated "strongly agree" by the pupil-respondents. Among these statements, "knowing how I fare in all the subject areas give me a sense of confidence" got the highest weighted mean posted at 4.86. This was followed by "going to school is rewarding" with 4.84 and "I enjoy learning all the subject areas – English, Filipino, Mathematics, Science and Sibika at Kultura" with 4.79. Other statements were rated as follows: "I love going to school to learn all the subjects even if we are many in the class" and "I want to go to school everyday" – 4.67, "Being in multi-grade classes helps me learn lessons in their simplified form because the teacher makes it understandable for us" – 4.65, and "I am fulfilled when I am attending classes because I am able to help others in their assignments and projects" – 4.56. The other two statements rated as "strongly agree" were: "I can get good grades in the entire subject even if I am enrolled in multi-grade class" – with 4.53 and "Going to school allows me to learn ideas which are relevant to my life" with 4.51. Only one statement was rated "agree" by the pupil-respondents, as follows: "I would like to continue to go to school even after I graduate from college" –

with 4.25 weighted mean, interpreted as "agree." The grand mean obtained was posted at 4.63, interpreted as "strongly agree" which further indicated a very favorable attitude towards schooling among the pupil-respondents.

6. Majority of the study habits were rated as "always", indicating that they always practiced these habits when studying. Among the study habits which were always practiced, the statement "I ask questions from my teachers for clarification" obtained the highest weighted mean posted at 4.71, followed by "I read my textbook before I come to class" with 4.65 and "I study in a place with study table and chair" with 4.63. Other statements which were rated "always" were as follows: "I begin with the easy questions first" – 4.62, "I study every day" - 4.60, "I have a specific time to study my lessons" and "I review for the test" – 4.59, "I take notes in class" – 4.57, "I memorize and scan concepts in all the subject areas" – 4.56, "I study where there is less noise" – 4.52, and "I have a specific place to study" – 4.51. The remaining four statements were rated as "often" by the pupil-respondents, indicating that they often practiced these habits when studying. Among these four statements, the statement "I review my notes before answering assignments in all the subjects" obtained the highest weighted mean posted at 4.50, followed by "I choose a well-equipped study room" with a weighted mean of 4.42, "I make notes as formulae" with a weighted mean of 4.39, and "I study in a room with electric fan" with a weighted mean of 4.34. On the whole, the pupil-respondents rated their study habits with

a weighted mean of 4.79 interpreted as "always" which implied that they frequently practiced all the abovementioned habits when studying.

7. Majority (27 or 93.10 percent) of the teacher-respondents were females, with only two (6.89 percent) who were males. Of the 27 female teacher-respondents, five (18.52 percent) of them were aged 39 years old. The other female teacher-respondents were distributed as to age as follows: two female teacher-respondents each who were aged 60 years old, 59 years old, 40 years old, 36 years old, and 30 years old, and one female teacher-respondent each who were aged 57 years old, 56 years old, 55 years old, 52 years old, 46 years old, 38 years old, 33 years old, 32 years old, 31 years old, 28 years old, 27 years old and 24 years old. The oldest female teacher-respondents were aged 60 years old whereas the youngest teacher-respondent was aged 24 years old. Of the two male teacher-respondent, one (50 percent) was aged 42 years old whereas the other one (50 percent) was aged 41 years old. As such, the oldest male teacher-respondent was aged 42 years old while the youngest male teacher-respondent was aged 41 years old. Meantime, the mean age for both female and male teacher-respondents was posted at 42 years old, with a standard deviation of 2.40, indicating that they are in their middle adult life.

7. Majority (25 or 86.21 percent) of the teacher-respondents were married whereas only four (13.79 percent) teacher-respondents were single.

8. Most (10 or 34.48 percent) of the teacher-respondents earned PhP10,933.00, followed by six (20.69 percent) who earned PhP11,486.00. The

remaining teacher-respondents were distributed as follows: two (6.89 percent) each earned PhP12,544.00, PhP12,371.00, and PhP11,207.00, and one (3.45 percent) each earned PhP13,774.00, PhP13,440.00, PhP13,112.00, PhP12,997.00, PhP12,284.00, PhP11,774.00, and PhP11,589.00. The mean income posted at PhP12,135.79 which is slightly above the poverty income threshold given by the National Statistics Office in 2004 which was estimated at PhP11,962.00 for a family of five members (two parents and three children).

10. Majority (20 or 68.97 percent) of the teacher-respondents held MA/MS/MAEd. units, followed by four (13.79 percent) who held certificates of completion of academic requirements, two (6.89 percent) each who had MA/MS/MAEd. degree and graduates of bachelor's degree, and one (3.45 percent) who had units in Ph.D./Ed.D./D.A. This implied that the teacher-respondents aimed to further their knowledge on their subject matter.

11. Eighteen (62.07 percent) of the teacher-respondents taught two-grade levels whereas 11 (37.93 percent) taught three-grade levels.

12. Six (20.69 percent) teacher-respondent had served for a period of five years, followed by three (10.34 percent) teacher-respondents who served for 12 years, nine years, two years and one year, and one (3.45 percent) who served for 38 years, 35 years, 33 years, 26 years, eight years and seven years. One teacher-respondent had served for 38 years which is considered to be the longest number of teaching years, whereas three (10.34 percent) teacher-respondent taught for only a year considered to be the shortest number of teaching

experience. The mean of the teacher-respondents' teaching experience was posted at 13.41 years, indicating that they are relatively young in the teaching profession.

13. Six (20.69 percent) teacher-respondents recited for 1090 minutes and 720 minutes, followed by five (17.24 percent) who recited for 740 minutes, four (13.79 percent) who recited for 750 minutes, three (10.34 percent) who recited for 1110 minutes, 1100 minutes, and 760 minutes.

14. Majority (25 or 86.21 percent) of the teacher-respondents attended district level relevant trainings/seminars, followed by two (6.89 percent) who attended division level relevant trainings/seminars, and one (3.45 percent) each who attended regional as well as national level relevant trainings/seminars.

15. As to the pretest result, the two grade level group had the highest frequency in terms of mean scores for mean score of 14 with a frequency of 76 followed by mean score of 21 with a frequency of 73. The lowest mean score was nine and the highest was 37. The mean scores obtained by the two grade level respondents was pegged at 18.10 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly lower implying that the respondents in the two-grade level did not perform better in the pretest of the district achievement test.

Looking closely it appears that the respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for grade level one and two are 30,

for grade three and four is 40 and 5 and 6 with 50 items each for every learning area. For each learning area it appears that the frequencies of the scores obtained by the respondents in the two –grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right is noticed.

