

# The Effect of Schools' Proximity to Students' Attendance and Academic Performance

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*Abstract* — This study aimed to identify the effect of school's proximity to students' attendance and academic performance.

The respondents of the study were the one hundred fifty two (152) Grade 7 students of Mutia National High School and Mutia National High School Extension – Alvenda of Division of Zamboanga del Norte.

Descriptive-correlational method of research was used to find the effect of schools' proximity to students' attendance and academic performance. This study aimed to look into possible differences in the students' class attendance when grouped according to profile and possible association of school proximity to students' class attendance and academic performance.

Descriptive method was employed to find the average class attendance and average academic performance of Grade 7 students of Mutia National High School and Mutia National High School Extension – Alvenda. It was also used to determine the school proximity in terms of walkability and accessibility.

The design was used to determine whether there is a significant difference in the students' class attendance when grouped according to profile and significant difference in the students' academic performance also when grouped according to profile. The correlational method was used to determine whether there is a significant relationship between the school proximity in term of distance, walkability, and accessibility and class attendance and academic performance. It was also used to determine the strength of association when there is statistical significance.

Based on the findings of the study that there is a slight effect of school's proximity to students' attendance and academic performance in Mutia National High School and Mutia National High School Extension – Alvenda. That is, the more walkable and accessible the school the better students' class attendance and academic performance.

As revealed in the findings, it was concluded that there is a significant relationship between class attendance and school's proximity in terms of walkability and accessibility and satisfactorily influenced to academic performance of the students.

Recommendations such as strictly implementation of DepEd's home visitation program so that teachers will faithfully monitor students' class attendance especially those who are at-risk and proper coordination to the office of Department of Social Welfare and Development in the municipality to enforce the conditionalities of 4P's of the government to encourage the parents to oblige their children to attend classes strengths and focus on the most pressing needs.

*Keywords* — *Accessibility, Walkability, Schools' Proximity to Students, Attendance, Academic Performance*

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## I. Introduction

[“A journey of a thousand miles begins with a single step.”](#)

### Lao Tzu

In the Philippines, basic education is free and compulsory as mandated by the Philippine Constitution and the Enhanced Basic Education Act of 2013. The government provides free schooling from kindergarten to secondary education. The operation of 38,659 public elementary and 7,748 public secondary schools (DepEd Fact Sheet, 2013) that offer free education to all Filipino learners is a visible manifestation of the government’s adherence to this mandate.

The Philippine National Education for All 2015 Plan of Action, anchored on the 1990 World Declaration on EFA (Education For All) and 2000 World Conference on Education for All and Dakar Framework of Action, ensures that every child, youth and adult be served their basic learning needs and that educational disadvantages do not take root early on. It seeks to put all children aged six and above in school.

Education is regarded as the major contributor to the improvement of living standards of disadvantaged groups. For many poor Filipinos, education is a means to a better life. The EFA 2015 Plan asserts that: Basic education as an anti-poverty instrument can provide the skills, attitudes, knowledge and values that people can use to organize themselves for common access to useful information, and a united approach to greater productivity. It can also empower the marginalized and prevent their exploitation and alienation from the development process.

Article XIV, Section 5 of the 1987 Constitution provides that the State “shall assign the highest budgetary priority to education.” True to this, in assuring the development of education of the country, the Senate Committee on Finance approved on October 11, 2017 the P549.5-billion budget of the Department of Education (DepEd) for Fiscal Year 2018-2019, which is dedicated to ensuring that education will continue in an inclusive and nurturing environment for learners, teachers, and personnel.

Expanding enrolment through increased schools close to the people has been a great step towards universalizing education as the eligible students would access schools and participate in all the planned school activities. Location of secondary schools in different countries is widely dispersed from the students ‘homesteads. As a result, longer walking or travelling distance from home to school/college has mostly impacted school students (Subrahmanian, 2003).

Crosnoe *et al.*, (2004) assert that higher academic performance is a top priority for educators and various researchers have sought to identify its determinants, some of which are age, gender, family socio-economic factors, **proximity**, pedagogical practices and peer influence

According to Webster’s Dictionary, proximity means as the quality or state of being next in time, place, causation, or influence. In this study, proximity refers to the distance (nearness)

of the school – Mutia National High School Extension – Alvenda – to the residences of the students. The school is identified as a rural school. Ultimately, the technical definition of a rural school corresponds to our general understanding of rural areas; they are characterized by geographic isolations and small population size.

About 80% of the Filipino poor live in the rural areas of the country. These are towns located deep in the mountains and the rice fields. The population density in the rural parts of the country is low, and there is a corresponding deficiency in schools and classrooms. Public school is free, but families still cannot afford to send their children for a complicated network of reasons. Transportation is another big problem. Kids walk two to three (2-3) kilometers or more to and from school every day. They have to cross rivers and climb hills with their bookbags. The ones that can afford it take a tricycle, but that is a luxury. Schools are sometimes too far for the most remote communities to practically access. So, the families can't afford to pay and the children are pulled from school (Weinstein, 2010). From this pressing situation, the academic performance of students is at stake.

Academic achievement or performance is simply the outcome of education. It is the extent to which a student, teacher or institution has achieved their educational goals. In recognition that one has completed a certain level of education, certificates or formal documents are awarded (Bonga, 2016). The subject is of much importance and concern to education policy mechanics and teachers as well as parents and students. It is generally a measure of the attainment of educational goals and objectives. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important.

