# Teacher Factors and Academic Performance of Multigrade Pupils in Baybay City Division: Inputs to an Improved Implementation of Multigrade Teaching

JOSEMILO P. RUIZ

http://orcid.org/0000-0002-9871-6263 ruizjosemilo@gmail.com Department of Education (DepEd) Regional Office VIII (Eastern Visayas)

Originality: 100% • Grammarly Score: 95% • Plagiarism: 0%

#### ABSTRACT

The study determines the relationship between the selected teacher factors and the academic performance of multigrade pupils in Baybay City Division. The selected teacher factors were the socio-demographic profile variable (age, sex, civil status, educational qualification, teaching experience, teaching position and trainings attended) and teacher empowerment dimensions (decision making, professional growth, status, self-efficacy, autonomy, and impact). The respondents of this study were the multigrade teachers, heads of the multigrade teachers, and the multigrade pupils in the division. The study used descriptive correlation employing triangulation design. Descriptive statistics, chi-square test, Pearson r correlation, analysis of variance (ANOVA) and regression were used. The teaching profession consistently attracts women to its fold, making it a woman's world. The same profession is staffed by a relatively young group of female teachers who were 40 years old and below and are expected to be in their productive and reproductive years as most of them are married. Multigrade teachers need uplifting in their educational qualification, trainings and similar initiatives to raise their rank, morale, motivation, and competence to remain in teaching. The extent of teacher empowerment dimensions with respect to decision making, professional growth, status, self-efficacy, autonomy, and impact are very highly empowered. The very poor academic showed in the five (5) learning areas is a brazen demonstration of a need to seriously evaluate multigrade instruction in the division. Among the selected teacher factors, only sex and professional growth turned out to be predictors of academic achievement in selected learning areas such as English, Makabayan, and Mathematics. On the extent of problems or difficulties encountered by multi-grade teachers in multi-grade teaching, a level of not serious has been rated by the teachers. The assessment of Multigrade Schools in the Division shall serve as a feedback mechanism on how the School Administrators can effectively manage multigrade classes and identify ways and means to improve the working condition of multigrade teaching.

*Keywords* — Teacher factors, academic performance, multigrade teaching, descriptive design, Baybay City, Philippines

#### INTRODUCTION

The relevance of the constitutional mandate, Section 2 of Article XIV, "to establish, maintain and support a complete, adequate and integrated system of education" becomes more apparent considering the need for more teachers both for the new schools to be opened and the incomplete schools to be completed. Compounding the lack of teachers is the lack of schoolrooms, instructional materials, physical facilities, and equipment. Furthermore, Section 3 of the same Article XIV calls for the various characteristics of human development so that our youth can live effectively in a progressive and democratic society (The 1987 Philippine Constitution). DECS Order No. 38, s. 1993 ordered the opening of combination or multigrade classes in 11,800 elementary schools to improve access to elementary education. The report cited that the opening of multigrade classes is a cost-effective scheme in terms of the savings derived from the opening of different grade levels in one class under one teacher compared to constructing and furnishing one classroom and one teacher for each class of one grade level.

Multigrade classes are viewed as a viable means of reaching as many children as possible, especially in the elementary grades, to make basic education accessible to many Filipino children. Thus, the efforts to improve the quality of instruction in these classrooms have begun in the form of investments in training programs, curriculum development of learning materials appropriate for children of varying ability levels and behaviors (Bensalah, 2002). The proponent of this study fully convinced that teacher factors indicated in the socio-demographic profile as age, sex, civil status, educational qualification, length of teaching experience, teaching position and relevant trainings attended and the six dimensions of teacher empowerment as decision making, professional growth, status, self-efficacy, autonomy, and impact are of crucial importance to the continued existence of the profession, has thus decided that a study be undertaken in order to find out which of the teacher factors correlate with pupils' academic performance.

Several studies have been conducted regarding multigrade teachers and teaching and their correlates to other factors in different settings. A review of 11 research studies on the impact of the split of multigrade classes' particularly elementary core French programs, was presented by Campbell (1993). Recurring themes include teachers' perceptions that multigrade classes negatively affect their ability to provide quality core French programming and the need for research to examine areas of student achievement and effective teaching strategies. Guskey and Lindle (1997) expressed their view on multiage/multigrade grouping. They said that multiage/multi-ability grouping occurs when more than one grade level of students is grouped in a classroom. They summarized research on multigrade grouping and looked into the factors that may explain improved learning and test results. The findings indicate that learning is enhanced not by how schools group students for information, but by what they do within these groups. In an article published in Research Education of Mulchahy (1992) on effective instruction and learning cognition, research evidence indicates that multigrade instruction has a significant positive impact on student attitudes and tends to enhance achievement outcomes under positive implementation conditions.

Miller (1991) emphasized that working in an open, multigrade school requires serious, ongoing teacher training and a commitment to hard work. Research studies have shown that cooperative learning students have improved in the areas of achievement, positive attitude towards the subject area, and critical thinking skills (Zisk, 1996). In order for the person to be cooperative, we need to do more than just have students work in small groups. Teachers and pupils have these five basic elements: 1) Positive interdependence, 2) Face to face promotive interaction 3) Individual accountability, 4) Social Skills, and 5) Group process. Beginning with the needs and interests of children, problem-solving develops from meaningful experiences important to the children. The

teacher-designed curriculum provides the classroom basis for these experiences (Britz, 1993). Abadzi (2006), in their study of second-grade pupils, found out that investigation of waste materials led one group of young children to explore the topic in an integrated way. Reading, writing, counting, measuring, and interview of community people, and science experiments were planned, initiated, and reported.

Solutions to many problems posed during the investigation were tried out and were successful. Through group work, individuals were able to participate and communicate as cognitive and social needs were met. In Sri Lanka, the national primary school curriculum is organized towards teaching in monograde schools. Teachers in the multigrade classroom face the difficulty of organizing the national curriculum to suit their teaching and learning needs. There is no provision in the Teacher Education Curriculum for multigrade teaching methodology. Thus, the teaching in these schools is of very low quality and student, and the student drop-out rate is very high. Multigrade schools in Vietnam are quite widely used in ethnic minority areas with the purpose of providing primary education to disadvantaged children by bringing schools closer to communities where children live. Problems associated with multigrade classes include the following: 1) There is a shortage of teachers, especially skilled teachers for multigrade teaching; 2) Teaching methods of the ethnic minority schools are very poor and unsuccessful; 3) Multigrade schools lack textbooks, guidebooks, and reference materials for teachers and pupils; and, 4) Pupils face language barriers when trained teachers from urban areas are sent to teach in ethnic minority schools.

