

**STATUS OF PHYSICAL PLANT AND FACILITIES OF A STATE UNIVERSITY AS  
EVALUATED BY THE STUDENTS**

Gaudencio G. Abellanos  
Cherry Ann P. Cutad  
Clint Joey A. Inson  
Kimberly Rose L. Cunanan  
Jastiene Mae S. Billones  
Rocel Rey S. Basada  
University of Southeastern Philippines  
[gaudencioabel@gmail.com](mailto:gaudencioabel@gmail.com)  
[cherryann.cutad@usep.edu.ph](mailto:cherryann.cutad@usep.edu.ph)  
[clintjoeyinson@gmail.com](mailto:clintjoeyinson@gmail.com)  
[kimberlyrosecunanan@gmail.com](mailto:kimberlyrosecunanan@gmail.com)  
[billonesjas@gmail.com](mailto:billonesjas@gmail.com)  
[rrbasada@gmail.com](mailto:rrbasada@gmail.com)

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**ABSTRACT**

The study aims to determine the status of physical plant and facilities of a state university as evaluated by the students. The study used quantitative non-experimental design to 100 respondents who are students from undergraduate and graduate school. The statistical tools used for the data analysis are mean, standard deviation, independent sample t-test and analysis of variance (ANOVA). The status of physical plant and facilities as evaluated by the students is of moderate level. Moreover, the data analysis showed that there is no significant difference when the students are grouped by their age, gender, religion and civil status. Lastly, there is a significant difference when the students are grouped by educational background.

**KEYWORDS:**

Status, Physical Plant, Facilities, Students, Accreditation Process.

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**INTRODUCTION**

Educational facilities are provided to ensure a comfortable learning environment where students are trained, and to optimize productivity in the teaching and learning processes. Studies have shown that a close relationship exists between the physical environment and the academic performance of students. Thus, the quality of the products of a University bears a direct relationship with the quality of the facilities deployed in the process of production, Asiabaka, (2008) and the rest of the world, McGowen, (2007).

The achievement of that goal cannot be possible without the efficiency and effectiveness in the provision of the services provided by the higher education institution. Most higher education institutions strive to achieve the efficiency and effectiveness in their educational services by investing wisely on issues such as facilities, human resources, education system and student. One of the most important issues that any university invest heavily on are the academic facilities, Vidalakis et al., (2013).

Apart from investing on the academic facilities to upgrade the quality of the academic services provided, the universities also invest on those facilities in order to meet the academic needs of the students and make their experience in the university worthwhile. Academic facilities are one of the important elements that must be present to ensure that the students, who are legal clients of these higher education institutions, are satisfied and have better academic services for better experience. Thus, the relationship between academic facilities and student satisfaction cannot be easily separated or overlooked, Gruber et al., (2010).

In this era of strong competition amongst Universities, student's satisfaction surveys are essential tools to evaluate the status on Physical Plant and Facilities and show the students that their opinions matter and their responses will

instigate change particularly to the accreditation office within the University. This calls the need to conduct this study.

#### FRAMEWORK

According to the Advanced English Dictionary, Microsoft Corporation, (2014) the word 'satisfaction' means, "the contentment one feels when one has fulfilled a desire, need, or expectation" or "state of being gratified or satisfied". Therefore, satisfaction can easily be understood as an act whereby there must be one party that can give or has an obligation of giving the other party experience be it from a service or some goods or combination of both. Or, as a phenomenon which individual person experience in relation to his or her personal needs or expectations concerning the realization of those needs or/and expectation. A review of the existing literature indicates a wide variance in the definitions of satisfaction and without a uniform definition of satisfaction, researchers are unable to select an appropriate definition for a given context; develop valid measures of satisfaction; and/or compare and interpret empirical results (Giese & Cote, 2002).

**Campus Site.** Campus site plays a major role in one's educational experience. It is advantageous if the school site is in a wholesome environment, safe from traffic and transportation hazards, sufficiently free from pollution whether air, water, noise, and other undesirable elements. It should also have considered the needs of the present school population and adequate space for future expansion and accessibility to major road networks and public transportation. Vigue (2002) reports that a site survey assessing campus safety and security should address the school's perimeter integrity, internal access control and entryways.