As to the pretest result, of the three grade level group, the highest frequency in terms of mean scores 14 with a frequency of 47 followed by mean score of 15 with a frequency of 34. The lowest mean score was nine and the highest was 31. The mean scores obtained by the three grade level respondents was pegged at 18.57 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly higher implying that the respondents in the three-grade level did perform better in the pretest of the district achievement test.

It is expected that scores of the majority of the pupils in three-grade classes will cluster from nine the (lowest score) to 31 (the highest score). For each learning area it appears that the frequencies of the scores obtained by the respondents in the three–grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right in some cases. Looking closely it appears that the three-grade level respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for grades level one and two are 30, for grades three and four is 40 and five and six with 50 items

each for every learning area. For each learning area it appears that the frequencies of the scores obtained by the respondents in the two-grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right is noticed.

The two grade level group had the highest frequency in terms of mean scores for mean score of 14 with a frequency of 76 followed by mean score of 21 with a frequency of 73. The lowest mean score was 9 and the highest was 37. The mean scores obtained by the two grade level respondents was pegged at 18.10 which shows that in relation to the over-all average (grand mean) in the pretest which is 18.45 shows that this result is slightly lower implying that the respondents in the two-grade level did not perform better in the pretest of the district achievement test. Looking closely it appears that the respondents' average grade obtained as their pretest performance in the DAT have two high points at score of 14 and 21 this must be because the number of items for grades level one and two are 30, for grades three and four is 40 and five and six with 50 items each for every learning area. For each learning area it appears that the frequencies of the scores obtained by the respondents in the two -grade level classes distributes into three clusters of bell shape curved with as can be noticed skewness either to the left or right in some cases.

16. Using the District Achievement Test as posttest, the following were obtained: For English – the lowest score obtained in English by the total 994 respondents from multigrade classes, the highest score obtained was 37 by two

respondents while the lowest score is nine obtained by 16 respondents. The score with the highest frequency of 71 respondents is 14. This is followed by a score of 21 with a frequency of 57 and a score of 20 with a frequency of 54. The scores with lowest frequencies are 34, 35, and 36 with a score of one. The mean score for English is 18.19 which indicates that majority of the respondents have scores that clusters from 11 to 25. The SD obtained is 5.16 which show that there is a slight dispersion of their scores from the mean score.

In Filipino the highest score obtained was 37 by three respondents while the lowest score is nine obtained by three respondents. The score with the highest frequency of 109 respondents is 14. This is followed by a score of 15 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and nine with frequency of three each. The table shows that the mean score for Filipino is 19.49 which indicates that majority of the respondents have scores that clusters from 14 to 27. The SD obtained is 5.12 which show that there is a slight dispersion of their scores from the mean score.

In Math the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 13 respondents. The score with the highest frequency of 114 respondents is 14. This is followed by a score of 15 with a frequency of 87 and a score of 21 with a frequency of 79. The scores with lowest frequencies are 34, 35, 36 and 37 with a frequency of two. The table shows that the mean score for Math is 18.15 which show that majority of the respondents

have scores from 11 to 25. The SD obtained is 5.23 which show that there is a slight dispersion of their scores from the mean score.

In Science the highest score obtained was 37 by one of the respondents while the lowest score is nine obtained by 14 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and 9 with frequency of three each. The table shows that the mean score for Filipino is 17.93 which indicates that majority of the respondents have scores that clusters from 11 to 24. The SD obtained is 4.92 which show that there is a slight dispersion of their scores from the mean score.

In HEKASI the highest score obtained was 37 by three of the respondents while the lowest score is nine obtained by 12 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 96. The scores with lowest frequencies are 34, 35 and 36 with a frequency of two, followed by 33, and 37 with frequency of three each. The table shows that the mean score for HEKASI is 18.51 which indicates that majority of the respondents have scores that clusters from 11 to 26. The SD obtained is 5.18 which show that there is a slight dispersion of their scores from the mean score.

To summarize in the five learning areas, the lowest mean was obtained by Science-17.93 and the highest mean was in Filipino. The respondents scored

higher in Filipino, and HEKASI. The respondents got lower mean scores in Science and Mathematics. These results were expected since based on observation, pupils perform better in Filipino and Filipino-taught subjects, like HEKASI. This is because Filipino is our national language and therefore, spoken in more speech communities and in media. In addition, it is easier to learn by Samareños, particularly because of the similarity in the sound system of Tagalog and Waray languages.

Considering their average scores in the five learning areas (mean of their pretest), the table reveals that in HEKASI the highest average score obtained was 37 by one respondent while the lowest score is nine obtained by two respondents. The average score with the highest frequency of 123 respondents is 14. This is followed by a score of 21 with a frequency of 101 and a score of 15 with a frequency of 86. The average scores obtained with lowest frequencies are 34, 36 and 37 with a frequency of one respondent, followed by 32, 33, and 35 with frequency of 2 each. The mean score for their average scores in the pretest is 18.45 which shows that majority of the respondents have scores that clusters from 11 to 25 which is nearer the mean age. The SD obtained is 4.89 which show that there is a slight dispersion of their scores from the mean score.

Using the District Achievement Test as posttest, the following were obtained: For English, the lowest score obtained in English by the total 994 respondents from multigrade classes, the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 16 respondents. The

score with the highest frequency of 71 respondents is 14. This is followed by a score of 21 with a frequency of 57 and a score of 20 with a frequency of 54. The scores with lowest frequencies are 34, 35, and 36 with a score of one. The mean score for English is 18.19 which indicates that majority of the respondents have scores that clusters from 11 to 25. The SD obtained is 5.16 which show that there is a slight dispersion of their scores from the mean score.

In Filipino the highest score obtained was 37 by three respondents while the lowest score is nine obtained by three respondents. The score with the highest frequency of 109 respondents is 14. This is followed by a score of 15 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and 9 with frequency of 3 each. The table shows that the mean score for Filipino is 19.49 which indicates that majority of the respondents have scores that clusters from 14 to 27. The SD obtained is 5.12 which show that there is a slight dispersion of their scores from the mean score.

In Math the highest score obtained was 37 by two respondents while the lowest score is nine obtained by 13 respondents. The score with the highest frequency of 114 respondents is 14. This is followed by a score of 15 with a frequency of 87 and a score of 21 with a frequency of 79. The scores with lowest frequencies are 34, 35, 36 and 37 with a frequency of two. The table shows that the mean score for Math is 18.15 which show that majority of the respondents

have scores from 11 to 25. The SD obtained is 5.23 which shows that there is a slight dispersion of their scores from the mean score.