According to Kang et.al (1996), academic achievement describes learners' academic self-competence, conduct and grades. Howcroft (1991) agitates that academic achievement can be measured in terms of the actual mark or score obtained in an examination. Gordon (1995) defines academic achievement as a commonly used term to denote a level of attainment measured by some form of objective tests; such as ordinary level examinations. For the purposes of this study, it will be taken as the outcome from their average academic grades.

Raychaudhuri, Debnath, Sen and Majumder (2010) report a positive relationship that exists between school location (closer distance to homesteads) and students' academic performance as they attend school regularly. Emore (2005) shares that distance to school together with school discipline; family background and school location caused truancy (attendance irregularity) among school students. Distance in association with location of the school seems to be one of the strong influencing origins for the academic performance among students. This was evidenced as well by Obemeata (1995) and Obayan (2003) who confirmed that school physical environment exerts dominant influence on students' academic performance.

Though the empirical evaluation of the relationship between individual attendance and student-level achievement has received little attention among education researchers (Corville-Smith, 1995; Epstein & Sheldon, 2002), attendance is nonetheless credited as being an important component of school success. Students with better attendance records are cited as having stronger test performance (Balfanz & Byrnes, 2006; Lamdin, 1996; Nichols, 2003). Other research has supported the notion that student attendance records can serve as direct signals of school quality (Coutts, 1998). Several studies have deemed attendance as important enough to be evaluated as an academic outcome (King, 2000; Lehr, Sinclair, & Christenson, 2004; Phillips, 1997; Sheldon, 2007), thereby suggesting that increased attendance is a direct indicator, rather than determinant, of school success.

Furthermore, in the assessment of effect of travelling distance among students in community secondary schools in relation to the quality of education by Galabawa and Lwaitama (2008) revealed that most of the students arrived at school late, tired and lost interest in leaning and hence, poor academic performance. Access to quality secondary education is essential for developing active workforce for socioeconomic development. To achieve the high-quality workforce, involvement of educational stakeholders deems appropriate. This means that there is an involvement in improving the quality of learning environment including the location of the school. Location is defined as the environmental condition around a school, which could be urban or rural (Ezike, 1997). Long distance has opposing results among researchers on academic performance. It is commonly argued that longer distance to school reduces the ability of learners to focus their attention in studies due to long walks or getting to class late.

Students must be present in school in order to benefit from the academic program in its entirety (DeKalb, 1999; Rothman, 2001). Schools and law enforcement officials are getting tough by enforcing laws that mandate school attendance and by holding parents responsible for their student's attendance. Student non-attendance is a problem that extends beyond the school. It affects the student, their families, and the community (DeKalb, 1999).

Absenteeism is detrimental to students' achievement, promotion, self-esteem, and employment potential (Bolo, 1983; DeKalb, 1999). Students who miss school fall behind peers in the classroom, which in turn increases the likelihood that they will become at-risk students and will drop out of school (DeKalb, 1999). In a study conducted by Rothman (2001), high student absenteeism rates were found to affect the achievement of students that attend regularly by disrupting the existing learning groups (Zamudio, 2004). According to Schagen, Benton & Rutt (2004), contextual variables such as, school size and **location**, have a large influence on the extent of absence within schools.

The amount of time actually spent in the classroom is in direct correlation to a student's access to education (DeKalb, 1999). Students who are tardy to school, those that do not attend or skip classes give up their opportunity for an education. They also interfere with other students' opportunity to learn by being late, absent or disruptive (Flanagan, & Murray, 2002). These

negative practices of being consistently late or absent will not benefit students well with their potential future employment responsibilities (KDE Dropout Prevention Resource Guide, 2003).

Research suggests that the family's socioeconomic status wield a significant influence on the likelihood that students will attend school regularly (Crowder & South, 2003; Henry, 2007; Reid, 2005). Students who reside in urban neighborhoods are more likely to miss school and/or become chronically absent due to the myriad of factors that distract students from school (Balfanz & Letgers, 2004; Orfield & Kornhaber, 2001). Students who are homeless or reside in temporary housing are also more likely to miss school. The child's home status significantly predicts whether the child will attend regularly.

Research studies by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) show that long distances from school contribute to poor school attendance.

UNESCO also says conditions at home, in school, on the way to school and in the community are more likely to prevent children from having a meaningful and conducive learning environment.

Schools of any type must be easily accessible – this is particularly valid for elementary schools. For health consideration, the slogan, ‘Short legs – short distance’ must not be valid only for elementary schools. It must lead to all schools being kept close to students’ homes. Only this way will it be guaranteed that children are not exposed to the stress and dangers of long journeys to school.

Osokoya and Akuche (2005) suggest that geographical location of the school is also necessary as distance from home residence of the learners and their facilitators is important to make them attracted with learning activities than longer traveling.

As Stewart (2006) points out, school site affects the importance the public holds of its schools. It also conditions how visitors and newcomers perceive the school. It is possible that it also affects how children in a school perceive it. The location of the site may also affect the children’s attitude to school attendance and possibly the achievements of some of them at school.