**Buildings.** Physical plant and facilities in any school system are vital in the learning of students. Study showed that inadequate physical facilities have some adverse effect on students' interest to learn. Hence, this may invariably affect their academic performance. In a situation where students are not having access to normal facilities like library equipment and inadequate seats in the classroom it is observed that these could contribute to low performance of students. Consequently, the availability of physical facilities in the school setting go a long way to motivate students to learn, Akomolafe et. al., (2016).

**Classrooms, Staff Rooms and Offices.** Classroom management is one of the essential physical dynamic that affects the academic performances and well-being of the students. According to Suleman and Hussain (2014), An auspicious classroom should have well-equipped with copious and helpful facilities that guarantees the student's welfare and not for school compliances. Hence, school ought to prioritize the needs of the classroom with adequate importance. It is important to note that the behavior of the students and educators depends on the classroom atmosphere whether it's too hot or too cold, resulting on negative effects such as discomfort and loss of concentration. Not to mention, the proper arrangement of physical instruments as such as desks, desks and chalkboards. Higgins et al (2005) stated that well organized furniture emphasized comfort and intention of accessibility. With these purposes it gives opportunity to work cooperatively among the students and strengthening the connection of the students and educators.

**Indoor and Outdoor Facilities.** According to Harb and El-shaarawin (2006) there are two types of factors affecting student academic achievement. These are internal and external classroom factors. Afe (2001) pointed out that the school environment is exerting the greatest influence next to the home on the students developing, according to him, a favorable school environment is the one which stimulate and relevant physical facilities like libraries, teaching materials space and instructional resources. It is one in which there is a sense of psychological well-being, in which the teacher is capable of establishing report of mutual esteem, good relationship and enhance the mental health of the learners.

**Medical and Dental Services.** The school health service promotes healthy development and wellbeing, helping students reach their full potential. School health nurses provide the service in partnership with schools. The school health service is free and confidential. Students learn better when they are healthy, safe and happy, State of Western Australia Child and Adolescent Health Service – Community Health, (2018).

**Student Center.** In this aspect, students are interested in the lecture theatres or student centers that have adequate and efficient lighting, attractive design of the hall (in the sense of arrangement and color), adequate and efficient lecturing aid materials such as powerful stage projectors, modern draw boards, and sufficient size of the whole student center, Farahmandian et al., (2013). Research done by (Sohail & Shaikh, 2004) as cited in (Farahmandian et al., 2013) indicates that, students are more likely to be satisfied with the institution that has not only good curriculum but also attractive and efficient student halls.

**School Canteen.** According to William (2002) ambience of cafeteria plays a big part in customer satisfaction. This element is about comfortable seating arrangement that leave enough space for customer to move, or high-quality design of the space and building, and also the suitable music. Besides that, the packaging of food, size and design of plate as well as lighting of the cafeteria will directly affect the individual's perception. Place with nice ambience which decorated with high-end furniture and good choice of colors is the main factor that will build customer loyalty and getting students to come back time and time again to the dining place. Furthermore, Ilias, Hasan et. al., (2008) the capabilities, an institution to provide and manage these, that would enable to meet student expectations and gain competitive advantage.

#### **OBJECTIVE OF THE STUDY**

The study was conducted to determine the status of the Physical Plant and Facilities as evaluated by the students in relation to campus site, buildings, classrooms and staff rooms and offices, in and outdoor facilities, medical and dental facilities, student center and school canteen and the significant difference in the status of Physical Plant and Facilities when the students are grouped by their demographic profile.

#### **METHODOLOGY**

The researchers made used quantitative non-experimental design. The goal is the acquisition of factual, accurate, and systematic data that can be used in averages, frequencies and similar calculations. The study was conducted to 100 respondents who are students from undergraduate and graduate school. Mean, standard deviation, independent sample t-test and analysis of variance (ANOVA) were the statistical tools used for the data analysis.

#### **NULL HYPOTHESIS**

Ho - There is no significant difference in the status of physical plant and facilities when the students are grouped by their profile.

#### **RESULTS AND DISCUSSION**

Presented in this section is the analysis and interpretation of the data gathered.

As presented in Table 1, the status of Physical Plant and Facilities as evaluated by the students is of moderate level with the mean rating of 2.76. This means that the Physical Plant and Facilities need more improvements. This finding conforms to Akomolafe et. al., (2016) that physical plant and facilities in any school system are vital in the learning of students. Consequently, the availability of physical facilities in the school setting go a long way to motivate students to learn. School Canteen with the mean rating of 3.62 discloses high level. Buildings as parameter obtained a mean rating of 2.82 or *moderate*. However, the other five remaining dimensions disclose low level with a mean rating of 2.53 for classrooms, 2.41 for staff rooms and offices, 2.43 for in and outdoor facilities and 1.85 for student center respectively. Moreover, the Standard Deviation shows homogeneity of the responses among respondents.

