

Adequacy of the Physical Plant and Facilities, Parental Support and the Academic Performance of the Senior High School Students

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Abstract — The study determined the adequacy of the Physical Plant and Facilities, Parental Support, and the Academic Performance of Senior High School Students in Liloan National Technical Vocational School, Southern Leyte. The findings of the study were the basis for a proposed Action Plan. The study involved 26 teachers and 40 parents. There were also 552 senior school students included. Complete enumeration was used in sampling. The physical facilities were perceived to be adequate and the condition is perceived to be very good. Parental support is also perceived as high. The majority of the students have a good grade range of 80-84, which is interpreted as Satisfactory. However, many students got a grade range of fairly satisfactory and very satisfactory. In all variables correlated to the academic performance: lab, library, equipment, and school facility the correlation reveals higher values on computed than the table values and so the null hypothesis is rejected. This means that there is a significant relationship between the status of school facilities and academic performance. In all variables correlated to the academic performance: volunteering, school awareness, home learning, and volunteering correlate higher values on computed than the table values, so the null hypothesis is rejected. This means that there is significant relationship between the status of school facilities and academic performance. This implies that parental support has strong impact on the success and failure of the students at school. The school sufficiently provided the physical facilities and the parental support of the parents were highly perceived and accorded. Hence, the students' academic performance was significantly enhanced by providing learning facilities and greater parental support. The proposed action plan should be implemented.

Keywords — *Physical Plant and Facilities; Parental Support; Academic Performance; Senior High School Students*

I. Introduction

The great challenge that all public schools in the Philippines are facing right now is the adequacy of the school's physical plant and facilities. The instructional facilities play an essential role in developing the students to be successful in school (Smith, 2016). The concept of providing conducive learning environment should be the ultimate goal of every school. On the other hand, the parental support is also equally essential to sustain strong partnership between school and home.

Ideally, this process involves the individually planned and systematically monitored arrangement of teaching procedures, adapted equipment and materials, accessible settings, and other interventions designed to help learners achieve a higher level of personal self-sufficiency and success in school and community than would be available if the student were only given access to a typical classroom education.

It is on this premise that the researcher conducts this study. The fervent hope of the researcher that the results of the study will contribute to the identification of problematic and strong aspects that would contribute to the delivery of educational services to the pupils. This will also be a useful tool to help shape a healthy, safe and friendly environment for all who live, learn and work in schools.

The Liloan National Technical Vocational High School is an emerging school founded in 2012 with regards to providing basic quality accessible and liberating high school education program. It goes with this mission the provision of adequate facilities to back with the students' instructional quality demands and the community.

The study determined the adequacy of the Physical Plant and Facilities, Parental Support and the Academic Performance of Senior High School Students in Liloan National Technical Vocational High School, Southern Leyte. The findings of the study were the basis for a proposed Action Plan.

More specifically, the study sought to answer the following questions:

1. What is the level of adequacy of the Physical Plant and Facilities of the school as perceived by the teachers and parents in terms of:
 - 1.1 Instructional Facilities;
 - 1.2 Library;
 - 1.3 School Rooms and Amenities; and
 - 1.4 Physical Plant?
2. What is the Level of Support of parents to their children with regards to:
 - 2.1 volunteering;
 - 2.2 awareness;
 - 2.3 home learning; and
 - 2.4 Collaborating with the community?
3. What is senior high school students' academic performance in Liloan National Technical Vocational High School?
4. Is there a significant relationship between:

- 4.1 the adequacy of the Physical Plant and Facilities and the academic performance of the Senior High School Students; and
- 4.2 parental support and academic performance of Senior High School Students?
5. What Action Plan can be proposed based on the findings of the study?

Hypotheses

Ho - There is no significant relationship between:

- a. the adequacy of the Physical Plant and Facilities and the academic performance of the Senior High School Students; and
- b. parental support and academic performance of Senior High School Students.

II. Methodology

Design. The study used a descriptive-correlational method of research. This refers to the method which collects detailed and factual information to describe existing phenomena. It describes systematically a situation or area of interest factually and accurately. It allows a researcher to describe and understand behavior through correlation carefully. Through this research, decisions could be made for improving, maintaining, or rejecting the focus to making it effective and efficient. This design is appropriate in determining the adequacy of the physical plant and facilities, parental support, and the academic performance of Senior High School Students of Liloan National Technical Vocational High School in Liloan, Southern Leyte. The findings of the study were the bases for a proposed Action Plan.