Horsman (1997) developed a resource material: Learning Together in Multi-Level Classrooms" designed to help teachers develop a vision of how successful teaching and learning can occur in multi-level classrooms. It provides teachers with practical applications that support an environment that is learner-centered. Anecdotal reports on teachers of Hutterite colony schools, Boyer and Bandy (1996) suggested that effective teaching strategies include the following: a) thematic organization of the curriculum, b) organizing adjacent grades into sub-groups, c) covering common subjects topics with assigning similar activities, but graduating the level of difficulty for each grade, d) coaching older students to effectively assist younger students, and e) careful monitoring of individual programs and progress.

A study conducted by Collins (1993) on the integrated thematic curriculum (TIC) revealed that Multigrade teaching enhances the quality of education by examining three outcomes. These outcomes are: 1) the instruction of critical

thinking skills; 2) the motivation of students to be self-directed and assume their own responsibility in learning, and 3) the empowerment of teachers to become educational leaders. TIC was defined as a curriculum that connects subject areas through the use of broad themes. A more efficient way to provide student success is to consider the range of user abilities at the design stage of the curriculum and incorporate accommodations that point. This "built-in-access for a wide range of users, those with and without disabilities, is the underlying principle of the universal design (Orkwis, 1999).

Ryan (1995) stressed that in order to understand the implementation and the effects of different approaches to curricula, children, parents, and teachers of a single-grade classroom should be prepared for all these. Beachy Cove Elementary School in Newfoundland has been selected to serve a common basis for comparison. The effects of the curricula in the children's academic performance, aspects of their social and emotional development, and their attitudes towards school were assessed. In addition, the parents' involvement in the school and their opinions about the different learning environments were examined. Initial achievement results showed that students from urban schools scored higher than students from rural schools.

Math and Turkish (reading comprehension, grammar usage, and writing were the test subjects with studies conducted in North America and Europe to assess the effects of multigrade instruction on student achievement generally show no significant differences between students in multigrade classes and single-grade classes, which is a common apprehension among educators and parents. Students in countries like Britain, Germany, the Netherlands, Switzerland, and the United States all perform as well as their counterparts in the monograde classroom for all subject areas (Thomas, Shaw & Mundial, 1992). Studies from countries in the developing world also show positive but mixed results in terms of student achievement among those enrolled in multigrade programs. For example, students enrolled in Colombia's multigrade schools called "Escuela Nueva" attained higher achievement levels compared to students in monograde schools for Math and Spanish (Little, 1995).

Freude, Seibt, Pech, and Ullsperger (2005) performed to analyze the workability and vitality of teachers of different age groups working at comprehensive secondary schools. It was shown that already 24% of teachers of the younger age group and 49% of the elderly teachers show a poor/moderate workability, which indicates an urgent need for measures for improving workability. More than 50% of teachers suffer from psychic (exhaustion, fatigue, and memory and

concentration problems) and muscular-skeletal disorders. Lowther, Gill, Coppard (1995) presented an analysis of the determinants of job satisfaction in teachers at various age levels. The following results are presented: (1) job satisfaction increases with age, (2) job values remain constant with age, (3) job rewards increase with age, and (4) the major determinants of job satisfaction are intrinsic to teaching for younger teachers and extrinsic to teaching for older teachers. Koblinsky and Sugawara (1984) examined the impact of nonsexist curricula and teacher's sex on children's sex-role learning. Exposure to the nonsexist curriculum produced significantly greater reductions in sex stereotyping on all measures than exposure to the control curriculum.

Moreover, children in the male-directed nonsexist program displayed greater decreases in stereotypic knowledge and preference for sex-typed children's activities than those in the female-directed nonsexist program, while children in the male-directed control program showed more stereotypic increases on these measures than their counterparts in the female-directed control program. Asher and Gottman (1973) conducted two experiments to assess the effects of 5<sup>th</sup> grader teacher sex on male and female student reading performance. Results show superior reading performance by girls. There was no significant effect of the sex of teachers on male or female reading performance.

Moreau (1987) examined the relationship between district size, faculty educational qualifications, and academic achievement in Maines Eight grade students. Teacher qualifications were found to have a low positive correlation with pupil achievement and were to be significant. The findings indicate that proportion of elementary teachers possessing an advanced degree is slightly increased learning outcomes in Maine school systems. The correlation between teacher qualificant. Thus, better-qualified teachers are associated with larger school systems. Ingersoll (2007) shared that A brief narrative description of the journal article, document, or resource.across the educational systems of the world, few issues receive more attention than the problem of ensuring that elementary- and secondary-school classrooms are staffed with adequately qualified teachers.

Even in nations where students routinely score high on international exams, the issue of teacher quality is the subject of concern. It is widely believed that the quality of teachers and teaching are among the most important factors shaping the learning and growth of students, an impact that goes beyond student academic achievement. Dodds (1997) examined the effect of prior educational, professional, and teaching experiences on technical and further education

teachers' approaches to their formal studies for educational diplomas. The teachers whose previous studies had been in technical and vocational areas did not find their prior experience nearly as helpful as the teachers with university and college degrees. Achwarin (2009) determined the teacher competence level and investigate the relationship between teacher qualification, teaching experience, and school size and teacher competence of teachers at schools in the three southern border provinces of Thailand.

The findings revealed three features that: First, most of the teachers (92.88%) hold bachelor degree; very few teachers (6.23%) hold a master degree or higher degree. Most of the teachers (71.07%) had teaching experience of more than ten years. Second, the level of teacher competence of teachers at schools in the three southern border provinces of Thailand was at a high level. 'Teachership' was the highest teacher competence. Third, an analysis of the relationship between teacher qualification, teaching experience, and school size and teacher competence of teachers was conducted.