*Table 1. Status of Physical Plant and Facilities as Evaluated by the Students*

| Indicator                   | SD         | MEAN        | Descriptive Level |
|-----------------------------|------------|-------------|-------------------|
| Campus Site                 | .39        | 3.63        | High              |
| Buildings                   | .33        | 2.82        | Moderate          |
| Classrooms                  | .49        | 2.53        | Low               |
| Staff rooms and Offices     | .62        | 2.41        | Low               |
| In and Outdoor Facilities   | .66        | 2.43        | Low               |
| Medical and Dental Services | .49        | 2.75        | Moderate          |
| Student Center              | .16        | 1.85        | Low               |
| School Canteen              | .28        | 3.62        | High              |
| <b>Overall</b>              | <b>.27</b> | <b>2.76</b> | <b>Moderate</b>   |

Presented in Table 2 is the non-significant difference in the status of physical plant and facilities when the students are grouped according to their age as revealed in the f-value of 1.06 with the p-value of .348 which is higher than .05 level of significance. All the parameters show nonsignificant difference. This implies that age of the students is not a source of difference along this variable and the statement of Daigneau, (2006) can be a best advise stated that the better the academic facilities lead to better education process and its overall quality

*Table 2. Significant Difference in the Status of Physical Plant and Facilities when the Students are Grouped According to Age*

| Indicator                   | Below 20 years old | 21- 35 years old | 35 years old and above | f-value     | p-value     | Significance  |
|-----------------------------|--------------------|------------------|------------------------|-------------|-------------|---------------|
| Campus Site                 | 3.62               | 3.64             | 3.61                   | .048        | .953        | Accept        |
| Buildings                   | 2.86               | 2.81             | 2.77                   | .403        | .669        | Accept        |
| Classrooms                  | 2.44               | 2.54             | 2.56                   | .431        | .651        | Accept        |
| Staff rooms and Offices     | 2.36               | 2.38             | 2.53                   | .495        | .611        | Accept        |
| In and Outdoor Facilities   | 2.30               | 2.37             | 2.76                   | 3.30        | .041        | Reject        |
| Medical and Dental Services | 2.72               | 2.71             | 2.89                   | .986        | .377        | Accept        |
| Student Center              | 1.80               | 1.86             | 1.85                   | 1.47        | .233        | Accept        |
| School Canteen              | 3.61               | 3.61             | 3.65                   | .161        | .852        | Accept        |
| <b>Overall</b>              | <b>2.72</b>        | <b>2.74</b>      | <b>2.83</b>            | <b>1.06</b> | <b>.348</b> | <b>Accept</b> |

Presented in Table 3 is the non-significant difference in the status of physical plant and facilities when the students are grouped according to their gender as revealed in the t-value of 1.158 with the p-value of .250 which is higher than .05 level of significance. All the parameters show nonsignificant difference. As mentioned by Mavondo (2000) the student satisfaction is an evidence to measure how well effective an institution. This implies that gender of the students is not also a source of difference along this variable.

**Table 3. Significant Difference in the Status of Physical Plant and Facilities when the Students are Grouped According to Gender**

| <b>Indicator</b>            | <b>Male</b> | <b>Female</b> | <b>t-value</b> | <b>p-value</b> | <b>Significance</b>    |
|-----------------------------|-------------|---------------|----------------|----------------|------------------------|
| Campus Site                 | 3.61        | 3.64          | .267           | .790           | Not Significant        |
| Buildings                   | 2.74        | 2.87          | 1.993          | .049           | Not Significant        |
| Classrooms                  | 2.50        | 2.53          | .315           | .753           | Not Significant        |
| Staff rooms and Offices     | 2.37        | 2.43          | .460           | .646           | Not Significant        |
| In and Outdoor Facilities   | 2.34        | 2.49          | 1.117          | .267           | Not Significant        |
| Medical and Dental Services | 2.75        | 2.75          | .013           | .990           | Not Significant        |
| Student Center              | 1.82        | 1.89          | 1.265          | .209           | Not Significant        |
| School Canteen              | 3.58        | 3.64          | 1.029          | .306           | Not Significant        |
| <b>Overall</b>              | <b>2.72</b> | <b>2.78</b>   | <b>1.158</b>   | <b>.250</b>    | <b>Not Significant</b> |

Presented in Table 4 is the significant difference in the status of physical plant and facilities when the students are grouped according to their religion. The findings reveal no significant difference as showed in the t -value of .485 with the p-value of .628 which is greater than .05 level of significance. This implies that the religion of students is not a source of difference among the seven variables but campus site matter. The findings affirm to the notion of Vigue (2002) that campus site plays a major role in one's educational experience.