It is important for school administrators and school heads to regularly monitor the site needs of their schools which may arise out of increase in student enrolment and the attendant need for new structures to accommodate them. Site needs are also indicated when new facilities are required to house modern instructional equipment and materials. The same is true when there is need to accommodate the educational program and house the school staff and children as obsolete school buildings are destroyed to give way to new ones.

This study aims to identify the effect of school’s proximity to students’ attendance and academic performance. It has been noted from the school’s data that the farthest feeder barangays (Barangay Nayon and Head Tipan) are five kilometers (5km) away from the school. This means

that some students travel for a total of ten kilometers (10km) a day in order to attend class. This prompts the researcher to identify the relationship of the school's proximity to students' attendance and academic performance.

## REVIEW LITERATURE

### *School Location*

Selecting and acquiring suitable school sites are an important part of the school plant planning process. A school's site is one of the factors that can either enhance or hinder the implementation of its instructional and non-instructional programs. The site is also one of the factors that can determine how useful a school plant can be to the members of the local community. School administrators should, therefore, be concerned with the present and future needs of their school sites.

The process of determining where to build a new school is influenced by a number of factors but typically lacks a rigorous planning process considering a multitude of factors to determine the optimal location for a new public school. In fact, size, footprint, location, accessibility, walkability, etc. often take a back seat to finding a location that is the most cost effective and that offers the least amount of obstacles prior to development (environmental, storm-water, zoning, etc). While a well-defined planning process may not always be used, there are a number of regulatory requirements that influence the scale, scope, and location of new schools.

One of the most vital problems to address when the establishment of a new school, or the expansion of an existing one, is under consideration is that of securing an adequate site. The word 'site' is a very familiar one. It generally stands for the area or exact plot of land or ground on which anything or a structure or group of structures is, has been or is to be located. School site is just the piece of land or plot of ground on which a school plant is built or is to be built. It is on the site that school buildings are erected. It is on the site that foot paths and walk ways, car parks, and play grounds and all other structures that make up a school are constructed. It is important that wherever possible, the school site should be of adequate size to accommodate all the structures, services and activities required to conveniently implement an educational program (Alonsabe, 2011).

It is obvious that without a school site there will be no physical structure called school. The size, location and nature of the school site can facilitate or hinder the implementation of the school program and affect the children's learning opportunities. If a school site is small, for instance, it may not be able to accommodate all the physical structures needed to implement the school program effectively. It may not have play and recreational grounds. Attempts to overcome this problem may lead high expenses on special design and construction of school buildings. Alternatively, it may lead to operating the school on two or more sites with the attendant coordination and transportation problems.

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It is important for school administrators and school heads to regularly monitor the site needs of their schools which may arise out of increase in student enrolment and the attendant need for new structures to accommodate them. Site needs are also indicated when new facilities are required to house modern instructional equipment and materials. The same is true when there is need to accommodate the educational program and house the school staff and children as obsolete school buildings are destroyed to give way to new ones.

### *Students' Attendance*

Daily school attendance is important for all children and young people to succeed in education and to ensure they don't fall behind both socially and developmentally.

School helps children and young people to develop important skills, knowledge and values that set them up for further learning and participation in their community. School helps them to make the most of life opportunities.

Children and young people who regularly attend school and complete Year 12, or an equivalent qualification, have:

- better health outcomes
- better employment outcomes
- higher incomes across their lives.

Research confirms there is a strong link between attendance and adverse student outcomes like early school leaving, poverty, substance use, unemployment and negative health outcomes.

Regular absences from school may also be a critical indicator of disengagement, leading to adverse outcomes. It is an easily observable warning sign. Early identification and intervention is critical in addressing problematic attendance issues and possible student disengagement from school. Schools can positively influence student attendance. To do so, they need to base their approaches in an understanding of their students' needs and with an awareness of whole-school, cohort and targeted responses for individuals.

Promoting school attendance, building a positive school climate, monitoring attendance and supporting students and families to address barriers that influence it are all key elements in helping students to attend school every day and maximize their educational achievement.

Schools also need to have an understanding of the factors that may affect their students' non-attendance and an awareness of what factors can be changed. There are complex factors that impact student attendance and absenteeism, which includes a range of student behaviors like school refusal and truancy (<http://www.education.vic.gov.au/>).

Attendance is important and is closely linked to attainment. Students who are not in school are not learning and could potentially be allowing their grades to suffer. Unless a student is genuinely ill, they should be in school and working hard to achieve their best, no matter what year group they are in.

Good attendance and punctuality are important for achieving success at school and are also important life skills. Absence from school disrupts learning and hinders progress. Ensuring regular attendance at school is a legal responsibility for parents (<http://www.oxtedschool.org/49/student-attendance>).

A missed school day is a lost opportunity for students to learn. In this era of increased accountability for states, districts, and schools, the connection between student attendance and learning is being studied more than ever before. As a result, education agencies are asked with increasing frequency to report attendance data in a standard manner to allow comparisons across organizations and jurisdictions.

The primary rationale for high-quality attendance data is the relationship between student attendance and student achievement. Teacher effectiveness is the strongest school-related determinant of student success, but chronic student absence reduces even the best teacher's ability to provide learning opportunities. Students who attend school regularly have been shown to achieve at higher levels than students who do not have regular attendance. This relationship between attendance and achievement may appear early in a child's school career. A recent study looking at young children found that absenteeism in kindergarten was associated with negative first grade outcomes such as greater absenteeism in subsequent years and lower achievement in reading, math, and general knowledge.