In Science the highest score obtained was 37 by one of the respondents while the lowest score is nine obtained by 14 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 80. The scores with lowest frequencies are 34, 35, and 36 with a frequency of two, followed by 33, 37, and nine with frequency of three each. The table shows that the mean score for Filipino is 17.93 which indicates that majority of the respondents have scores that clusters from 11 to 24. The SD obtained is 4.92 which show that there is a slight dispersion of their scores from the mean score.

In HEKASI the highest score obtained was 37 by three of the respondents while the lowest score is nine obtained by 12 respondents. The score with the highest frequency of 115 respondents is 14. This is followed by a score of 21 with a frequency of 91 and a score of 21 with a frequency of 96. The scores with lowest frequencies are 34, 35 and 36 with a frequency of two, followed by 33, and 37 with frequency of 3 each. The table shows that the mean score for HEKASI is 18.51 which indicates that majority of the respondents have scores that clusters from 11 to 26. The SD obtained is 5.18 which show that there is a slight dispersion of their scores from the mean score.

To summarize in the five learning areas, the lowest mean was obtained in Science-17.93 and the highest mean was in Filipino-19.51. The respondents

scored higher in Filipino, and HEKASI. The respondents got lower mean scores in Science and Mathematics. This result were expected since based on observation, pupils perform better in Filipino and Filipino-taught subjects, like HEKASI. This is because Filipino is our national language and therefore, spoken in more speech communities and in media. In addition, it is easier to learn by Samareños, particularly because of the similarity in the sound system of Tagalog and Waray languages.

Considering their average scores in the five learning areas (mean of their pretest), the table reveals that In HEKASI the highest average score obtained was 37 by one respondent while the lowest score is nine obtained by two respondents. The average score with the highest frequency of 123 respondents is 14. This is followed by a score of 21 with a frequency of 101 and a score of 15 with a frequency of 86. The average scores obtained with lowest frequencies are 34, 36 and 37 with a frequency of one respondent, followed by 32, 33, and 35 with frequency of two each. The mean score for their average scores in the pretest is 18.45 which shows that majority of the respondents have scores that clusters from 11 to 25 which is nearer the mean age. The SD obtained is 4.89 which show that there is a slight dispersion of their scores from the mean score.

17. For the difference between the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination comprising 651 pupils and three-grade combination comprising 343 pupils and with respect to the pretest scores, the two-grade combination has a

higher mean score compared to the three-grade combination in their pretest score. The mean of the two-grade combination in their pretest is 95.45 interpreted as average performance while the three-grade combination is 86.21, which is interpreted as average performance in the DAT. The mean difference in the pretest is 9.25 in favor of the two-grade combination. To test if this mean difference is significant, the computed t-value of 5.77 was obtained. This computed t-value was observed to be greater than the critical t-value, which is 1.96 at 0.05 level of significance, two tail and df = 992. Thus, the hypothesis of no significant difference in the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is rejected. This means that the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is significantly different or that it differs with the two-grade combination performing better than the three-grade combination both in the pretest and posttest. This implies that the teacher teaching two-grade combination can attend to her/his task better than the teachers in three-grade combination.

In their posttest score the two-grade combination has a higher mean score than the three-grade combination. As to the posttest scores of the pupil-respondents, the mean of the two-grade combination is 149.43 interpreted as very high performance while the three-grade combination is 125.04 interpreted as high performance in the DAT. The mean difference is 24.38 in the posttest in

favor of the two-grade combination. To test if this mean difference is significant, the computed t-value of 8.74 was obtained. This computed t-value was observed to be greater than the critical t-value, which is 1.96 at 0.05 level of significance, two tail and df = 992. Thus, the hypothesis of no significant difference in the performance levels of pupil-respondents in multi-grade classes with respect to class type two-grade combination and three-grade combination is rejected. The mean difference is significant. This meant that the performance levels of the pupil-respondents in the two-grades combinations differ from the three-grades combination in the posttest of the DAT. It can be inferred from the pretest and posttest mean scores that the pupil-respondents have gains in performance from the pretest to the posttest in the DAT.

For comparing level of performance in the DAT (as pretest) with respect to grade level of the respondents, Grade 1 to Grade 6 respondents have "average performance" in term of descriptive rating in the DAT pretest this indicated that the pupil-respondents from Grade 1 to Grade 6 have average performance in the DAT. So considering that the number of items were different for Grades 1 & 2 30 items, Grades 3 & 4, 40 items and Grades 5 & 6, 50 items the mean obtained for the grade level will differ as to their mean scores but do not differ in terms of the descriptive ratings of the mean scores. The mean of the pretest scores of grade 1 is 75 while the Grade 2 has a mean of 74. The Grade 3 has a mean of 113 and the Grade 4 has a mean of 103, the Grade 5 has a pretest mean of 117 while the Grade 6 has a mean of 115.

The result of the One-way ANOVA the computed F-value was 290.75, which was observed to be greater than the critical F-value of 2.22. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (pretest) of the pupil-respondents and their grade level. This means that the level of performance in the DAT (pretest) of the pupil-respondents differ significantly with respect to their year level. This can be explained that the number of respondents in the grade level differs. For Grade 1, it is 238 for Grade 2 it is 269 while the mean obtained as observed in the summary table differ only by one point, 75 and 74 but looking at the variance in the summary table Grade 2 has a variance of 134.52 while Grade 1 has a variance of 208.28. This mean difference between Grade 1 and Grade 2 having the same number of items is significantly different also considering that there were 269 Grade 2 as compared to 238 Grade 1.

For Grade 3 the mean obtained is 113 while the mean for grade 4 is 103. So there is a big difference in mean obtained by these two grade levels. The variance is 201.43 for Grade 3 while the variance is 269.55 for Grade 4. Considering that there were 165 Grades 3 and there were 152 Grades 4 the distribution of the DAT pretest scores is more disperse in Grade 4 than in Grade 3. For Grade 5 and Grade 6, the Grade 5 pupil-respondents have higher mean scores 117 compared to Grade 6 which is 115. Their variance also differs with the Grade 5 more disperse (variance = 572.96) compared to the Grade 6 (variance =

386.56). Also, there were more Grade 6 pupil-respondents (87) compared with Grade 5 with 83 respondents.