**Table 4 Significant Difference in the Status of Physical Plant and Facilities when the Students are Grouped According to Religion**

| <b>Indicator</b>            | <b>Catholic</b> | <b>Non-Catholic</b> | <b>t-value</b> | <b>p-value</b> | <b>Significance</b>    |
|-----------------------------|-----------------|---------------------|----------------|----------------|------------------------|
| Campus Site                 | 3.71            | 3.49                | 2.74           | .007           | Significant            |
| Buildings                   | 2.84            | 2.77                | .956           | .341           | Not Significant        |
| Classrooms                  | 2.47            | 2.61                | 1.32           | .188           | Not Significant        |
| Staff rooms and Offices     | 2.33            | 2.54                | 1.62           | .107           | Not Significant        |
| In and Outdoor Facilities   | 2.34            | 2.58                | 1.77           | .080           | Not Significant        |
| Medical and Dental Services | 2.77            | 2.71                | .513           | .609           | Not Significant        |
| Student Center              | 1.84            | 1.84                | .032           | .975           | Not Significant        |
| School Canteen              | 3.63            | 3.68                | .544           | .588           | Not Significant        |
| <b>Overall</b>              | <b>2.74</b>     | <b>2.77</b>         | <b>.485</b>    | <b>.628</b>    | <b>Not Significant</b> |

Disclosed in Table 5 is the non-significant difference in the status of physical plant and facilities when the students are grouped according to civil status. The findings reveal no significant difference as showed in the t-value of .091 with the p value .928 which is greater than .05 level of significance. Thus, the quality of the products of a University bears a direct relationship with the quality of the facilities deployed in the process of production, Asiabaka, (2008). This implies that the civil status is not a source of difference along this variable.

**Table 5. Significant Difference in the Status of Physical Plant and Facilities when the Students are Grouped According to Civil Status**

| Indicator                   | Single      | Married     | t-value     | p-value     | Significance           |
|-----------------------------|-------------|-------------|-------------|-------------|------------------------|
| Campus Site                 | 3.63        | 3.63        | .000        | 1.00        | Not Significant        |
| Buildings                   | 2.83        | 2.78        | .622        | .536        | Not Significant        |
| Classrooms                  | 2.52        | 2.52        | .070        | .944        | Not Significant        |
| Staff rooms and Offices     | 2.42        | 2.37        | .315        | .753        | Not Significant        |
| In and Outdoor Facilities   | 2.40        | 2.51        | .686        | .495        | Not Significant        |
| Medical and Dental Services | 2.73        | 2.80        | .655        | .514        | Not Significant        |
| Student Center              | 1.85        | 1.84        | .295        | .769        | Not Significant        |
| School Canteen              | 3.62        | 3.60        | .246        | .806        | Not Significant        |
| <b>Overall</b>              | <b>2.75</b> | <b>2.79</b> | <b>.091</b> | <b>.928</b> | <b>Not Significant</b> |

Presented in Table 6 is the significant difference in the status of physical plant and facilities when the students are grouped according to their educational background as revealed in the f-value of 4.69 with the p-value of .000 which is below .05 level of significance. Four out of eight parameters show significant difference in terms of classrooms with p-value of .000, staff rooms and offices with p-value of .001, in and outdoor facilities with p-value of .000. The findings can be affirmed to the notion of Zeithaml (2003) stated that in the context of this study may influence the students' satisfaction. In fact, there is a relationship between the physical facilities and students' satisfaction. This implies that educational background of the students can be a source of difference along this variable.