Sampling. The study respondents were the 26 Senior High School Teachers and the 40 parent-members of the Parent-Teachers Association. Complete enumeration was done in the teacher sampling as well as the parents who are members of the PTCA. All the 556 Senior High School Students were part as their grades served as secondary data.

Research Procedure. The researcher sought approval from the Dean of the Graduate School through a transmission letter and submitted to the Schools Division office for endorsement and approval. The researcher asked the permission from the school principal to conduct the study through the endorsed letter from the school's division office. Orientation was done for the teachers and the parents who are members of the PTCA. The researcher personally administered the survey to the participants. The teachers and the parents answered the tool in instructional facilities. After they answer the questionnaire, the questionnaire was retrieved and tallied for statistical analysis. The academic performance of the Senior High School students in Q3 was sought.

Ethical Issues. The right to conduct the study was strictly adhered through the principal's approval, approval of the Superintendent of the Division, and approval of the Regional office under research guidelines for graduate studies. Orientation of the respondents, both the teachers and the

parents were done separately. In the orientation, the issue on, an Informed Consent Form was accomplished prior to distribution of questionnaires. The secondary data needed a written permission was sought to the principal. As such, confidentiality and anonymity were followed.

Treatment of Data. Weighted Mean - this was used to determine the level adequacy of the physical plant and facilities of the school. T-Test for Mean Difference – this was used to determine the test of difference in the parents and the teachers' perceptions on the adequacy of the physical plant and facilities of the school. Pearson r product Moment – this was utilized to measure the relationship between the academic performance and the physical plant and facilities of the school.

III. Results and Discussion

TABLE 1-A
ADEQUACY OF PHYSICAL PLANT AND FACILITIES (LABORATORIES)

Laboratories	Weighted Mean	Interpretation
1. functional multimedia center	4.10	VERY GOOD
2. structured Learning Resource Center	3.80	VERY GOOD
3. functional science laboratory, and speech laboratory	3.94	VERY GOOD
4. complete sports equipment and covered court for athletic needs.	3.00	GOOD
5. functional and standard school clinic	3.70	VERY GOOD
6. functional Audio Video Room	4.00	VERY GOOD
7. functional computer laboratory with wi-fi connections	4.12	VERY GOOD
8. functional music room	3.76	VERY GOOD
9. functional dancing and theater room	3.33	GOOD
Average	3.75	VERY GOOD

Table 1-A presents the status of instructional facilities in terms of laboratories. The laboratories are important instructional facility of the school where academic activities are done. Functional and workable laboratories may facilitate better learning opportunities. The laboratories served as house of applied practice where all practical works are done. The students can do hands-on exercises, do observation using senses, participate in physical education, play sports or even watch video and perform operations in machine

The average weighted mean is 3.75 which is interpreted as Very Good. This is the perception of the teachers as they are the end user of the laboratories. They perceive the quality

and condition of the laboratories to be sufficient for the class use. The Liloan National Technical Vocational High School has appropriate budget allocation for laboratories.

The highest rated item is on “functional computer laboratory with wi-fi connections,” with a weighted mean of 4.12 which is interpreted as Very Good. This is due to the functional condition it offers to the students of the school. The lowest rated item is on “complete sports facilities and covered court for athletic needs,” with a weighted mean of 3.00, which is interpreted as Good. There is a need to upgrade the covered court facilities for sports.

TABLE 1-B
ADEQUACY OF PHYSICAL PLANT AND FACILITIES (LIBRARY)

Library	Weighted Mean	Interpretation
1. has enough books and other references.	4.10	VERY GOOD
2. has computer for information access.	4.00	VERY GOOD
3. librarian is technically skilled to assist students and teacher’s needs.	4.20	VERY GOOD
4. library is well equipped with reading materials enough for research works.	3.90	VERY GOOD
5. The school library is well ventilated and clean.	4.20	VERY GOOD
6. Reading materials and other reference in the library are provided	4.00	VERY GOOD
7. Learning soft-wares for video showing	3.40	GOOD
8. used of overhead projector	3.30	GOOD
9. Computer for information and data bank inside the Library.	3.00	GOOD
Average	3.79	VERY GOOD

Table 1-B presents the status of instructional facilities in terms of LIBRARY. The heart of academic institution is the library. The library is the richest source of knowledge which houses the prints and non-print materials. The library is an independent learning resource center where one could learn tons of information. The library could make or break a certain school. The highest value on library is equal to the strong academic foundation of the school.

The average weighted mean is 3.79 which is interpreted as Very Good. This means that the library collection is sufficient to facilitate better learning opportunities for the students. The book collection primarily comes for the school budget. However, there are also considerable number of

donated books from parents, LGU and non-government organizations. The patron sponsors were gracious enough to fulfill the school's inadequacy to supply books for the students.