The computation of the One-way ANOVA revealed a computed F-value was 290.75, with a critical F-value of 2.22. The hypothesis that "There are no significant differences in the performance in the DAT of the pupil-respondents when grouped according to their grade level" was rejected since the computed F-value was greater than the critical F-value. This means further that the pupil-respondents differ significantly in their performance in the DAT pretest with respect to their grade level. This just indicated that the pupil-respondents although have the same descriptive rating (average performance) since, they fall in a range that their pretest mean scores is in the range for average performance the mean obtained is significantly different. Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT pretest of the pupil-respondents and their grade level.

With respect to the performance in the DAT pretest of the pupil-respondents and their grade levels, 15 group pairs were compared. Pair 1 – Grade 1 and Grade 2 DAT performance in the pretest, the table showed a no significant difference in performance in the DAT pretest of the pupil-respondents since the computed F-value of 0.16, which was observed to be less than the critical F-value of 2.11.

Pair 2 – Grade 1 and Grade 3 performance in the DAT pretest, the table showed a significant difference since the computed F-value of 604.84 was greater than the critical F-value of 2.11. Pair 3 – Grade 1 and Grade 4 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 302.00 was greater than the critical F-value of 2.11. Pair 4 – Grade 1 and Grade 5 pupil-respondents performance in the DAT pretest revealed a significant difference since the computed F-value of 468.27 was greater than the critical F-value of 2.11. Pair 5 – Grade 1 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 431.86 was observed to be greater than the critical F-value of 2.11.

Pair 6 – Grade 2 and Grade 3 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 653.32 was greater than the critical F-value of 2.11. Pair 7 – Grade 2 and Grade 4 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 328.98 was greater than the critical F-value of 2.11. Pair 8 – Grade 2 and Grade 5 pupil-respondents performance in the DAT pretest revealed a significant difference since the computed F-value of 495.37 was greater than the critical F-value of 2.11. Pair 9 – Grade 2 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 458.05 was observed to be greater than the critical F-value of 2.11.

Pair 10 – Grade 3 and Grade 4 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 37.34 was greater than the critical F-value of 2.11. Pair 11 – Grade 3 and Grade 5 pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 3.94 was greater than the critical F-value of 2.11. Pair 12 – Grade 3 and Grade 6 pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 0.72 was lesser than the critical F-value of 2.11.

Pair 13 – Grade 4 and Grade 5 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 48.87 was observed to be greater than the critical F-value of 2.11. Pair 14 – Grade 4 and Grade 6 pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 35.34 was greater than the critical F-value of 2.11. Pair 15 – Grade 5 and Grade 6 pupil-respondents performance in the DAT pretest showed a no significant difference because the computed F-value of 0.70 was lesser than the critical F-value of 2.11.

18. For comparing level of performance in the DAT (as posttest) with respect to grade level of the respondents, Grade 1 and Grade 2 have "high performance" in term of descriptive rating in the DAT posttest, Grade 3 have average performance, Grade 4 have high performance and Grade 5 and Grade 6 have very high performance. This indicated that the pupil-respondents from Grade 1 to Grade 6 have increase in performance in the DAT posttest from the

pretest. The posttest mean scores of the Grade 1 respondents is 102, Grade 2 has a posttest mean score of 110. The Grade 3 has a posttest mean of 149 and the Grade 4 has a posttest mean of 156, the Grade 5 has a posttest mean of 219 while the Grade 6 has a mean of 228. Even if the Grade 3 has a posttest mean score interpreted as average performance its value is very much higher compared to its pretest value.

The variance obtained in the posttest is lower compared to the variance in the pretest showing that the results of the posttest indicated that the performance of the pupil-respondents do not vary much in the posttest or its dispersion from the mean score is not as wide as in the pretest except for the Grade 3 which has a variance value of 96.41 indicating a wide variation from the mean score. The result of the One-way ANOVA the computed F-value was 9242.99, which was observed to be greater than the critical F-value of 2.22. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (posttest) of the pupil-respondents and their grade level. This means that the level of performance in the DAT (posttest) of the pupil-respondents differ significantly with respect to their year level. The mean values obtained differ by year level with Grade 1 obtaining the lowest mean and Grade 6 the highest mean value.

The computation of the One-way ANOVA revealed a computed F-value was 9242.99, with a critical F-value of 2.22. The hypothesis that "There are no significant differences in the performance in the DAT (posttest) of the pupil-

respondents when grouped according to their grade level" was rejected since the computed F-value was greater than the critical F-value. This means further that the pupil-respondents differ significantly in their performance in the DAT posttest with respect to their grade level. This just indicated that the pupil-respondents have differ in their performance in the posttest as indicated by their descriptive rating of average performance, high performance, very high performance. The mean scores obtained is significantly different. Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT posttest of the pupil-respondents and their grade level.

With respect to the performance in the DAT posttest of the pupil-respondents and their grade levels, 15 group pairs were compared. Of the 15 groups pair compared the table shows that they were all significantly different as revealed by the computed F-value.

Pair 1 – Grade 1 and Grade 2 DAT performance in the posttest, the table showed a significant difference in performance in the DAT posttest of the pupil-respondents since the computed F-value of 216.82, which was observed to be greater than the critical F-value of 2.11. Pair 2 – Grade 1 and Grade 3 pupils' performance in the DAT posttest, the table showed a significant difference since the computed F-value of 5522.44 was greater than the critical F-value of 2.11. Pair 3 – Grade 1 and Grade 4 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 6826.67 was

greater than the critical F-value of 2.11. Pair 4 – Grade 1 and Grade 5 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 21358.96 was greater than the critical F-value of 2.11. Pair 5 – Grade 1 and Grade 6 pupil-respondents performance in the DAT pretest was also found to be significantly different since the computed F-value of 25581.83 was observed to be greater than the critical F-value of 2.11.

Pair 6 – Grade 2 and Grade 3 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 3953.81 was greater than the critical F-value of 2.11. Pair 7 – Grade 2 and Grade 4 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 5130.92 was greater than the critical F-value of 2.11. Pair 8 – Grade 2 and Grade 5 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 19026.98 was greater than the critical F-value of 2.11. Pair 9 – Grade 2 and Grade 6 pupil-respondents performance in the DAT posttest was also found to be significantly different since the computed F-value of 23056.74 was observed to be greater than the critical F-value of 2.11.

Pair 10 – Grade 3 and Grade 4 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 87.34 was greater than the critical F-value of 2.11. Pair 11 – Grade 3 and Grade 5 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 6806.28 was greater than the critical

F-value of 2.11. Pair 12 – Grade 3 and Grade 6 pupil-respondents performance in the DAT posttest revealed a significant difference since the computed F-value of 8915.05 was greater than the critical F-value of 2.11.