Poor attendance has serious implications for later outcomes as well. High school dropouts have been found to exhibit a history of negative behaviors, including high levels of absenteeism throughout their childhood, at higher rates than high school graduates.<sup>3</sup> These differences in absentee rates were observed as early as kindergarten, and students who eventually dropped out of high school missed significantly more days of school in first grade than their peers who graduated from high school. In eighth grade, this pattern was even more apparent and, by ninth grade, attendance was shown to be a key indicator significantly correlated with high school graduation.

The effects of lost school days build up one absence at a time on individual students. Penalties for students who miss school may unintentionally worsen the situation. The disciplinary response to absenteeism too often includes loss of course credits, detention, and suspension. Any absence, whether excused or not, denies students the opportunity to learn in accordance with the



school's instructional program, but students who miss school are sometimes further excluded from learning opportunities as a consequence of chronic absenteeism (National Center for Education Statistics, 2009).

The relationship between school attendance, school performance and work is generally perceived to be negative. Work interferes with schooling because it requires too much of children's time (Heady, 2003). Balancing the demands of work and education places physical and psychosocial strain on children and often leads to poor academic performance and dropping out. Work may demand extensive physical energy, so that the child lacks the energy required for school attendance or effective study. As a result of fatigue and a lack of leisure activities to support physical, social and emotional development, the child will experience very little mental stimulation and will end up neglecting his or her studies (Binder & Scrogin, 1999). Akabayashi & Psacharopoulos (1999), for example, found that a child's reading and mathematics ability decreased with additional hours of work, whereas they increased with additional hours of school attendance and study. In their study, Ray & Lancaster (2003) investigated the effect of work on the school attendance and performance of children in the 12-14 year age group in seven countries, particularly in terms of the relationship between hours of work and school attendance and performance. They concluded that hours spent at work had a negative impact on education variables, with the marginal impact weakening at the higher levels of work hours. An exception to this was in the case of Sri Lanka, where a weekly work load of up to (approximately) 12-15 hours a week contributed positively to the child's schooling and to his/her study time.

### ***Academic Performance***

Academic achievement or performance is simply the outcome of education. It is the extent to which a student, teacher or institution has achieved their educational goals. In recognition that one has completed a certain level of education, certificates or formal documents are awarded (Bonga, 2016). The subject is of much importance and concern to education policy mechanics and teachers as well as parents and students. It is generally a measure of the attainment of educational goals and objectives. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important.

When people hear the term "academic performance" they often think of a person's GPA. However, several factors indicate a student's academic success. While some may not graduate top of their class, they may hold leadership positions in several student groups or score high on standardized tests.

### **Grades**

People often consider grades first when evaluating academic achievement. This includes schools, who rank students by their GPA, awarding special designations such as valedictorian and salutatorian for those who graduate first and second in their class. Scholarship organizations and

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universities also start by looking at grades, as do some employers, especially when hiring recent graduates. Grades carry more weight in some industries, especially technical professions such as law, medicine and finance. Other industries place less importance on GPA, particularly creative professions such as writing or art and occupations such as sales where people skills are more crucial than technical knowledge.

### **Test Scores**

Grades don't always reflect a person's knowledge or intelligence. Some students don't perform well in a classroom setting but are very intelligent and earn high marks on IQ tests, standardized testing or college entrance exams. Universities and employers consider these scores along with other measurements and may forgive a less-than-perfect GPA for students who perform well on these tests. Some tests, such as the Law School Admission Test (LSAT) and Medical College Admission Test (MCAT), determine if a student is accepted into graduate school. Law firms and medical facilities also place great importance on these scores and may eliminate anyone who scores below a certain number.

### **Extracurricular Activities**

Some of the brightest students don't earn straight As but are extremely well-rounded, succeeding at everything from music to athletics. The ability to master a diverse set of skills illustrates intelligence, curiosity and persistence, qualities attractive to universities and employers. Some colleges will admit and even award scholarships to students who earned average grades but display a pattern of achievement by consistently learning new skills. As a moral responsibility, every mentor should ensure that learners learn how to choose from the myriad of readily available materials and tools through improvising apparatuses. To be able to do this, teachers should be flexible, creative, and innovative in the classroom to turn learners become critical and creative thinkers (Luza-Tabiolo, C.D.(2018).

### **Leadership**

Initiative can also indicate academic performance. Some students demonstrate their competence by serving as student body president or holding officer positions in student groups such as the honor society or the science club. Or, they might regularly organize student events such as fundraisers, pep rallies or dances. Others participate in volunteer organizations and coordinate food drives or other community outreach efforts. Universities and employers look favorably on consistent leadership activities, feeling these students will bring that same drive to their classrooms or board rooms (Willaims, Ellie.2017).

An **academic classroom** is one where the primary goal is to promote proficiency of academic standards. Everything else, while appreciated and winked at, comes after. The class, curriculum, and instruction, by design, are built to move students in their academic proficiency.