The highest rated item is on “librarian is technically skilled to assist students and teacher’s needs,” and “The library is well ventilated and clean,” with a weighted mean of 4.20 interpreted as Very Good. The librarian has sufficient number of years of experience and trained to perform her duties. The library has sufficient number of ventilators and is kept clean all the time. The lowest rated item is on “Computer for information and data bank inside the Library,” with a weighted mean of 3.00 interpreted as Good. Although, records are now saved in hard drive however, computerization or developing program software for automation is still not done.

TABLE I-C
ADEQUACY OF PHYSICAL PLANT AND FACILITIES (EQUIPMENT)

Equipment	Weighted Mean	Interpretation
1. functional equipment for science laboratory, speech and AVR	3.90	VERY GOOD
2. school amenities such as rest rooms has its distinction for male and female and cleanliness maintained for continuous uses.	4.00	VERY GOOD
3. school amenities such as drinking fountain is sufficient.	4.20	VERY GOOD
4. study room and learning center can be availed by the students and teachers.	4.40	EXCELLENT
5. school amenities such as kiosk or canteen offers the food needed by every students and teachers.	4.30	EXCELLENT
6. Computer ratio in computer class and laboratory	4.00	VERY GOOD
7. Provision of Maps and learning posters	4.30	EXCELLENT
8. provision of TV, Cassette player and recorder	4.20	VERY GOOD
9. equipments of PE class like balls, bat, gloves, nets, etc.	3.90	VERY GOOD
10. Science lab equipment, ie. Microscope, test tubes, etc.	3.80	VERY GOOD
Average	4.10	VERY GOOD

Table I-C presents the status of instructional facilities in terms of EQUIPMENT. Equipment is defined as any learning tools that facilitate comfort and ease in study. Comfort rooms, drinking fountain, speech lab equipment, computer, microscope, chairs, multimedia facilities are typical examples of the learning equipment. This equipment could enhance better learning promotion

among students. They serve to create conducive learning situation and provide holistic realia for the students to do their hands-on study.

The weighted mean is 4.10 which is interpreted as Very Good. This means that the school has sufficient supply of equipment and efficient provision of some amenities to promote learning opportunities. The equipment is provided considering the student and class ratio. Proper scheduling and guidelines in utilization is well oriented and informed among students and teachers. Teachers are encouraged to use the facilities especially multimedia to support learning enhancement.

The highest-rated item is on “study room and learning center can be availed by the students and teachers,” with a weighted mean of 4.40 which is interpreted as Excellent. There is a policy ad guideline of schedule in the use of such facility posted in conspicuous place and announced during school orientation. The lowest rated item is on “science lab equipment,” which is rated 3.80 interpreted as Very Good. There is a good number of provisions of such equipment however, collection should be increase based on the growing population of the school.

TABLE 1-D
ADEQUACY OF PHYSICAL PLANT AND FACILITIES (SCHOOL FACILITIES)

School Facilities	Weighted Mean	Interpretation
1. concrete school buildings	4.00	VERY GOOD
2. standard class size of classrooms	4.20	VERY GOOD
3. science, speech and computer laboratories	3.90	VERY GOOD
4. study shed for students	4.30	EXCELLENT
5. toilets for urination and disposal	4.00	VERY GOOD
6. covered court for physical activities	3.40	GOOD
7. building is sufficient to the number of students	3.75	VERY GOOD
8. building is properly inspected annually for its safety and precautionary measure.	4.00	VERY GOOD
9. budget appropriation of building for renovation and repair	3.80	VERY GOOD
10. appropriate classroom furniture's for learning.	4.00	VERY GOOD
11. social spaces in and around school premises.	4.00	VERY GOOD
Average	4.08	VERY GOOD

Table I-D presents the status of instructional facilities in terms of FACILITIES. The school plant and facility are essential in providing conducive learning environment among students. There are appropriate provisions and standard measurements to follow before a school can operate the

academic offerings. Building for example with its room measures, or construction of laboratories, learning furniture and others should be in adequate number.

The average weighted mean is 4.08 which is interpreted as Very Good. This means that the school has provided sufficient school facilities for the students and teachers. The school's budget allocation is well provided for maintenance and repair and acquisition of new facilities is also requested and done through sponsorships and resource mobilization programs.