Pair 13 – Grade 4 and Grade 5 pupil-respondents performance in the DAT posttest was also found to be significantly different since the computed F-value of 5423.73 was observed to be greater than the critical F-value of 2.11. Pair 14 – Grade 4 and Grade 6 pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 7265.93 was greater than the critical F-value of 2.11.

Pair 15 – Grade 5 and Grade 6 pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 84.22 was greater than the critical F-value of 2.11.

19. For comparing level of performance in the DAT (as pretest) with respect to learning areas, the pupil-respondents have "average performance" in the DAT pretest in the following learning areas – English, Filipino, Math, Science and HEKASI.

The following DAT pretest mean scores in the five learning areas were obtained: English -18.19, Filipino-19.48, Math-18.15, Science-17.93 and HEKASI-18.51. It is clear in the table that the highest score in DAT pretest in the learning areas is in Filipino (19.48) and the lowest was obtained in Science (17.93). The table revealed further that since the number of items in the learning areas is 30 for Grade 1 and 2, 40 for Grade 3 & 4, and 50 for Grade 5 & 6 that the pupil –

respondents were not able to obtained 50 percent of the total number of items during the pretest. Although the mean score of the pretest falls under the descriptive rating of average performance (17-24) the mean obtained for all the learning areas were nearer the lower end of the ranged of scores in the average performance scale indicating that the pupil-respondents have almost not reached the average performance.

The result of the One-way ANOVA for comparing means obtained by learning areas in the pretest, the computed F-value was 14.06, which was observed to be greater than the critical F-value of 2.37. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (pretest) of the pupil-respondents in the learning areas. This means that the level of performance in the DAT (pretest) of the pupil-respondents differ significantly with respect to the learning areas. The difference in the mean scores obtained by learning areas is significant. Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT pretest of the pupil-respondents in the learning areas.

With respect to the performance in the DAT pretest of the pupil-respondents in the learning areas, 10 group pairs were compared. Pair 1 – English and Filipino DAT performance in the pretest, the table showed a significant difference in performance in the DAT pretest of the pupil-respondents since the computed F-value of 31.49, which was observed to be greater than the

critical F-value of 2.18. Pair 2 – English and Math performance in the DAT pretest, the table showed a no significant difference since the computed F-value of 0.03 was less than the critical F-value of 2.18. Pair 3 – English and Science pupil-respondents performance in the DAT pretest showed a no significant difference because the computed F-value of 1.28 was less than the critical F-value of 2.18. Pair 4 – English and HEKASI pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 1.94 was lesser than the critical F-value of 2.18.

Pair 5 – Filipino and Math pupil-respondents performance in the DAT pretest was found to be significantly different since the computed F-value of 33.48 was observed to be greater than the critical F-value of 2.18. Pair 6 – Filipino and Science pupil-respondents performance in the DAT pretest was found to be significantly different given that the computed F-value of 45.47 was greater than the critical F-value of 2.18. Pair 7 – Filipino and HEKASI pupil-respondents performance in the DAT pretest showed a significant difference because the computed F-value of 17.81 was greater than the critical F-value of 2.18.

Pair 8 – Math and Science pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 0.92 was less than the critical F-value of 2.18. Pair 9 – Math and HEKASI pupil-respondents performance in the DAT pretest was also found to be significantly

different since the computed F-value of 2.45 was observed to be greater than the critical F-value of 2.18.

Pair 10 – Science and HEKASI pupil-respondents performance in the DAT pretest was found to be not significantly different given that the computed F-value of 1.69 was less than the critical F-value of 2.18.

For comparing level of performance in the DAT (as posttest) with respect to the five learning areas, the pupil-respondents have "high performance" in the DAT posttest in the following learning areas – English, Filipino, Math, Science and HEKASI. The following DAT posttest mean scores in the five learning areas were obtained: English -28.40, Filipino-29.44, Math-27.66, Science-27.53 and HEKASI-27.98. It is clear in the table that the highest score in DAT posttest in the learning areas is in Filipino (29.44) and the lowest was obtained in Science (27.53).

Since the number of items in the learning areas is 30 for grade 1 and 2, 40 for grade 3 & 4, and 50 for Grade 5 & 6 that the majority of Grade 1 & 2 pupil – respondents have high scores in the posttest to obtained a very high mean scores of 27, 28 and 29 in the five learning areas during the posttest. The mean score of 27 or higher in the posttest which falls under the descriptive rating of high performance (25-32) for all the learning areas implies that majority of the Grade 1 & 2 pupil-respondents have high scores in the posttest to pull the average up since, there were 238 + 269 or a total of 507 which constituted more than one – half of the total 994 respondents. This would also implies that the 83 grade 5

and the 87 grade 6 pupil -respondents have obtained high scores such as 40 and more than 40 to pull the posttest average up since their total number of items in the learning areas is 50 each.

The result of the One-way ANOVA for comparing means obtained by learning areas in the posttest, the computed F-value was 7.46, which was observed to be greater than the critical F-value of 2.37. This led to the rejection of the hypothesis that there is no significant difference in the level of performance in the DAT (posttest) of the pupil-respondents in the learning areas. This means that the level of performance in the DAT (posttest) of the pupil-respondents differ significantly with respect to the learning areas. The difference in the mean scores obtained by learning areas is significant. Since the abovementioned hypothesis was rejected, Scheffe's test was computed to determine the significance of the differences in the DAT posttest of the pupil-respondents in the learning areas.

With respect to the performance in the DAT posttest of the pupil-respondents in the learning areas, 10 group pairs were compared. Pair 1 – English and Filipino DAT performance in the posttest, the table showed a significant difference in performance in the DAT posttest of the pupil-respondents since the computed F-value of 6.82, which was observed to be greater than the critical F-value of 2.18. Pair 2 – English and Math performance in the DAT posttest, the table showed a significant difference since the computed F-value of 3.45 was greater than the critical F-value of 2.18. Pair 3 – English and

Science pupil-respondents performance in the DAT posttest showed significant difference because the computed F-value of 4.77 was greater than the critical F-value of 2.18. Pair 4 – English and HEKASI pupil-respondents performance in the DAT pretest revealed a no significant difference since the computed F-value of 1.11 was lesser than the critical F-value of 2.18.

Pair 5 – Filipino and Math pupil-respondents performance in the DAT posttest was found to be significantly different since the computed F-value of 19.97 was observed to be greater than the critical F-value of 2.18. Pair 6 – Filipino and Science pupil-respondents performance in the DAT posttest was found to be significantly different given that the computed F-value of 23.00 was greater than the critical F-value of 2.18. Pair 7 – Filipino and HEKASI pupil-respondents performance in the DAT posttest showed a significant difference because the computed F-value of 13.44 was greater than the critical F-value of 2.18.