The results revealed that there was a positive, significant relationship between teacher qualification and teaching experience, teacher competence areas in language and technology for teachers, curriculum development, and educational research, and there was a positive, significant relationship between teaching experience and school size, teacher competence areas of curriculum development. Catherwood (2003) attempted to investigate the differences in need satisfaction of five levels of certified school personnel. The study examined the differences in need satisfaction of school personnel categorized by age, sex, total years of teaching experience, total years' experience in the present position, and school size. Study findings reveal that significant differences in total need satisfaction exist among groups of certified school personnel categorized by hierarchical position, age, sex, total years school experience, and years' experience in present position; and that no significant differences in total need satisfaction exist among certified school personnel categorized by school size.

Gray, Ryan, and Coulon (2004) reported on the results of a study undertaken into innovative practices in the development and uses of eLearning for teachers and trainers, and the activities, competencies, and roles used in such practices. Results revealed that in nearly half of the projects, blended learning was the strategy of choice, but that other approaches included virtual classrooms, tele-teaching, and collaborative learning. A diversity of strategies towards the management of e-Learning projects were revealed, with some organizations struggling when moving from single-authored to team delivered projects. Dunst (1991) has suggested that teacher empowerment consists of two issues: (1) enabling experiences, provided within an organization that fosters autonomy, choice, control, and responsibility, which 2) allow the individual to display existing competencies as well as learn new competencies that support and strengthen functioning.

Ysseldyke (2003) summarizes the findings from two research areas: teacher effectiveness and teacher decision making practices. Paradigms for research on teaching, characteristics of an effective teacher, generalizations about teachers' decision making, decision-making models, and the relationship of teacher self-efficacy and teacher behaviors are reviewed. Effective teacher characteristics are outlined for such areas as classroom management, instructional organization, lesson presentation, teacher beliefs, and teacher practices. Generalizations from the research on teacher decision making are discussed in six categories: the kind of information used, focus of instructional planning, use of curriculum objectives, judging the lesson implementation, use of time, and accuracy in judging student performance.

Four decision-making models are considered which focus on (1) teacher decision making, (2) supervision, (3) teacher education, and (4) instructional improvement. Audet (2005) conducted a research on teacher professional growth plans, a non-evaluative program involving administrators and teachers. The study found that teachers and administrators perceive leadership consideration for supporting the development of teacher growth plan as an important leadership factor, along with a situational factor such as school culture. The study also found that educators reported dissatisfaction with the outcomes of growth plans, or production, and with the value ascribed to both the outcomes of individual growth plans and the growth process.

Hargreaves, et al. (2007) on their Teacher Status Project, a national four-year study of public and individual teachers' perception of the status of the teachers and teaching. The findings are as follows: 1) a third of the general public surveyed considered the social status of teachers to be most like that of social workers, and of head teachers to be most like that of management consultants; 2) the media presentation of teachers has changed to a more sympathetic and positive portrayal of a profession, contradicting teachers' common misperception of a hostile press perpetuating their low status; 3) teachers and associated groups consistently perceived teaching as a less rewarded, but more controlled and regulated profession than a high status profession; 4) teachers appeared to be not overly concerned with their external status, nevertheless they gained a sense

of positive status when they felt trusted, appreciated and rewarded by parents and through collaborative work with other professionals; 5) polarization between schools classified as high achieving or poor performing became evident in terms of differential resources and facilities, and disparities in perceived evaluation by parents and other teachers; 6) most teachers welcomed the potential of recent policy initiatives such as workforce reform and extended schools to raise their status, although the actual effects of recent policy were mixed as schools differed in the extent to which these policies were established; and 7) some teachers in subgroups including minority ethnic, early years, special educational needs, pupils referral units and supply teachers, reported feeling some degree of marginalization within the profession.

Eslami and Fatahi (2008) examined the efficacy beliefs of nonnative English speaking (NNES) Iranian EFL teachers. EFL teachers' perceptions of their teaching efficacy in terms of personal capabilities to teach English as a Foreign Language (EFL) and their perceived English language proficiency level were examined. The results showed that the teachers' perceived efficacy was positively correlated with self-reported English proficiency. The findings also revealed that the more efficacious the teachers felt, the more inclined they were to use communicative-based strategies. The study has implications for the preparation of NNES teachers and the support they need to develop their language proficiency, which in turn is related to their perceived self-efficacy.

Little (1995) argued that learner autonomy depends on teacher autonomy in two senses: 1) it is unreasonable to expect teachers to foster the growth of autonomy in their learners if they themselves do not know what it is to be an autonomous learner; 2) in determining the initiatives they take in their classrooms, teachers must be able to apply to their teaching those same reflective and self-managing processes that they apply to their learning. In the study of Nelson (2005) about Exploring the Correlates of Academic Success in Pennsylvania Charter Schools, the findings on teacher professional autonomy are among the most interesting in the analysis. There was a strong and significant negative relationship between teachers' perceptions of classroom autonomy and achievement score growth. These findings are consistent with claims that classroom level autonomy can lead to loose coupling in schools. Indeed, students of teacher professional culture have argued that teacher autonomy must be coupled with common professional norms in order to offset the centripetal tendencies that come with teacher autonomy. Across these eight studies, teacher leader practices were primarily focused on providing instructional support to teachers, which took many different forms

(e.g., observing and giving feedback, demonstration lessons, leading workshops, or meeting with groups of teachers). Some of these practices situate teacher leaders in classrooms with teachers (e.g., observing), while others situate teacher leaders outside the classroom (e.g., meeting with groups of teachers); we do not know from these studies whether particular practices or sets of practices with teachers had a greater impact. Aside from providing instructional support to teachers, teacher leaders engaged in other practices that did not directly address teachers' classroom practices but were suggested as impacting the school or classroom culture in which teachers work. These included promoting communication among teachers and with administrators, acting at the school level in terms of planning new programs or addressing the school improvement plan, or organizing and conveying materials to teachers (Gillis, 1991).