## A Classroom of Proficiency: 6 Factors Of Academic Performance

### Accuracy

Accurately **unpacking the standard**--not oversimplifying it, nor making it more complex than it has to be. Making sense of what the standard says, and understanding exactly what the student needs to know and be able to do to get there. Accurately acknowledging the **rigor of the standard**--accurately, which means *what it says*, not what you think it should be. The standards describe a minimal level of proficiency--feel free to push students above and beyond, but not until they've mastered the language described in the standard.

### Alignment

Alignment between **student practice with the standard**. The work students do throughout the year shouldn't merely "engage" students or "push them to think, make, or create."

Alignment between **student readiness and the academic standard**. Think the Zone of Proximal Development. It does no good to create "rigorous" work for the student who lacks the background knowledge, content knowledge, or literacy to perform the work while you browbeat them to "meet your expectation." *Meet the student where they are* implies exactly that.

### Data

A climate of assessment provides usable data that teacher's can grab-and-use to **revise planned instruction**. Fresh, trustworthy, and relevant data teachers can use and students can understand to let them know what should come next. If it doesn't answer that question--what now?--it's an assessment of narrow value.

Data as in, **units, lessons, and activities are designed to flexibly respond to that data** in authentic ways without leaving it all on the teacher's shoulders to do so on the fly--or, worse, at the local "data team" meeting.

### Flexible Literacy

Literacy in terms of **being able to read a variety of texts both critically and holistically**. To be able to decode grade level texts of appropriate complexity, and to then be able to take that text apart in terms of ideas, evidence, theme, and craft.

And further, flexible literacy, as in **being able to write clearly and eloquently** about what is read, learned, and thought across physical and digital forms, for a variety of audiences and purposes. In short, to be able to seamlessly use the writing process to create and refine arguments and narrate experiences for both academic and authentic purposes.

### **Student Effort**

Student effort as in, helping students developing **intrinsic motivation**. Student effort as in, supporting students emotionally, metacognitively, and intellectually to **give themselves to the process of mastering academic content**. Student effort is everything. Teaching with engagement is like tweeting constantly with zero followers. Singing to an empty stadium. Dancing alone in the dark. We often use words and phrases like “student engagement,” student-centeredness, curiosity, and so on—and all of these are great. But a motivated student with zero technology, limited resources, and even a novice teacher will perform light years better than an apathetic student in a “21st century classroom.”

### **Self-Initiated Transfer**

Self-initiated transfer is a key indicator of understanding. It can be defined here as the ability to transfer knowledge or skill to a new and unfamiliar context, preferably unprompted. Put another way, students who know what to use what knowledge, when without being told to do so (Heick, Terry.2014).

## **II. Methodology**

This section presents the discussion of the method used, research environment, respondents of the study, research instrument, validation of the instrument, scoring procedure, data gathering procedure, and statistical treatment of the data in this study.

### **Research Design**

The researcher used the descriptive-correlational method of research to find the effect of schools’ proximity to students’ attendance and academic performance. This study aimed to look into possible differences in the students’ class attendance when grouped according to profile and possible association of school proximity to students’ class attendance and academic performance.

Descriptive method was employed to find the average class attendance and average academic performance of Grade 7 students of Mutia National High School and Mutia National High School Extension – Alvenda. It was also used to determine the school proximity in terms of walkability and accessibility.

The design was used to determine whether there is a significant difference in the students’ class attendance when grouped according to profile and significant difference in the students’ academic performance also when grouped according to profile. The correlational method was used to determine whether there is a significant relationship between the school proximity in term of distance, walkability, and accessibility and class attendance and academic performance. It was also used to determine the strength of association when there is statistical significance.

### Setting Of The Study

The researcher was a teacher and officer-in-charge of Mutia National High school Extension - Alvenda. She was interested to conduct the study in the said school of the school year 2017 – 2018. Her commitment and dedication to her profession concerned her about the students' attendance and academic performance. Since she also believed that school attendance is very important to the success of students, she exerted more effort to determine whether or not walkability, accessibility, and the distance from student's home to school justifies their school nonattendance which might affect their academic performance.

### Respondents Of The Study

The subjects of the study were the one hundred fifty two (152) Grade 7 students of Mutia National High School and Mutia National High School Extension – Alvenda of the school year 2017 – 2018.

The number of Grade 7 students from the said schools were shown in figure 8 below.

Schools	Number of Grade 7 Students
1. Mutia National High School	113
2. Mutia National High School Extension – Alvenda	39
<b>Total</b>	<b>152</b>

**Figure 8:** The Respondents of the Study

### Sampling Technique

The purposive sampling technique was used in the design since the researcher wishes to include all Grade 7 students of Mutia National High School and Mutia National High School Extension – Alvenda. The researcher collected the necessary data from these students.

### Research Instrument

A researcher-made instrument was used to determine the distance from students' home to school. The students' class attendance was obtained from their teachers' school register and the academic performance was measured by their average grade for the quarter.

### Data Gathering Procedure

The researcher asked permission from the school principal/ school head of of Mutia National High School and Mutia National High School Extension – Alvenda to collect data from the students of these schools. Since school proximity, class attendance, and academic performance

are the researcher's interest for the study, she then asked the students about these information by giving them a questionnaire.

The researcher, together with the school principal also politely asked the help of Grade 7 advisers in gathering information about the students' class attendance and average grade for the quarter to verify the data provided by the students in the questionnaire.