**Table 6. Significant Difference in the Status of Physical Plant and Facilities when the Students are Grouped According to Educational Background**

| Indicator                   | Bachelor's Degree | Master's Degree | t-value     | p-value     | Significance       |
|-----------------------------|-------------------|-----------------|-------------|-------------|--------------------|
| Campus Site                 | 3.62              | 3.67            | .518        | .606        | Not Significant    |
| Buildings                   | 2.78              | 2.97            | 2.36        | .020        | Not Significant    |
| Classrooms                  | 2.42              | 2.93            | 4.40        | .000        | Significant        |
| Staff rooms and Offices     | 2.31              | 2.81            | 3.27        | .001        | Significant        |
| In and Outdoor Facilities   | 2.32              | 2.91            | 3.79        | .000        | Significant        |
| Medical and Dental Services | 2.68              | 3.04            | 2.96        | .004        | Significant        |
| Student Center              | 1.83              | 1.90            | 1.79        | .075        | Not Significant    |
| School Canteen              | 3.61              | 3.65            | .561        | .576        | Not Significant    |
| <b>Overall</b>              | <b>2.70</b>       | <b>2.99</b>     | <b>4.69</b> | <b>.000</b> | <b>Significant</b> |

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**CONCLUSION**

Based on the findings, the researchers concluded that the status of physical plant and facilities as evaluated by the students is of moderate level. Moreover, the data analysis showed that there is no significant difference when the students are grouped by their age, gender, religion and civil status. Lastly, there is a significant difference when the students are grouped by educational background.

**REFERENCE**

- [1] Afe, A. (2001). Impact of School Facilities on Students' Academic Achievement.
- [2] Akomolafe et. al. (2017). 1. The Impact of Physical Facilities on Students' Level of Motivation and Academic Performance in Senior Secondary Schools in South West Nigeria).
- [3] Daigneau, W. A. (2006). Facilities and Educational Quality. *Organization for Economic Cooperation and*
- [4] Farahmandian, S., Minavand, H., & Afshardost, M. (2013). Perceived Service Quality and Student Satisfaction in Higher Education. *IOSR Journal of Business and Management*.
- [5] Gbadosami, G., & De Jager, J. (2010). Specific remedy for specific problem: measuring service quality in South African higher education. *Higher Education*, 251-267.
- [6] Giese, J., & Cote, J. (2002). *Defining Consumer Satisfaction*. Washington: Washington University.
- [7] Gruber, T., Fub, S., Voss, R., & Glaser-Zikuda, M. (2010). "Examining student satisfaction with higher education services: Using a new measurement tool". *International Journal of Public Sector Management*, 23 No. 2, 105-123.
- [8] Harb, E. (2006). School Facility Conditions and Student Academic Achievement.
- [9] Higgins, S. H. (2005). The impact of school environments: A literature review. Callaghan, NSW: University of Newcastle.
- [10] Ilias, A. (2008). *Student Satisfaction and Service Quality: Any Differences in Demographic Factors*.
- [11] Mavondo, F. e. (2000). *Student Satisfaction with Tertiary Institution and Recommending it to Prospective Students*.
- [12] McGowen, R. S. (2007). *The Impact of School Facilities on Student Achievement, Attendance, Behavior, Completion Rate and Teacher Turnover Rate in Selected Texas High Schools* . Texas: Texas A&M University.
- [13] Microsoft Corporation. (2014). Advanced English Dictionary.
- [14] Sivathaasan, N. (2013). Personal Characteristics and Use of Library Facilities: A Special Reference to Faculty of Management Studies and Commerce University of Jaffna Sri Lanka. *European Journal of Business and Innovation Research*, 72-79.
- [15] Sohail, M. S., & Shaikh, N. M. (2004). Quest for Excellence in Business Education: A Study of Student Impressions of Service Quality. *Quality Assurance in Education*.
- [16] Suleman, Q. a. (2014). Effects of Classroom Physical Environment on the Academic Achievement Scores of Secondary School Students in Kohat Division, Pakistan. *International Journal of Learning & Development*,
- [17] Vidalakis, C., Sun, M., & Papa, A. (2013). "The quality and value of higher education facilities: a comparative study". *Facilities*, 31 No. 11/12, 489-504.
- [18] Vigue, A. (2002). *Physical facilities for education: what planners need to know* .
- [19] William, B., Gruber, T., & Smzigin, I. (2007). Service quality in higher education: The role of students expectations. *Journal of Business Research*, 949-959.
- [20] Zeithaml, V. (2003). *Consumer Perceptions of price, quality and value; a mean-end model and synthesis of evidence*, *Journal Mof Marketing*.
- [21] Zeithaml, V. (2003). *Services Marketing: Integrating customer focus across the firm*.