The findings of a relationship between teacher leaders' practice and teachers' practice, as represented in this set of studies, seem to apply across grade spans (three studies focused at elementary, one at middle school, two at high school, one at middle and high school, and one spanned all grade levels). These studies more often focused on science rather than mathematics (four studies on science, two on science and mathematics), but there is nothing in these findings to suggest that this broadly described relationship wouldn't hold for mathematics or other areas, as indicated by the two studies examining teacher leadership outside mathematics/science (Feldman & Tung, 2002).

Bandura's concept of self-efficacy has been the focus of numerous research studies related to teacher self-efficacy. Most studies have investigated Bandura's first three sources of self-efficacy beliefs: mastery experiences, vicarious experiences, and social persuasion—with much less emphasis placed on Bandura's fourth source, the role of emotions. Essentially, teacher self-efficacy research has centered upon classroom practice and teachers' perceptions of their ability to bring about desired outcomes in relation to student learning.

Much less is known about how teacher self-efficacy is shaped by teachers' emotions and factors outside the immediate sphere of their daily practice (Lightsey, 1999). Importantly, efficacy beliefs help dictate motivation. Bandura observed: "People regulate their level and distribution of effort in accordance with the effects they expect their actions to have. As a result, their behavior is better predicted from their beliefs than from the actual consequences of their actions. From the social cognitive theory perspective, because the human agency is mediated by our efficaciousness, self-efficacy beliefs influence our choices, our effort, our persistence when facing adversity, and our emotions (Pajares, 1997).

Eslami and Fatahi (2008) examined the efficacy beliefs of nonnative English speaking (NNES) Iranian EFL teachers. EFL teachers' perceptions of their teaching efficacy in terms of personal capabilities to teach English as a Foreign Language (EFL) and their perceived English language proficiency level were examined. The results showed that the teachers' perceived efficacy was positively correlated with self-reported English proficiency. The findings also revealed that the more efficacious the teachers felt, the more inclined they were to use communicative-based strategies. The study has implications for the preparation of NNES teachers and the support they need to develop their language proficiency, which in turn is related to their perceived self-efficacy.

From the studies, we can derive from implications to the Philippine multigrade setting. This implies that where there are multigrade classes, effective multigrade teaching can result in positive achievement and other benefits. But the poor quality of instruction in multigrade programs, as well as the quality of instruction in single-grade classes, will also result in poor student achievement. Moreover, teachers who have negative attitudes towards teaching may also produce poor outcomes.

The foregoing literature and studies provided the researcher with valuable concepts and perceptions in the formulation of a conceptual framework and the construction of survey questionnaires. Although some of the reviewed studies did not specifically deal with the interrelationship of the variables under study, they deepened the researcher's insight on how to undergo the present study.

## FRAMEWORK

The present study considered several theories on integrated teaching, individual differences, and multigrade teaching theories. Shoemaker's (1989) spouses integrated curriculum that teaches the holistic and natural way of teaching and reflects the real world of the children. Krogh (1990) seconded that integrated curriculum brings benefits to the learners such that it provides adequate coverage of the curriculum, builds on the interest of the learners, adoption of natural learning, teaching skills in meaningful contexts, more flexibility, and an organized planning device.

After having done historical researches into the origin of multigrade classes in the countries of antiquity, Thomas, Shaw, and Mundial (1992), concluded that early formally organized educational program was similar to the modern-day set-up of multigrade schools in the sense that were was no formal leveling of the curriculum into grades, and the learners in one class were of a wide range of ages with a corresponding diversity of interests and background knowledge and skills. Thomas, Shaw, and Mundial (1992) identify four critical elements for effective implementation of multigrade technology: 1) teachers need to adopt innovative and productive practices for effective learning to happen; 2) sufficient materials and physical resources are needed to support the teaching-learning process; 3) local and regional support networks need to be developed among teachers; 4) there must be national-level support for pilot programs, including both financial support and active involvement of a few multigrade advocates.

They emphasized the four most critical elements in the teacher's adoption of effective teaching practices in the implementation of multigrade technology. According to them, if other countries were successful in their practice of this technology using such elements, there's nothing much to refute that they can also be employed in the Philippine setting. Miller (1991) identified six key instructional dimensions affecting multigrade teaching, to wit: classroom organization, classroom management and discipline, instructional organization and curriculum, instructional delivery and grouping, self-directed learning, and peer tutoring.

Moreover, on evaluation theories, Little (2001) pointed out that curricular development, implementation, and evaluation are an extensive and continuous process. Over the four-year duration of the project, a wide range of information will be collected on specific curricular materials and instructional strategies. The children's achievements can be determined in relation, and actual instructional strategies used. While the goals of education remain intact, the means of achieving these goals are changing. T to goals and instructional objectives intended for the curriculum content, the learning resources and actual instructional strategies used. While the goals of education remain intact, the means of achieving these goals are changing. Teachers need professional preparation for teaching in multigrade classes/environment. Rather than simply applying curricular and instructional strategies of the single-grade classroom, they have to be knowledgeable about alternative teaching and learning strategies to capitalize on the features of a multigrade classroom. Today in all parts of the civilized world, multigrade schools are used to deliver education opportunities in rural areas.

However, the Department of Education has provided materials to be used by teachers such as Teacher's Guides, multi-leveled materials, facilities, such as tables, textbooks, workbooks, science apparatuses. But despite all these, the achievement of pupils still remains low. Queries such as "Are the teachers satisfied with their handling of multigrade classes?", "Are the selected teacher factors effective in handling multigrade classes?" and "What problems are encountered by teachers in the implementation of the multigrade program? These queries have led the researcher to correlate teacher factors and academic performance of multigrade pupils in Baybay City Division.

## **OBJECTIVES OF THE STUDY**

The study determines the relationship between the selected teacher factors and the academic performance of multigrade pupils in Baybay City Division. Specifically, it seeks to describe: 1) the socio-demographic profile variable (age, sex, civil status, educational qualification, teaching experience, teaching position and trainings attended) and teacher empowerment dimensions (decision making, professional growth, status, self-efficacy, autonomy, and impact); 2) the academic performance of multigrade pupils along with the five learning areas; and 3) the problems encountered by the respondents in the teaching of multigrade classes; 4) the guide to improve the implementation of multigrade teaching.