The researcher also ensured that the information given by the students and their class advisers will remain confidential and will be used only by the researcher for the present study.

### Statistical Treatment of Data

The following statistical methods was used by the researcher in order to present the data meaningfully and to make a valid and reliable interpretation of the results:

The frequency and percentage distribution table was used to describe the profile of the Grade 7 students respondents. The percentage is computed using the formula:

$$P = \frac{\sum f}{n} \times 100$$

Where:

$P$  = Percentage

$f$  = frequency

$n$  = total number of students

The arithmetic mean was used to determine the average class attendance of the students, and academic performance. The arithmetic mean is computed using the formula:

$$Mean = \frac{\sum x}{n}$$

Where:

$Mean$  = average rate

$\Sigma$  = symbol used to indicate the sum

$x$  = number of times absent / first quarter grade

$n$  = total number of pupils

The weighted mean was used to determine the school proximity in terms of walkability and accessibility. The weighted mean is computed using the formula:

$$Weighted\ Mean = \frac{\sum wx}{n}$$

Where:

- Weighted Mean* = average
- $\Sigma$  = symbol used to indicate the sum
- $x$  = number of times absent / average quarterly grade
- $w$  = weight
- $n$  = total number of students

The following is the scale level for frequency about walkability and accessibility:

SCALE LEVEL	DESCRIPTION
4	Always
3	Often
2	Sometimes
1	Never

The following statistical continuum was used to interpret the walkability:

STATISTICAL CONTINUUM	INTERPRETATION
3.25 – 4.00	Very Walkable (VW)
2.50 – 3.24	Walkable (W)
1.75 – 2.49	Somehow Walkable (SW)
1.00 – 1.74	Not Walkable (NW)

The following statistical continuum was used to interpret the accessibility:

STATISTICAL CONTINUUM	INTERPRETATION
3.25 – 4.00	Very Accessible (VA)
2.50 – 3.24	Accessible (A)
1.75 – 2.49	Somehow Accessible (SA)
1.00 – 1.74	Not Accessible (NA)

The following statistical continuum was used to interpret the academic performance of students:

STATISTICAL CONTINUUM	DESCRIPTION
90.00 – 100.00	Outstanding
85.00 – 89.99	Very Satisfactory
80.00 – 84.99	Satisfactory
75.00 – 79.99	Fairly Satisfactory
Below 75	Did not meet expectations

To determine whether there is a significant difference in the students' class attendance when grouped according to profile One Way ANOVA was used. To determine whether there is a

significant difference in the students' academic performance when grouped according to profile One Way ANOVA was also used. The One Way ANOVA is computed using the formula:

$$F = \frac{MS_B}{MS_W} \qquad MS_B = \frac{SS_B}{df_B} \qquad MS_W = \frac{SS_W}{df_W}$$

Sum of Squares

$$\begin{aligned} SS_T &= \sum_{i=1}^{n_j} \sum_{j=1}^C (x_{ij} - \bar{x})^2 \\ SS_B &= \sum_{j=1}^C n_j (\bar{x}_j - \bar{x})^2 \\ SS_W &= \sum_{i=1}^{n_j} \sum_{j=1}^C (x_{ij} - \bar{x}_j)^2 \\ df_B &= C - 1 \\ df_W &= N - C \\ df_T &= N - 1 \end{aligned}$$

Where:

- $i$  = a particular member of a treatment level
- $j$  = a treatment level
- $C$  = number of treatment levels
- $n_j$  = number of observations in a given treatment level
- $\bar{x}$  = grand mean
- $\bar{x}_j$  = column mean
- $x_{ij}$  = individual value
- and

$$SS_T = SS_B + SS_W$$

Where:

$SS_T$  = total sum of squares

$SS_B$  = sum of squares between groups

To determine whether there is a significant relationship between the average distance from home to school and students' class attendance Pearson Correlation Coefficient ( $r$ ) was used. To determine whether there is a significant relationship between the average distance from home to school and students' academic performance Pearson Correlation Coefficient ( $r$ ) was also used. The Pearson Correlation Coefficient ( $r$ ) is computed using the formula:

$$r = \frac{n\sum xy - \sum x \cdot \sum y}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}$$



Where:

- $n$  = number of pairs of scores
- $\Sigma xy$  = sum of the products of paired scores
- $\Sigma x$  = sum of x scores
- $\Sigma y$  = sum of y scores
- $\Sigma x^2$  = sum of squared x scores
- $\Sigma y^2$  = sum of squared y scores

The guide for interpreting the correlation coefficient as presented by Punsalan and Uriarte (2000) were as follows:

$\pm 1.00$ to $\pm 0.90$	Very High correlation; Very Significant relationship
$\pm 0.89$ to $\pm 0.60$	High correlation; Significant relationship
$\pm 0.59$ to $\pm 0.40$	Moderate correlation; Average relationship
$\pm 0.39$ to $\pm 0.20$	Low correlation; Small relationship
$\pm 0.19$ and below	Negligible; Almost no relationship

$r$  has a  $t$  distribution with  $n - 2$  degrees of freedom, and the test statistic is given by:  $t = r \sqrt{\frac{n-2}{1-r^2}}$

### III. Results and Discussion

This section presents the brief summary of the whole study, the findings of each problem, the conclusions and the recommendations based on the data gathered and analyzed.