The highest rated item is on “study shed for students” with a weighted mean of 4.30 which is interpreted as excellent. The study shed outside school is well cleaned and provided for students in their group study or meetings. The lowest rated item is on “covered court for physical activities,” which is rated 3.40 interpreted as Good. This is due to the class ratio that can be accommodated in covered court but a plan is now being submitted for the expansion and renovation.

TABLE 2-A
PARENTAL SUPPORT IN TERMS OF VOLUNTEERING AND SCHOOL AWARENESS

A. Volunteering	Weighted Mean	Interpretation
1. Understanding parental role; increased comfort in school interactions and carryover of school activities at home.	4.20	HIGH
2. Take time to volunteer in any civic activity or PTA programs in school	3.60	HIGH
3. All-family awareness that families are welcomed and valued at school	4.50	VERY HIGH
4. Sharing time, skills and help on any school volunteer work	3.48	HIGH
5. Safeguard Role or perform other activities to aid safety and operation of school programs.	3.45	HIGH
Average	3.84	HIGH
B. School Awareness		
1. Understanding school programs and policies	4.60	VERY HIGH
2. Monitoring and awareness of child's progress	4.00	HIGH
3. Help identify responsive activities to address student's problems as needed	3.75	HIGH
4. Interactions with teachers and ease of communications with school and teachers	3.60	HIGH
5. Understanding of school expectations and procedures for behavior attendance and other policies	4.00	HIGH
Average	3.99	HIGH

Table 2-A presents the parental support in terms of volunteering and school awareness among parents. Parental Support refers to the volunteering of parents, parenting, communicating of parents to school personnel, learning at home to the children to help the teachers and collaborating with the community. Volunteering- Understanding teacher's job; increased comfort in school interactions and carryover of school activities at home. Self-confidence in ability to work in school and with children, or take steps for own education or work. All-family awareness that families are welcomed and valued at school. Gains in specific skills of volunteer work Parent patrols or other activities to aid school programs' safety and operation. School Awareness refers to the understanding of school programs and policies. Monitoring and awareness of child's progress: Conduct responsive activities to address students' problems as needed Interactions with teachers and ease of communication with school and teachers. Understanding of school expectations and procedures for behavior attendance and other policies

The average weighted mean in volunteering is 3.84 which is interpreted as High. This means that the parents often provide extended help and support to the school to collaborate with teachers in providing holistic learning programs for their children. The weighted mean for school awareness is 3.99 which is interpreted as High. This means that the parents are aware of their duties and part to participate in some school's consorted activities. The parents are also invited in an orientation ad meeting to facilitate better understanding of their obligations and concerns.

TABLE 2-B
PARENTAL SUPPORT IN TERMS OF HOME LEARNING AND COLLABORATING

A. Home Learning	Weighted Mean	Interpretation
1. Know how to support, encourage, and help student at home	4.20	HIGH
2. Discussions of school, class work, and homework at home.	4.00	HIGH
3. Understanding of instructional program and what child is learning in each subject	3.75	HIGH
4. Provide Tutorials and remedial support	4.10	HIGH
5. Provide pocket discussion and reinforcement of lesson in school	3.95	HIGH
Average	4.00	HIGH
B. Collaborating with the Community		
1. Information for students and families on community health, cultural, recreational, social support, and other programs or services.	3.60	HIGH
2. Information on community activities that link to learning skills and talents, including summer programs for students.	3.45	HIGH

3. Planned service integration of school in partnership with businesses, civic, counseling, cultural, health, recreation, and other agencies and organizations.	3.50	HIGH
4. Service to the community by students, families, and schools (e.g., recycling, art, music, drama, and other activities for seniors or others, etc.) Alumni to link to school programs for students.	3.64	HIGH
5. Knowledge and use of local resources by family and child to increase skills and talents, or obtain needed services.	3.60	HIGH
Average	3.56	HIGH

Table 2-B presents the parental support in terms of home learning and collaborating. Parental Support refers to the volunteering of parents, parenting, communicating of parents to school personnel, learning at home to the children to help the teachers and collaborating with the community.

Learning at Home- Know how to support, encourage, and help student at home each year. Discussions of school, class work, and homework. Understanding of instructional program each year, and what child is learning in each subject Appreciation of teaching skills. Awareness of child as learner.

Collaborating with Community- Information for students and families on community health, cultural, recreational, social support, and other programs or services. Information for students and families on community health, cultural, recreational, social support, and other programs or services. Planned service integration of school in partnership with businesses, civic, counseling, cultural, health, recreation, and other agencies and organizations. Service to the community by students, families, and schools (e.g., recycling, art, music, drama, and other activities for seniors or others, etc.) Alumni to link to school programs for students. Knowledge and use of local resources by family and child to increase skills and talents, or obtain needed services.