## METHODOLOGY

## **Research Design**

This study made use of the survey design, which is still descriptive in nature as this correlates the selected teacher factors and academic performance of multigrade pupils in Baybay City Division, of which the data served as inputs to an improved implementation of multigrade teaching.

## **Participants**

The context of the study focused on the schools with multigrade classes of Baybay City Division, Baybay City, Leyte. It is located in the southern part of the province of Leyte. The City Division is composed of four (4) elementary school districts. Due to the limited number of multigrade teachers, all of them were taken as respondents of the study distributed among the districts in the division, to wit: fourteen (14) from Baybay I, twenty-eight (28) from Baybay II, twenty (20) from Baybay III and thirty (30) from Baybay IV. A total of 92 multigrade teacher respondents and 18 cluster heads of multigrade teachers. For Focus Group Discussion (FGD), fifty percent (50%) of the multigrade teachers per district were chosen. This was done through a lottery.

#### Instrumentation

The method of collecting the needed data was done using a survey questionnaire, focus group discussion, interview schedule with cluster heads, and the data on file at the school districts in Baybay City Division. Part I of the questionnaire asked data about the socio-demographic profile of the MG teacher respondents. Part II contained the items on teacher characteristics inspired by Short (1994) from the Journal "Defining Teacher Empowerment." A questionnaire on decision-making ability was adopted from the Melbourne Decision Making Questionnaire used by Mann et al. (1997). This was employed to have a logical and systematic response to the decision-making process, which helped address the critical elements that resulted in a good decision. The instrument involved the issue of vigilance, buck-passing, procrastination, and hypervigilance of the decision-maker. NCBTS Teacher Performance Appraisal was used with indicators for professional growth that describe the professional development of teachers. The indicators were on professional at the individual student level, classroom level, school level, level of parents and the wider community, and the level of personal-professional growth.

A questionnaire on teacher status was adopted from Hangreaves et al. (2007), a questionnaire used in their studies titled "Status of a Teacher and the Teaching Profession: Views from inside and outside the profession: Interim findings from the teacher status project." Items on self-efficacy were adopted from Pajares's (1997) study questionnaire on self-efficacy. Another questionnaire on teacher autonomy was adopted from Moomaw (2005). On teacher impact, a questionnaire was adopted from Brooks's (1993) questionnaire in his study "The Impact of Teachers: A Story of Indelible Memories and Self-Esteem." Part III of the survey questionnaire contained items that measured the extent of the seriousness of the problems/difficulties in the implementation of the multigrade program patterned from Vithanapathirana (2005) study.

#### **Data Gathering Procedure**

A permit to conduct the study was sought from the City Schools Division Superintendent of Baybay. The approval prefaced the questionnaires to be given out to the identified respondents and groups for Focus Group Discussion. Data collection was handled by the researcher himself or his trained staff, especially in the distribution and retrieval of the accomplished questionnaire from the respondents. The study also used the Focus Group Method, which is a type of interview involving the use of groups. At the end of the discussion, the participants were given refreshments, and a release form to be signed by them was used. Also, during the interview schedule of the cluster head of the multigrade teachers, the same procedure was done in FGD.

### **Ethical Considerations**

A permit to conduct the study was sought from the Schools Division Superintendent of Baybay City Division. The approval prefaced the questionnaires given to the respondents. Adherence to the Data Privacy Law was observed in the conduct of the study.

## **Statistical Analysis**

The data which were collected from the various respondents and from office files were classified, tabulated, and subjected to statistical analysis in order to formulate objective interpretation in terms of research findings, conclusions, and recommendations. Specified instruments were used to gather the needed data, and appropriate statistical tools were employed to test the null hypotheses concerning the variables under study. This was a fact-finding study with an adequate and accurate interpretation of the findings. It described the status of multigrade teaching and multigrade pupils' academic performance in Baybay City Division, the school year 2009-2010. To analyze the data gathered, the descriptive statistical tool was used. Those are frequency counts, means, percentages, and standard deviation.

The statistical tool used in determining the relationship was Pearson's Correlation Coefficient and eta coefficient correlation. To be able to verify the validity and significance of the relationship, the resultant correlation values were subjected to t-test and other statistical tests. Multiple Regression and Analysis of Variance (ANOVA) were used to determine which among the identified variables relate highest to academic performance when taken singly or in combination. To aid statistical computations and for accuracy of results, a computer software called Statistical Package for Social Sciences (SPSS) was used. The null hypotheses were tested at 0.05 level of significance using inferential statistics.

## **RESULTS AND DISCUSSION**

At the outset, the study attempted to get the demographic profile of the multigrade teachers employed as respondents in terms of age, sex, civil status, educational attainment, teaching experience, teaching position and relevant trainings attended and selected indicator variables of teacher empowerment such as decision making, professional growth, status, self-efficacy, autonomy and impact.

As to age distribution, almost 70% of the respondents belong to the young adult group whose ages ranged from 20 - 39 years. This indicates that the majority of the multigrade teachers in the division are relatively young and are expected to be in their productive years in teaching. It could also be implied that novice teachers are first initiated by handling multigrade classes, a truism in the deployment of new applicants in many school divisions. With this being practiced, the teacher induction program, which is espoused by the region, has to be seriously enforced if there is a lull in the implementation.

A marked difference could also be noticed in their sex distribution. Seventyseven out of the 92 MG teachers are females compared to only 15 or 16% males. This confirms the popular claim that women continue to dominate the teaching profession and as reported by De Guzman in the Household School Matching Survey. In the first survey, the sex ratio was 7:1 in favor of the women and in the second survey the ratio was significantly rose to 8:1. Deductions could therefore be made that the profession no longer attracts men, especially in multigrade teaching where instructional tasks are too complicated for a new entrant to handle. In terms of civil status, the findings revealed that 66 or 72% of them are married and the remaining 25 (27%) are single. This is echoed in the SOUTELE findings that a typical elementary school teacher is a married female whose age group is 37 years old.

The data which pertain to the educational qualification of the respondents indicate that none of them have finished any advanced degree, even only up to the master's level. They ended up in just earning units and the acquisition of the certificate of academic requirements for promotion purposes. To them, attendance in graduate studies is a big sacrifice on their part, as many of them are assigned in hard-to-reach areas. They are constrained in many counts to upgrade themselves. Firstly, they are limited financially as part of their salary goes to the production of learning support materials that are needed by them in teaching. Secondly, the nature of the assignment needs quality time to prepare everything, including a number of lesson plans which are required of them before facing the class.