#### Summary

The study aimed to identify the effect of school's proximity to students' attendance and academic performance in Mutia National High School and Mutia National High School Extension – Alvenda during the school year 2017 – 2018.

The findings revealed the answers to the following questions:

1. What is the profile of the students in terms of
  - a. sex; and
  - b. income?
2. What is the school's proximity in terms of
  - a. distance;
  - b. walkability; and
  - c. accessibility?

3. What is the class attendance of the students?
4. Is there a significant difference in the class attendance of students when group according to profile?
5. Is there a significant relationship between the school's proximity and class attendance?
6. What is the academic performance of the students?
7. Is there a significant relationship between the school's proximity and academic performance?

## **FINDINGS**

The following are the findings of the study:

### **1. On the profile of the students in terms of**

#### **1.1 sex**

In Alvenda Campus, twenty one (21) or 53.8 % of the students are males and eighteen (18) or 46.2 % are females.

Most of the respondents in Alvenda Campus were males.

In the Main Campus, fifty three (53) or 46.9% of the students are males and sixty (60) or 53.1% are females.

Most of the respondents in the Main Campus were females.

#### **1.2 income**

In Alvenda Campus, twenty nine (29) or 74.4 % of the students have less than P50,000; eight (8) or 20.5% have P50,000 – less than P100,000; one (1) or 2.6% have P100,000 – less than P150,000; and one (1) or 2.6 % have P250,000 or over average annual income.

Most of the respondents in Alvenda Campus have an average annual income of less than P50,000.

In the Main Campus, seventy three (73) or 64.6% of the students have less than P50,000; sixteen (16) or 14.2% have P50,000 – less than P100,000; eight (8) or 7.1% have P100,000 – less than P150,000; two (2) or 1.8% have P150,000 – less than P200,000; seven (7) or 6.2% have P200,000 – less than P250,000; and one (7) or 6.2 % have P250,000 or over average annual income.

Most of the respondents in the Main Campus have an average annual income of less than P50,000.

## **2. On the school's proximity in terms of**

### **2.1 distance**

In Alvenda campus, there are seven (7) students who lived less than 500 meters away from the school and also seven (7) students who lived about 2.5 kilometers or over away from the school.

The median distance of the students from home to school is between 1 kilometer and 1.5 kilometers.

In the Main campus, there are three (3) students who lived less than 500 meters away from the school and twenty nine (29) students who lived about 2.5 kilometers or over away from the school.

The median distance of the students from home to school is between 1.5 kilometer and 2.0 kilometers.

### **2.2 walkability**

The grand weighted mean for Alvenda campus which is 2.79 tells us that the way from home to school is walkable regardless of the distance. The parents often allowed their children to walk to and from school during the rains although the road is sometimes not passable for as long as their children are safe during their travel.

The grand weighted mean for the Main campus which is 2.54 tells us that the way from home to school is walkable regardless of the distance. The parents sometimes allowed their children to walk to and from school during the rains although the road is sometimes not passable for as long as their children are safe during their travel. Students are also concerned on the condition of their way to school.

### **2.3 accessibility**

The grand weighted mean for Alvenda campus which is 2.09 tells us that the school is somehow accessible because there are some transport vehicles available in the area. The students sometimes ride in their way to school but usually they preferred to walk to school during the rains. The road is somehow slippery and it is unsafe and risky for them ride in their way to school.

The grand weighted mean for the Main campus which is 2.64 tells us that the school is accessible because there are transport vehicles available in the area. The students from nearby barangays ride in their way to school especially during the rains. They preferred to ride in their way to school for as long as the road is passable and is safe for travel because it can save them time as they tend to manage time better and to provide a more relaxed way to travel to school.

### 3. On the class attendance of the students

In Alvenda campus, the mean number of days students are present was 17.6 which is about 2 days less than the average. This tells us that the students were absent on the average at about two days in each month from November to March.

In the Main campus, the mean number of days students are present was 18.0 which is about 1 day less than the average. This tells us that the students were absent on the average at about one day in each month from November to March.

### 4. On the significant difference in the class attendance of students when group according to

#### 4.1 sex

In Alvenda campus, the computed F-value 10.746 is significant against the critical F-value 4.105 at 0.05 level of uncertainty. In the Main campus, the computed F-value 7.295 is significant against the critical F-value 3.927 at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. That is, there is a significant difference in the class attendance of students when grouped according to sex. The result above shows that sex did influence class attendance of the students regardless of school proximity.

#### 4.2 income

In Alvenda campus, the computed F-value 0.053 is not significant against the critical F-value 2.874 at 0.05 level of uncertainty. In the Main campus, the computed F-value 1.402 is not significant against the critical F-value 2.299 at 0.05 level of uncertainty. We do not have enough evidence to reject the null hypothesis. That is, there is no significant difference in the class attendance of students when grouped according to income. The result above shows that annual income did not influence class attendance of the students regardless of school proximity.

### 5. On the significant relationship between the school's proximity and class attendance

#### 5.1 distance

In Alvenda campus, the computed Pearson  $r$  value 0.154 is not significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do not have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.046 is not significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do not have enough evidence to reject the null hypothesis. That is, there is no significant relationship between class attendance and school's proximity in terms of distance. This implies that students' class attendance is not related to school's proximity in terms of distance.