Pair 8 – Math and Science pupil-respondents performance in the DAT posttest revealed a no significant difference since the computed F-value of 0.11 was less than the critical F-value of 2.18. Pair 9 – Math and HEKASI pupil-respondents performance in the DAT posttest was also found to be not significantly different since the computed F-value of 0.65 was observed to be less than the critical F-value of 2.18.

Pair 10 – Science and HEKASI pupil-respondents performance in the DAT posttest was found to be not significantly different given that the computed F-value of 0.34 was less than the critical F-value of 2.18.

20. As to age, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' age, the computed r-value was .775, with a Fisher's t-value of 38.62, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT in the five learning areas and the pupil-respondents' age".

This meant that the performance in the DAT (over-all) in the five learning areas is significantly related to age of the pupils. This implies that older and more mature pupils have better performance in the DAT (over-all) in the five learning areas that the much younger one.

As to sex, a correlation coefficient of -.014, with a Fisher's t-value of -0.44 was obtained between the pupil-respondents' performance in the DAT (over-all) in the five learning areas and the pupil-respondents' sex. The negative correlation indicate that since the female is coded as 1 and the male 2, that the male pupils have low performance in the DAT (over-all) in the five learning areas compared to the females. The obtained Fisher's t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their sex. This meant that the male and female pupils obtained the

same performance in the DAT in the five learning areas. This must be because the multi-grade class is a combination of both sexes, so since they were under the same teachers so their performance in the DAT in the five learning areas will not differ.

As to grade level, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' grade level, the computed r-value was .923, with a Fisher's t-value of 75.55, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT (over-all) in the five learning areas and the pupil-respondents' grade level." This meant that the relationship is significant, that the higher the grade level the better is the performance in the DAT (over-all) in the five learning areas.

As to height, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' height, the computed r-value was .738, with a Fisher's t-value of 34.45, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT (over-all) in the five learning areas and the pupil-respondents' height." This meant that taller pupils have better performance in the DAT (over-all) in the five learning areas than those who are low in height (shorter).

As to weight, the correlation between the performance in the DAT (over-all performance in the five learning areas) and pupils' weight, the computed r-

value was 0.771, with a Fisher's t-value of 38.13, which was observed to be greater than the critical t-value of 1.96. This result led to the rejection of the hypothesis that "there is no significant relationship between the performance in the DAT in the five learning areas and the pupil-respondents' weight." This meant that pupils weight is significantly related to his/her performance in the DAT (over-all) in the five learning areas. Pupils' who are normal weight or who exceed the normal weight for their age and height have better performance than the underweight. Underweight is usually associated with malnourish and undernourished which implies that performance in the DAT (over-all) in the five learning areas is influenced by the pupil's nutrition.

As to attitude towards schooling, a correlation coefficient of 0.022, with a Fisher's t-value of 0.69 was obtained between the pupil-respondents' performance in the DAT (over-all) in the five learning areas and the pupil-respondents' attitude towards schooling. The obtained Fisher's t t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their attitude towards schooling. This meant that the pupils with positive and those with negative attitude towards schooling have the same performance in the DAT in the five learning areas.

As to study habits, a correlation coefficient of -.001, with a Fisher's t-value of 0.03 was obtained between the pupil-respondents' performance in the DAT (over-all) in the five learning areas and the pupil-respondents' study habits. The

obtained Fisher's t t-value was less than the critical t-value of 1.96 indicating the acceptance of the hypothesis of no significant relationship between the performance of the pupil-respondent in the DAT and their study habits. This meant that pupils with better study habits and those with poor study habits obtained the same performance in the DAT (over-all) in the five learning areas.

Conclusions

On the bases of the findings of the study, the following conclusions were made:

1. Most of the pupil-respondents males who are relatively young, were in Grade II.

2. Most of the pupil-respondents were relatively tall and healthy as shown by their weight.

3. Majority of the pupil-respondents indicated a very favorable attitude towards schooling.

4. Majority of pupil-respondents rated their study habits as "always" practice which implied that they frequently practiced all the habits when studying.

5. Majority of the teacher-respondents was females and is in their middle adult life, and were married.

6. Most of the teacher-respondents earned income posted which is slightly above the poverty income threshold given by the National Statistics

Office in 2004 which was estimated at PhP 11,962.00 for a family of five members (two parents and three children).

7. Majority of the teacher-respondents held MA/MS/MAEd. Units.

8. The teacher-respondents taught two-grade levels and had served for 13.41 years, indicating that they are relatively young in the teaching profession.

9. The teacher-respondents recited for longer number of minutes which is expected since they are handling multigrade classes.

10. Majority of the teacher-respondents attended district level relevant trainings/seminars.

Recommendations

Based on the findings and conclusions of the study, the following are hereby recommended:

1. The Department of Education (DepEd), through the Division Office, in coordination with the different districts should encourage its teachers and school administrators to conduct action researches regarding multi-grade classes – specifically on how pupils perform in multi-grade classes.

2. The should Department of Education (DepEd), through the Division Office, in coordination with the different districts, encourage its teachers and school administrators to conduct action researches correlating the academic

performance of pupils in multi-grade classes and other variates, not just the teacher-related variates and pupil-related variates.

3. The Department of Education (DepEd), through the Division Office, in coordination with the different districts should encourage its teachers to look into other variates which may have influence on the performance levels of the pupils in multi-grade classes aside from the teacher- and pupil-related variates.

4. School activities to support and maintain the pupil-respondents' favorable attitude towards schooling should be conducted among multi-grade classes.

5. School activities to closely monitor the pupil-respondents' healthier practice of their study habits should be conducted by school administrators.

6. The performance levels of pupils and teachers in multi-grade classes should also be studied not only in terms of class type, grade levels, and learning areas but also as to participation in non-academic and academic activities within the district.

7. A sequel study should be conducted to expand the coverage of this study including a comparison of the performance levels of the pupils in multi-grade and non multi-grade classes.

8. Future researchers should conduct a similar study focusing on performance levels of pupils in multi-grade classes in academic and non-academic activities outside their schools such as District Quiz Bee and others.

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A P P E N D I C E S

APPENDIX A

Republic of the Philippines
Samar State University
Catbalogan, Samar

November 13, 2007

Dear Respondents,

Greetings!