All these pose as impediments to their desire to upgrade instructional competencies. Having this reality, it behooves the Department of Education and the Division in particular to implement a functional faculty development program giving priorities to multigrade teachers through scholarships as provided for in the Magna Carta for Public School Teachers. The mentoring program should also be strengthened deploying senior and master teachers to these schools to assist the multigrade teachers, thereby enhancing instruction. When asked about their teaching experience, more than half or 59% of them expressed that they just have stayed in teaching from 1 to 5 years. This is another way of saying that they are still young in the service and being so, closer supervision is wanting to make them more prepared to handle their multifarious roles as multigrade teachers.

Since most of them are novice teachers, they have to be properly inducted to the profession through the establishment of an effective mentor-mentee relationship to make them stay longer in teaching. More than 75% of the multigrade teachers included in the study are only Teacher I in the division plantilla, which is consistent with the reported low educational qualifications. To get promoted to next higher rank requires the teacher to earn units obtained from advanced studies. But considering the plight of MG teachers, attending graduate studies would be more of an ordeal than a privilege taking into serious account the complicated nature of their assignments. The Department of Education should implement programs and projects to cater to the needs of schools with multigrade classes in upgrading teacher qualifications which will also raise their ranks. Relevant and localized seminars and trainings should be available for them to upgrade their instructional competencies with built-in monitoring and evaluation mechanism. Doing so will assure that learning in trainings and seminars would be put into effective use by participants.

As regards teacher empowerment, all the six areas identified, namely: decision making, professional growth, status, self-efficacy, autonomy and impact obtained an overall mean of 3.57 interpreted as very high empowerment.

In decision making, for instance, these MG teachers are given all the chances to participate in making decisions on all aspects which have something to do with their work, including a budget, scheduling, curriculum, and other concerns. Some of them are scarcely supervised, as informal interviews are revealed due to the hard-to-reach location of schools. One drawback that they could identify when no regular or closer supervision is done is when they are confronted with problems that they could not see the solution in sight. They grapple with so much difficulty and they think of leaving the profession.

Writing several lesson plans daily kills their enthusiasm as teachers when one well-crafted plan would be enough for the day. There's a need to look into the technology adopted by DepED and institutionalize one that is deemed more practical and effective getting feedbacks from teachers concerned. It is quite supervising to note that despite their low educational qualifications, the teachers still feel that the division provides them the opportunities to grow professionally. While it is true that pursuing advanced studies is a freedom given to teachers, the access to this opportunity is limited as their assignments are far from educational centers.

To them, their weekends are critical for them as most often these days are used as their time to prepare for the week. Their request is for them to be given a chance to study during summer and other terms where they would be full-time students giving them more concentration and retentive learning. Scholarships are recommended for those who have stayed in teaching for a number of years so that they will not be lagging so much behind than those assigned in monograde schools. As multigrade teachers, they do not feel inferior from their counterparts. They earn respect from their administrators and peers as some are even expressing admiration for having accepted the assignment, which is turned down by some applicants. What they yearn is to have continued strong administrative support to have their instructional competence enhanced employing varied continuing professional education (CPE) activities specially designed for multigrade teaching.

Professional growth of teachers has been found to have an influence on pupils academic performance. Teachers who develop themselves professionally would have more to share to the pupils causing them to achieve better. Therefore, more professional development initiatives should be available to teachers especially those assigned to multigrade classes.

Based on the study, sex significantly correlated with the academic achievement of multigrade pupils. Moreover, some researches have found out that females perform better in English, while males show dominance in Mathematics.

As to problems besetting the multigrade teachers, the greater majority or 75% of the 24 sources were rated not serious. This simple means, that the teachers can ably manage them. But in the discussion conducted, many of the MG teachers disclosed some points which were found in their responses in the questionnaires. They expressed dismay over so many inadequacies they are encountering in teaching. It is true that trainings are conducted but they are not enough to equip them adequately with the necessary skills to face pupils of diverse learning abilities and problems. Varied teaching modalities have to be taught to them through demonstrations and modeling by more experienced and true master teachers.

The nature of their work is truly tedious, with several lesson plans to make everyday. More time is spent in preparing plans, no more quality time for LSM production and mastery of the lessons. With two or three grades handle one at a time as the approach dictates, effective learning is too impossible to set in as the groups on seat work give more attention to the teacher at work. The technology is good, yet the implementation had to be seriously evaluated. Multigrade classes could be handled just like monograde classes, but this needs intensive study by the planners. Teachers can be trained in pace with the changes.

Handling multigrade classes is really demanding and it becomes heavier with additional non-teaching jobs added to their shoulders. Time is of the essence but teachers spreading themselves so thinly in many other activities, the pupils are really short-changed.

More allowances are needed if quality outputs are expected. With the so little allowance given to MG teachers, it patches up only a small portion of the needs of teachers in multigrade operation.

#### CONCLUSIONS

The teaching profession consistently attracts women to its fold, making it a woman's world, even in multigrade teaching. The same profession is staffed by a relatively young group of female teachers 40 years old and below who are expected to be in their productive and reproductive years as most of them are married. Most MG teachers need uplifting in their educational qualification and rank to raise their morale and motivation to remain in teaching. These MG teachers thirst for more upgrading in the form of trainings and similar initiatives for them to improve their instructional competence. The extent of teacher empowerment dimensions with respect to decision making, professional growth, status, self-efficacy, autonomy, and impact are very highly empowered. The very poor academic showing of the MG pupils in the five (5) learning areas is a brazen demonstration of a need to seriously evaluate multigrade instruction in the division. Among the selected teacher factors, only sex and professional growth turned out to be predictors of academic achievement in also selected learning areas as English, Makabayan and Mathematics. On the extent of problems or difficulties encountered by multigrade teachers in multigrade teaching, a level of not serious has been rated by the teachers, although some of the problem indicators need to be addressed.