In terms of home learning, the average weighted mean is 4.00 which is interpreted as High. This means that parents often make a follow up to provide learning support for their children. In terms of volunteering, the weighted mean is 3.56 which is interpreted as High. This means that the parents mostly volunteer in some civic and school-based activities to promote their children's learning enhancement.

TABLE 3
ACADEMIC PERFORMANCE OF STUDENTS

Grades/Ratings	Description	Frequency	Percentage
90-100	Outstanding	84	15
85-89	Very Satisfactory	156	28
80-84	Satisfactory	182	34
75-79	Fairly Satisfactory	122	22
74 and below	Did not meet Expectation	8	1
Total		552	100
Weighted mean grade		83.32	Satisfactory

Table 3 presents the academic performance of the senior high school students. There are 84 (15%) out of 552 who got a grade range from 90-100 which is interpreted as outstanding; 156 (28%) out of 552 who got a grade of 85-89 with an interpretation of very satisfactory; 182 (34%) out of 552 with a grade range of 80-84 which is interpreted as Satisfactory; 122 (22%) out of 552 with a grade range of 75-79 interpreted as fairly satisfactory; and 8 (1%) with a grade range of 74 below which is interpreted as Did not meet expectation. The mean average is 83.32 equivalent to satisfactory. This means that majority of the pupils have a good grade range of 80-84 which is interpreted as Satisfactory. However, there is also good number of pupils who got a grade range of highly satisfactory and fairly satisfactory.

TABLE 4-A
TEST OF RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND STATUS
OF PHYSICAL FACILITY

Variables Correlated with Academic Performance	r values	Computed r	Table Value @0.05	Decision on Ho	Interpretation
LABORATORIES	0.70	12.544	9.84	Reject Ho	Significant
LIBRARY	0.68	13.954	9.84	Reject Ho	Significant
EQUIPMENT	0.75	10.544	9.84	Reject Ho	Significant
SCHOOL FACILITIES	0.75	11.243	9.84	Reject Ho	Significant

Table 4-A presents the test of the relationship between pupils' academic performance and the status of physical facilities. In all variables correlated to the academic performance: lab, library, equipment, and school facility the correlation reveals higher values on computed than the table values and so the null hypothesis is rejected. This means that there is significant relationship between the status of physical facilities and academic performance.

Many studies have shown that many school systems, particularly those in urban and high-poverty areas, are plagued by decaying buildings that threaten students' health, safety, and learning opportunities. Good facilities appear to be an important precondition for student learning, provided that other conditions are present that support a strong academic program in the school. A growing body of research has linked student achievement and behavior to the physical building conditions and overcrowding.

TABLE 4-B
TEST OF RELATIONSHIP BETWEEN ACADEMIC PERFORMANCE AND
PARENTAL SUPPORT

Variables Correlated with Academic Performance	r values	Computed r	Table Value @0.05	Decision on Ho	Interpretation
Volunteering	0.71	8.114	7.32	Reject Ho	Significant
School Awareness	0.66	9.994	7.32	Reject Ho	Significant
Home Learning	0.75	9.544	7.32	Reject Ho	Significant
Collaborating	0.72	8.243	7.32	Reject Ho	Significant

Table 4-B presents the test of the relationship between the academic performance of pupils and parental support. In all variables correlated to the academic performance: volunteering, school awareness, home learning and volunteering the correlation reveals higher values on computed than the table values and so the null hypothesis is rejected. This means that there is a significant relationship between the status of school facilities and academic performance. This implies that parental support has strong impact on the success and failure of the pupils at school.

IV. Conclusion

The school sufficiently provided the physical facilities and the parental support of the parents were highly perceived and accorded. Hence, the students' academic performance was significantly enhanced by the provision of learning facilities and greater parental support.

V. Recommendations

1. The proposed action plan should be implemented;
2. The school facilities could be further enhanced by:
 - 2.1 appropriating student-use ratio;
 - 2.2 the resource mobilization of the school heads should be strengthened;
 - 2.3 sponsorship and linkages could augment the facilities;

- 2.4 budget appropriation should be prioritized for maintenance and repair of some facilities;
- 2.5 acquisition of software for learning should be requested.
3. Parental support could be further tapped by:
 - 3.1 promoting further orientation to all parents;
 - 3.2 home-visitation and counselling;
 - 3.3 creating home directories for contacts;
 - 3.4 follow up calls.
4. Training of teachers to use multi-media to maximize learning opportunities should be done.

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