I am presently conducting a research entitled "**THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS,**" in partial fulfillment of the requirements for the degree Master of Arts major in Elementary Education. In this regard, you are chosen to be one of the respondents of this study.

Rest assured that your answers would be treated with utmost confidentiality. Thank you very much for your cooperation.

Respectfully yours,

(SGD.) MARIA ANNABELLE D. DACA
Researcher

APPENDIX B

Republic of the Philippines
Samar State University
Catbalogan, Samar

November 13, 2007

DR. ALFREDO D. DACURO
Schools Division Superintedent
Department of Education
Division of Samar
Catbalogan, Samar

Greetings!

I am presently conducting a research entitled "THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS," in partial fulfillment of the requirements for the degree Master of Arts major in Elementary Education. In this regard, I would like to seek permission from your good office to conduct the study in Motiong District.

I hope for your kind consideration on this matter. Thank you very much.

Respectfully yours,

(SGD.) MARIA ANNABELLE D. DACA
Researcher

Noted:

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

APPROVED:

(SGD.) ALFREDO D. DACURO, Ph. D.
Schools Division Superintendent

APPENDIX C

Republic of the Philippines
Samar State University
Catbalogan, Samar

November 13, 2007

DR. FELIX D. ACONG
District Supervisor
Paranas, Samar

Greetings!

I am presently conducting a research entitled "THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS," in partial fulfillment of the requirements for the degree Master of Arts major in Elementary Education. In this regard, I would like to seek permission from your good office to conduct the study in your respected district.

I hope for your kind consideration on this matter. Thank you very much.

Respectfully yours,

(SGD.) MARIA ANNABELLE D. DACA
Researcher

Noted:

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

APPROVED:

(SGD.) FELIX D. ACONG, Ph. D.
District Supervisor

APPENDIX D

Republic of the Philippines
Samar State University
Catbalogan, Samar

December 10, 2007

Dear Respondents,

Greetings!

I am presently conducting a research entitled "**THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS,**" in partial fulfillment of the requirements for the degree Master of Arts major in Elementary Education. In this regard, you are chosen to be one of the respondents of this study.

Rest assured that your answers would be treated with utmost confidentiality. Thank you very much for your cooperation.

Respectfully yours,

(SGD.) MARIA ANNABELLE D. DACA
Researcher

APPENDIX B

Republic of the Philippines
Samar State University
Catbalogan, Samar

December 13, 2007

DR. ALFREDO D. DACURO
Schools Division Superintedent
Department of Education
Division of Samar
Catbalogan, Samar

Greetings!

I am presently conducting a research entitled "**THE ACADEMIC PERFORMANCE OF MULTI-GRADE PUPILS IN MOTIONG DISTRICT: BASIS FOR CURRICULAR REDIRECTIONS,**" in partial fulfillment of the requirements for the degree Master of Arts major in Elementary Education. In this regard, I would like to seek permission from your good office to conduct the study in Motiong District.

I hope for your kind consideration on this matter. Thank you very much.

Respectfully yours,

(SGD.) MARIA ANNABELLE D. DACA
Researcher

Noted:

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

APPROVED:

(SGD.) ALFREDO D. DACURO, Ph. D.
Schools Division Superintendent

APPENDIX E

QUESTIONNAIRE FOR THE TEACHER-RESPONDENT

Respondent Number _____

Part I. Teacher-Respondents' Profile

Name _____
(Optional)

Age _____ Sex [ ] Male [ ] Female Civil Status [ ] Single [ ] Married [ ] Separated [ ] Widowed

Average Family Income _____
Highest Educational Attainment

[ ] Bachelor's Degree
[ ] With MA/MS/MAEd. Units
[ ] With MA/MS/MAEd. CAR
[ ] With MA/MS/MAEd Degree
[ ] With Ph.D./Ed.D./D.A. Units
[ ] With Ph.D./Ed.D./D.A. CAR
[ ] With Ph.D./Ed.D./D.A. Degree

Grade(s) Level Taught _____ Teaching Experience _____
Teaching Load _____

Relevant Training/Seminars Attended

Nature/Name of Training/Seminar	No. of Days
1. National	
2. Regional	
3. Division	
4. District	

(Note: Please use an extra sheet if the blank spaces are not enough to list down all the seminars/trainings you have attended.)

Part II. Problems Encountered in the Implementation of Multi-Grade Program

DIRECTION: Listed below are possible problems that you have encountered in the implementation of multi-grade program. Please indicate the extent to which you have encountered these problems using the following scales:

5	–	Always	(A)
4	–	Often	(O)
3	–	Sometimes	(S)
2	–	Rarely	(R)
1	–	Never	(N)

Indicators	RESPONSES				
	5 (A)	4 (O)	3 (S)	2 (R)	1 (N)
1. The imposition of pupil discipline is very difficult because of crowded classroom.					
2. The preparation of instructional materials is very difficult.					
3. The preparation of lesson plan is very tasking because it is individualized according to grade level taught.					
4. The assessment of pupils' performance is very difficult because there is no uniform grading system for multi-grade classes.					
5. The use of teaching strategies is very confusing since there are more than one class in one room which requires different teaching strategies.					
6. The development of remedial lessons and/or enhancement activities to pupils is very demanding because of the varied grade levels included in one room.					
7. The management of the classroom is very taxing because of the numerous pupils inside the classroom.					
8. The teacher does not know how to teach multi-grade.					

Indicators	RESPONSES				
	5 (A)	4 (O)	3 (S)	2 (R)	1 (N)
9. The structuring of classroom is very expensive because of the various IMs for different grade levels.					
10. The conduct of test is very demanding because two- or more grade levels will be taking the test in one room.					
11. Others, please specify _____ _____ _____ _____					

Thank you very much!

APPENDIX F

QUESTIONNAIRE FOR THE PUPIL-RESPONDENTS

Respondent Number _____

Part I. Pupil-Respondents' Profile

Name (Pangalan) _____
(Optional)

Age (Gulang) _____ Sex (Kasarian) [ ] Male (Lalaki)
[ ] Female (Babae)

Grade Level (Baitang) [ ] One [ ] Four
[ ] Two [ ] Five
[ ] Three [ ] Six

Weight (in kilos) (Timbang) _____

Height (in inches) (Taas) _____

Part II. Pupil-Respondents' Attitude towards Schooling
(Saloobin ng mga Mag-aaral Hinggil sa Kanilang Pag-aaral)

DIRECTION: The following are statements that indicate your attitude towards schooling. Please indicate your perceptions by ticking the appropriate box using the given scales:

(Ang mga sumusunod na pahayag ay nagpapakita na inyong mga saloobin hinggil sa inyong pag-aaral. Pakilagay ng inyong pananaw sa pamamagitan ng paglagay ng ekis sa nakalaang kahon alinsunod sa mga sumusunod na iskala.)