#### RECOMMENDATIONS

School administrators can use the findings of this study as partial basis for the assessment of Multigrade Schools in Division. In addition, they can consider the findings of this study as feedback on how they manage multigrade classes in certain situations and identify ways and means to improve the working condition of multigrade teaching. Conduct campaigns for more male teachers to go into teaching especially with multigrade classes. Male teachers can trek long distances especially in hard-to-reach places where multigrade classes are held. Teacher training schools must incorporate multigrade teaching in their schools in consonance to DepED style. Implement a workable and functional faculty development program prioritizing multigrade teachers especially those meeting the qualifications. Trainings, seminars and CPE initiatives should be a regular activity for MG teachers. No teacher should be assigned unless adequately trained. The same training should be a pre-service requirement for graduation. Supervisory strategies and other clinical approaches should be used to determine the dismal performance of pupils of Multigrade classes.

For future researchers, another study can be undertaken to really study multigrade teaching making use of other effective variables and data-collection strategy to confirm the findings of the study.

Improved Implementation of Multigrade Teaching

To overcome identified hindrances to multigrade teaching, specific strategies for implementation have been identified as follows:

- 1. Policy strategy
  - a. Conduct a comprehensive analysis of the multigrade teaching situation and identify critical areas where appropriate policies are needed.
- 2. Strategies to counter the negative perception of multigrade teaching
  - a. Conduct public awareness campaigns using all available media.
  - b. Increase and upgrade the performance of multigrade teachers and pupils to make them comparable to that of single grade classes.
  - c. Conduct research and publish research findings to improve multigrade teaching.
  - d. Publicize the achievement of successful multigrade schools.

## 3. Teacher-related strategies

- a. Teacher training
  - ♦ Formulate clear policies, guidelines and objectives for the upgrading of multigrade teachers.
  - ♦ Develop in-service and pre-service teacher training programmes and materials for multigrade teaching, based on the specific needs of multigrade teachers.
  - Develop a core of multigrade teacher-trainers who can be mobilizes to train teachers in remote areas.
  - Oevelop a training programme of multigrade teaching to include:
    - Development of material from available local resources
    - Adoption of innovations
    - Development of a good learning environment
- b. Provide better supervision
  - ◊ Train principals and supervisors on how to supervise multigrade classes
  - Provide a system of incentives (rewards and recognition) for good performance by multigrade teachers and supervisors.
- c. Establish a teacher support system
  - ♦ Provide a mechanism for regular meetings of multigrade teachers for sharing experiences and exchange of information.
  - ♦ Arrange field trips for multigrade teachers to reduce teacher isolation.
- 4. Facilities-related strategies
  - a. Conduct school mapping and facilities surveys.
  - b. Develop a plan for upgrading multigrade school facilities and present this to the community and education authorities at all levels, including the planning, finance and budget authorities.
  - c. Develop advocacy/lobbying plans to mobilize resources from the community, government and non-government agencies.
- 5. Strategies to counter negative attitudes to schooling
  - a. Involve parents in school activities.
  - b. Have an "open day" on a regular basis for parents to visit and observe children in school.
  - c. Have a master list of eligible school-aged children in the community so that it becomes easy to identify who are not in school.

#### LITERATURE CITED

- Abadzi, H. (2006). Efficient learning for the poor: Insights from the frontier of cognitive neuroscience. The World Bank. Retrieved from https://bit. ly/3k92lX5
- Achwarin, N. A. (2009). The study of teacher competence of teachers at schools in the three southern provinces of Thailand. *Scholar: Human Sciences*, *1*(1). Retrieved from https://bit.ly/2ZfWyGR
- Asher, S. R., & Gottman, J. M. (1973). Sex of teacher and student reading achievement. *Journal of Educational Psychology*, 65(2), 168. Retrieved from https://doi.org/10.1037/h0034986
- Audet, M. J. (2005). Teacher professional growth plans: A case study of the Chilliwack school district (Doctoral dissertation, Faculty of Education-Simon Fraser University). Retrieved from https://summit.sfu.ca/item/10136
- Bensalah, K. (2002). *Guidelines for education in situations of emergency and crisis, EFA Strategic Planning.* Retrieved from https://bit.ly/2DVZSzx
- Boyer, W. and Bandy, H. (1996). *Impact of students with special needs on teacher in rural communities. Hammill Institute on Disabilities*. Retrieved from https://bit.ly/3kf3GeR
- Britz, J. (1993). *Problem solving in early childhood classrooms*. ERIC Degist. Retrieved from https://eric.ed.gov/?id=ED355040
- Brooks, R. (1993). The impact of teachers: A story of indelible memories and self-esteem. Retrieved from https://bit.ly/2DHVUKW
- Campbell, G. (1993). Assessing the impact of multigrade classes: An annotated bibliography. The Canadian Modern Language Review, Vol. 49, Issue 2, January 1993, pp. 345-346. Retrieved from https://bit.ly/2ZBSWPL
- Catherwood, C. (2003). General Teaching Council of Oklahoma: Improving Learning through Cognitive Intervention. Retrieved from http://www.portal. state.pa.us/portal/server.pt/community/finding\_a\_teachingposition/8629

- Collins, S. (1993). A Study of the Thematic Integrated Curriculum (TIC) of the Focus 2000 Program. Retrieved from https://scholarworks.wmich.edu/ dissertations/1872/
- Constitution, P. (1987). Article XIV Education, Science and Technology, Arts, Culture and Sports. Retrieved from https://bit.ly/3m1G5Qj
- DECS Order No. 38, s. 1993. Improving Access to Elementary Education By Providing Complete Grade Levels in All Public Elementary Schools Through Combination and/or Multi-grade Classes. Retrieved from https:// bit.ly/33trbKr
- Dodds, A. (1997). Influences of Academic and Teaching Experience on TAFE Teachers' Educational Studies. Retrieved from https://eric. ed.gov/?id=ED295030
- Dunst, T. (1991). *Who controls teachers' work?* Power and Accountability in America's Schools. Retrieved from http://www.teacherworkingconditions. org/empowerment/index.html
- Eslami, Z. R., & Fatahi, A. (2008). Teachers' Sense of Self-Efficacy, English Proficiency, and Instructional Strategies: A Study of Nonnative EFL Teachers in Iran. *Tesl-Ej*, 11(4), n4. Retrieved from https://eric.ed.gov/?id=EJ898136
- Feldman, J., & Tung, R. (2002). The Role of External Facilitators in Whole School Reform: Teachers' Perceptions of How Coaches Influence School Change. Retrieved from https://eric.ed.gov/?id=ED470680
- Freude, G., Seibt, R., Pech, E., & Ullsperger, P. (2005, June). Assessment of work ability and vitality—a study of teachers of different age groups. In *International Congress Series* (Vol. 1280, pp. 270-274). Elsevier. Retrieved from https://doi.org/10.1016/j.ics.2005.02.099
- Gillis, L. (1991). The Summative Evaluation of the Science Quality Education Project (SQEP). Evaluation and Project Research Report No. 9-1990-91. Retrieved from https://eric.ed.gov/?id=ED328453