The students did not consider distance as a factor that affects their class attendance. Even if that distance means that they have to wake up early in the morning and travel a long distance to attend classes.

### 5.2 walkability

In Alvenda campus, the computed Pearson  $r$  value 0.380 is significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.226 is significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. That is, there is a significant relationship between class attendance and school's proximity in terms of walkability. The correlation coefficient of 0.380 and 0.226 is interpreted as low correlation. This implies that students' class attendance is slightly related to school's proximity in terms of walkability.

Even though the students did not consider distance as a factor that affects their class attendance, they look at the situation where the road on their way to school that is not passable usually discouraged them to attend classes.

### 5.3 accessibility

In Alvenda campus, the computed Pearson  $r$  value 0.380 is significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.226 is significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. That is, there is a significant relationship between class attendance and school's proximity in terms of accessibility. The correlation coefficient of 0.347 and 0.228 is interpreted as low correlation. This implies that students' class attendance is slightly related to school's proximity in terms of accessibility.

The availability of transport vehicles in the area is an advantage to students who have to travel a long distance. They preferred to ride in their way to school for as long as the road is passable and is safe for travel especially during the rains. Taking a transport resource can save them time as they tend to manage time better and provide a more relaxed way to travel to school. Accessibility of the school through transport vehicles enabled them to attend classes.

## 6. On the academic performance of the students

In Alvenda campus, five (5) students have a grade that "did not meet expectations," sixteen (16) have "fairly satisfactory," five (5) have "satisfactory," nine (9) have "very satisfactory," and

four (4) have “outstanding” performance. The mean academic performance, 80.27, tells us that the academic performance of the students is “satisfactory.”

In the Main campus, two (2) students have a grade that “did not meet expectations,” seventeen (17) have “fairly satisfactory,” forty three (43) have “satisfactory,” forty three (43) have “very satisfactory,” and eight (8) have “outstanding” performance. The mean academic performance, 83.42, tells us that the academic performance of the students is “satisfactory.”

## **7. On the significant relationship between the school’s proximity and academic performance**

### **7.1 distance**

In Alvenda campus, the computed Pearson  $r$  value 0.040 is not significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do not have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.062 is not significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do not have enough evidence to reject the null hypothesis. That is, there is no significant relationship between academic performance and school’s proximity in terms of distance. This implies that students’ academic performance is not related to school’s proximity in terms of distance.

### **7.2 walkability**

In Alvenda campus, the computed Pearson  $r$  value 0.383 is significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.373 is significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. That is, there is a significant relationship between class attendance and school’s proximity in terms of walkability. The correlation coefficient of 0.383 and 0.373 is interpreted as low correlation. This implies that students’ academic performance is slightly related to school’s proximity in terms of walkability.

### **7.3 accessibility**

In Alvenda campus, the computed Pearson  $r$  value 0.354 is significant against the critical  $r$  value 0.312 with 37 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. In the Main campus, the computed Pearson  $r$  value 0.337 is significant against the critical  $r$  value 0.189 with 111 degrees of freedom at 0.05 level of uncertainty. We do have enough evidence to reject the null hypothesis. That is, there is a significant relationship between class attendance and school’s proximity in terms of accessibility. The correlation

coefficient of 0.354 and 0.337 is interpreted as low correlation. This implies that students' academic performance is slightly related to school's proximity in terms of accessibility.

#### IV. Conclusion

Based from the findings of the study, the following conclusions were drawn:

Generally, there is a slight effect of school's proximity to students' attendance and academic performance in Mutia National High School and Mutia National High School Extension – Alvenda. That is, the more walkable and accessible the school the better students' class attendance and academic performance.

Specific conclusions about the profile, school proximity, and academic performance are:

1. most of the respondents in Alvenda Campus were males and most of the respondents in the Main Campus were females;
2. most of the respondents in Alvenda Campus have an average annual income of less than P50,000 and most of the respondents in the Main Campus have an average annual income of less than P50,000;
3. the median distance of the students from home to school in Alvenda campus is between 1 kilometer and 1.5 kilometers and the median distance of the students from home to school in the Main campus is between 1.5 kilometer and 2.0 kilometers;
4. in Alvenda campus the way from home to school is walkable regardless of the distance and in the Main campus the way from home to school is walkable regardless of the distance;
5. in Alvenda campus the school is somehow accessible because there are some transport vehicles available in the area and in the Main campus the school is accessible because there are transport vehicles available in the area;
6. in Alvenda campus, the mean number of days students are present was 17.6 which is about 2 days less than the average and in the Main campus, the mean number of days students are present was 18.0 which is about 1 day less than the average;
7. there is a significant difference in the class attendance of students when grouped according to sex; and there is no significant difference in the class attendance of students when grouped according to income;
8. there is no significant relationship between class attendance and school's proximity in terms of distance;

9. there is a significant relationship between class attendance and school's proximity in terms of walkability;
10. there is a significant relationship between class attendance and school's proximity in terms of accessibility;
11. the academic performance of the students is "satisfactory";
12. there is no significant relationship between academic performance and school's proximity in terms of distance;
13. there is a significant relationship between class attendance and school's proximity in terms of walkability; and
14. there is a significant relationship between class attendance and school's proximity in terms of accessibility.

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