5 – Strongly Agree (SA) *(Lubos na Sumasang-ayon)*
4 – Agree (A) *(Sumasang-ayon)*
3 – Undecided (U) *(Hindi Mawari)*
2 – Disagree (D) *(Hindi Sumasang-ayon)*
1 – Strongly Disagree (SD) *(Lubos na Di-Sumasang-ayon)*

Attitude Statements	Responses				
	SA (5)	A (4)	U (3)	D (2)	SD (1)
1. I enjoy learning all the subject areas – English, Filipino, Mathematics, Science and Sibika at Kultura. *(Ako ay natutuwang matuto ng lahat ng mga Asignatura tulad ng Inglis, Filipino, Mathematics, Science at Sibika at Kultura.)*					
2. Knowing how I fare in all the subject areas give me a sense of confidence. *(Ang kabatiran ko sa kung ano ang aking nagagawa sa lahat ng mga asignatura ay nagbibigay sa akin ng lakas ng loob.)*					
3. I love going to school to learn all the subjects even if we are many in the class. *(Ako ay nawiwiling pumunta sa paaralan para matuto ng lahat ng mga asignatura kahit na maramikami sa klase.)*					
4. I am fulfilled when I am attending classes because I am able to help others in their assignments and projects. *(Ako ay kontento kung ako ay nasa klase kasi nakakatulong ako sa iba sa pamamagitan ng pagsagot sa kanilang mga takdang aralin at proyekto.)*					
5. Being in multi-grade classes helps me learn lessons in their simplified form because the teacher makes it understandable for us. *(Ang multi-grade class ay nakakatulong sa pag-aaral ng mga leksyon sa pinakasimpleng paraan.)*					
6. Going to school is rewarding. *(Ang pagpunta sa paaralan ay nagbibigay ng gantimpala sa sarili.)*					

Attitude Statements	Responses				
	SA (5)	A (4)	U (3)	D (2)	SD (1)
7. Going to school allows me to learn ideas which are relevant to my life. *(Ang pagpunta sa paaralan ay nakatutulong para mapag-aralan ang mga idesya na may kabuluhan sa buhay.)*					
8. I would like to continue to go to school even after I graduate from college. *(Gugustuin ko ang magpatuloy sa pagpunta sa paaralan kahit na pagkatapos na ako ay magtapos sa kolehiyo.)*					
9. I can get good grades in the entire subject even if I am enrolled in multi-grade class. *(Makakukuha ako ng mataas na marka sa lahat ng mga asignatura kahit pa ako ay nasa isang multi-grade class.)*					
10. I want to go to school everyday. *(Gusto kong pumunta sa paaralan araw-araw.)*					

Part III. Pupil-Respondents' Study Habits

DIRECTIONS: Please describe your study habits using the given scales below:

(Pakilarawan ang inyong pamamaraan ng pag-aaral gamit ang mga iskala sa ibaba.)

5 – Always (A) *(Palagi)*
4 – Often (O) *(Kadalasan)*
3 – Sometimes (S) *(Paminsan-minsan)*
2 – Rarely (R) *(Madalang)*
1 – Never (N) *(Hindi)*

Study Habits	Responses				
	AP (5)	OP (4)	SP (3)	RP (2)	NP (1)
1. I study every day. *(Ako ay nag-aaral araw-araw.)*					
2. I have a specific time to study my lessons. *(Ako ay naglalaan ng eksaktong oras para mag-aral ng mga leksyon.)*					
3. I have a specific place to study. *(Ako ay nagtatalaga ng eksaktong lugar para mag-aral.)*					
4. I choose a well-equipped study room. *(Ako ay pumipili ng isang silid aralan na kompleto sa kagamitan.)*					
5. I study in a room with electric fan. *(Ako ay nag-aaral sa isang silid na may electric fan.)*					
6. I study in a place with study table and chair. *(Ako ay nag-aaral sa lugar na may mesa at upuan.)*					
7. I study where there is less noise. *(Ako ay nag-aaral kung saan walang masyadong ingay.)*					
8. I take notes in class. *(Ako ay nagsusulat ng mga napag-aaralan sa klase.)*					
9. I review my notes before answering assignments in all the subjects. *(Ako ay nagbabalik-aral ng mga napaag-aaralan sa klase bago sagutin ang mga takdang-aralin sa lahat ng asignatura.)*					
10. I memorize and scan concepts in all the subject areas. *(Ako ay nagsasaulo ng mga konseptong napag-aaralan sa lahat ng mga asignatura.)*					

Study Habits	Responses				
	AP (5)	OP (4)	SP (3)	RP (2)	NP (1)
11. I ask questions from my teachers for clarification. *(Ako ay nagtatanong sa aking mga guro para makasigurado.)*					
12. I read my textbook before I come to class. *(Ako ay nagbabasa ng libro bago pumasok sa klase.)*					
13. I review for the test. *(Ako ay nagbabalik aral para sa eksamin.)*					
14. I make notes as formulae. *(Ako ay gumagawa ng listahan ng mga napag-aaralang formulae.)*					
15. I begin with the easy questions first. *(Ako ay nag-uumpisang sagutin ang mga madadaling tanong.)*					

Thank you very much!

C U R R I C U L U M V I T A E

CURRICULUM VITAE

PERSONAL DATA

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Children	:	Ritchel Anne & Ma. Lyra Venice
Work Station	:	Inalad Elementary School Motiong District Motiong, Samar
Position	:	Elementary School Head Teacher III

EDUCATIONAL BACKGROUND

Elementary School	:	Catbalogan I Central Elementary School Catbalogan, Samar 1981 - 1987
Secondary	:	Samar State Polytechnic College Catbalogan, Samar 1987 - 1991
Tertiary	:	Sacred Heart College Catbalogan, Samar 1991 – 1996
Graduate Studies	:	Samar State University Catbalogan, Samar 2002 – 2008
Curriculum Pursued	:	Master of Arts in Elementary Education

ELIGIBILITIES

Professional Board Examination for Teachers – May 28, 1996 (71.02%)

POSITIONS HELD

Teacher I	Department of Education Motiong, Samar
Teacher in Charge	Department of Education Motiong, Samar 2006 – 2008
Head Teacher III	Department of Education Motiong, Samar 2009 - present

SEMINARS AND TRAINING ATTENDED

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