- Gray, D. E., Ryan, M., & Coulon, A. (2004). The training of teachers and trainers: Innovative practices, skills and competencies in the use of eLearning. *European Journal of Open, Distance and e-learning*, 7(2). Retrieved from https://www.eurodl.org/?p=archives&year=2004&halfye&abstract=159
- Hargreaves, L., Cunningham, M., Hansen, A., McIntyre, D., Oliver, C., & Pell, T. (2007). The status of teachers and the teaching profession in England. *England: DfE*. Retrieved from https://bit.ly/2Fu6buS
- Horsman, H. (1997). *Learning together in multi-level classrooms*. ERIC Digest. Retrieved from https://eric.ed.gov/?id=ED433981
- Ingersoll, R. (2007). A comparative study of teacher preparation and qualifications in six nations. Retrieved from DOI 10.12698/cpre.2007.6nationsRR
- Koblinsky, S. A., & Sugawara, A. I. (1984). Nonsexist curricula, sex of teacher, and children's sex-role learning. Sex roles, 10(5-6), 357-367. Retrieved from https://doi.org/10.1007/BF00287553
- Krogh, S. (1990). The Integrated Early Childhood Curriculum. Order Department, McGraw Hill Publishing Company, Princeton Road, Hightstown, NJ 08520. Retrieved from https://bit.ly/3jSxDRN
- Lightsey, R. (1999). Albert Bandura and the exercise of self-efficacy. *Journal of Cognitive Psychotherapy*, 13(2), 158. Retrieved from https://bit.ly/32ruP8l
- Little, A. (1995). *Multigrade teaching: A review of research and practice*. Education Research Paper. ERIC Digest. Retrieved from https://eric. ed.gov/?id=ED459042
- Little, A. (2001). Multigrade teaching: Towatds an international research and policy agenda. International Journal of Educational Development. Retrieved from https://doi.org/10.1016/S0738-0593(01)00011-6
- Little, D. (1995). Learning as dialogue: The dependence of learner autonomy on teacher autonomy. *System*, 23(2), 175-181. Retrieved from https://doi. org/10.1016/0346-251X(95)00006-6

- Lowther, M. A., Gill, S. J., & Coppard, L. C. (1985). Age and the determinants of teacher job satisfaction. *The Gerontologist*, 25(5), 520-525. Retrieved from https://doi.org/10.1093/geront/25.5.520
- Mann, L., Burnett, P., Radford, M., & Ford, S. (1997). The Melbourne Decision Making Questionnaire: An instrument for measuring patterns for coping with decisional conflict. *Journal of Behavioral Decision Making*, 10(1), 1-19. Retrieved from https://doi.org/10.1002/(SICI)1099-0771(199703)10:1<1::AID-BDM242>3.0.CO;2-X
- Miller, B. (1991). A review of the qualitative research on multigrade instruction. ERIC Digest. Retrieved from https://eric.ed.gov/?id=ED342563
- Moomaw, W. E. (2005). *Teacher-perceived autonomy: A construct validation of the teacher autonomy scale* (Doctoral dissertation, University of West Florida). Retrieved from https://bit.ly/33ac08z
- Moreau, R. (1987). District size, teacher qualifications and pupil performance in Maine school districts. *Research in Rural Education*, 4(2), 95-99. Retrieved from https://bit.ly/3jUR8Jf
- Mulchahy, D. (1992). *Muti-grade-single-grade what is the difference?* Retrieved from http://www.mun.ca/educ/faculty/mwatch/vol2/mulcahy3.html
- Nelson, C., & Miron, G. (2005). Exploring the correlates of academic success in Pennsylvania charter schools. New York, NY: National Centre for the Study of Privatization in Education. Retrieved from https://bit.ly/33mJqkP
- Orkwis, R. (1999). *Curriculum access and universal design for learning*. ERIC Digest. Retrieved from https://eric.ed.gov/?id=ED437767
- Pajares, F. (1997). Current directions in self-efficacy research. Advances in motivation and achievement, 10(149), 1-49. Retrieved from https://www. dynaread.com/current-directions-in-self-efficacy-research
- Ryan, M. (1995). The provision of the elementary core French program in small rural schools in Newfoundland and Labrador. Memorial University Repository. Retrieved from https://research.library.mun.ca/5212/

- Shoemaker, B. J. E. (1989). Integrative Education: A Curriculum for the Twenty-First Century. OSSC Bulletin, 33(2), n2. Retrieved from https://eric. ed.gov/?id=ED311602
- Thomas, C., Shaw, C. P., & Mundial, B. (1992). *Issues in the development of multigrade schools* (Vol. 172). Washington, DC: World Bank. Retrieved from https://bit.ly/3jVvBAf
- Vithanapathirana, M. V. (2005). Improving multigrade teaching: action research with teachers in rural Sri Lanka (Doctoral dissertation, Institute of Education, University of London). Retrieved from https://discovery.ucl.ac.uk/id/ eprint/10020487/
- Ysseldyke, R. (2003). *Decision making: cognitive models and explanations*. Retrieved from https://bit.ly/2Rq40ed
- Zisk, J. (1996). *Cooperative learning: More than just small groups*. In annual meeting of the NSTA, St. Loius, MO. Retrieved from https://bit.ly/35Cf2FB