



## THE STUDENTS' LEARNING ENVIRONMENT OF THE COLLEGE OF ARTS AND SCIENCES OF NUEVA ECIJA UNIVERSITY OF SCIENCE AND TECHNOLOGY

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### Abstract

*This research study aimed to assess the students' learning environment of the College of Arts and Sciences at the Nueva Ecija University of Science and Technology, Cabanatuan City, during the academic year 2017-2018. Specifically, it sought to answer questions about the profile of the students; teachers' competence in terms of instruction, and attitude; and students services offered by CAS. This research study employed the descriptive-evaluative type of research. The respondents of this study were composed of 73 students from first year to fourth year. CAS offers three programs which include the BS Chemistry, BS Environmental Science and BS Agriculture. Questionnaire was used as an instrument in obtaining relevant information about the respondents and the components of learning environments. Based on the results and findings, the CAS students are generally female, single, belonging to the low family income and with average academic performance. The competence of the teachers in terms of the instruction, attitude and physical aspects was satisfactory and students agreed that they were good and competent in the field of teaching. The students services were satisfactory. Registrar's staff were polite in any transactions they made and prompt in attending to students request, however, students were not satisfied with the services being offered to them by the security personnel as well as the food personnel. The physical facilities were satisfactory. The audio visual room was conducive and well maintained however, the classrooms, student center and comfort rooms were fair. There is a significant difference among the year levels of students in the college in terms of teachers' competence, student services and physical facilities.*

### Keywords:

*Learning Environment, Teachers' Competence, Students' Services, Physical Facilities*

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## 1. INTRODUCTION

The learning environment has a strong positive relationship with students' ratings of their overall school satisfaction, students' self-esteem, and academic performance (Tope, 2011 and Sandberg, 2014). Teachers competency enhances a teacher's ability to create an environment that is fair, understanding, and accepting of diverse students, ideas, experiences, and backgrounds. Teachers have been found to be the most important factor influencing student achievement (Kaplan and Owings, 2002).

Likewise, a growing body of research has found that physical facilities and services can have a profound impact on student outcomes. Physical facilities and student services affect health, behaviour, engagement, learning, and growth in achievement (Haverinen-Shaughnessy, 2011). Thus,

researchers generally conclude that without adequate and functional facilities and resources and services, it is extremely difficult to serve large numbers of students with complex needs (Jones, 2007). Researchers have found most schools lack 21st century facilities in the form of infrastructure, laboratories, and instructional space (Buckley and Shang, 2004). Thus, quality of facilities is an important predictor of teacher retention and student learning.

Assessment of the learning environment is very much important to ensure the quality and adequacy of its components (Ancheta, 2013). Assessment is a method for judging the worth of the program or environment, its quality, importance, extent or condition (Encarta Dictionary, 2009). Assessment is a determinant of the success or failure of the program. It can determine the worth or value of the learning environment as well as its strengths and weaknesses (Tessmer 2013).

The foregoing premises, justify the relevance of this study.

## Objectives

This research study aimed to assess the students' learning environment of the College of Arts and Sciences at the Nueva Ecija University of Science and Technology, Cabanatuan City, during the academic year 2017-2018. Specifically, it sought to answer the following questions: (1) How may the profile of the students be described in terms of gender, civil status, socio economic status, and academic performance?, (2) How may the teachers' competence be described in terms of instruction, attitude, and physical aspect?, (3) How may the students services offered by College of Arts and Sciences be described in terms of Scholarships/Financial Assistance Services, Health Services, Food Services, Library/Learning Resource Center Services, Guidance and Counseling Services, Student Organization and Development Services, Student Welfare and Security Services, Testing Center Services, Sports and Cultural Development Services, Registrar's Office Services, Alumni and Placement Services, and Student Publication Services?, (4) How may the physical facilities available in the department be described in terms of Library/Learning Resource Center, Laboratories, Classrooms, Instructional Equipments, Audio Visual Room, Comfort Rooms, Student Center/Students' Lounges, and Corridors/Alleys/Exit Ways?, and (5) Is there a significant difference among the year levels of the students in terms of teachers' competence, students' services and physical facilities offered by the college?.

## 2. METHODOLOGY

This reasearch study employed the descriptive-evaluative type of research. It gives information about the learning environment in the College of Arts and Sciences specifically the teacher's competence, student services, and physical facilities.

The respondents of this study were composed of 73 students from the College of Arts and Sciences in NEUST. The respondents were 87 percent of the total population of 84 students. The researcher tried to distribute

questionnaires to all students of the college, however, only 87 percent of the total population was given due to irregularity of schedule of classes. Some students attend only specific subject since they are not regular students. The College of Arts and Sciences offers three programs which include the BS Chemistry, BS Environmental Science and BS Agriculture.

This study used the questionnaire as an instrument in obtaining relevant information about the respondents and the components of learning environments.

The questionnaire was divided into three parts. Part I is the student's profile which includes, the personal information such as course, gender, age, civil status, average grade, and their socio economic status in terms of average monthly family income. Part II is the students' assessment of the learning environment which includes the teachers' competence, student services, and physical facilities. Teachers' Competence has three components which includes the instruction which describes the actual competence of the teacher in teaching the subject; attitude where the emotion, values, and personality of the teacher were included; and physical aspect which covers the physical feature and good grooming of the teacher. The students services include the services offered by the department to the students. These are the following: scholarship/financial assistance , health, food, library/learning resource center, guidance and counseling, student organization and development, student welfare and security, testing center, sports and cultural development, registrar's office, allumni and placement, and student publication. The physical facilities include the following: library/LRC, laboratories, classroom, instructional equipment, audio-visual room, comfort rooms, student center/student lounges and corridors/alleys/exit ways. Part III is the section where students can write their comments, sugestions and recommendations for the improvement of the three aspects of learning environment.

Reliability coefficient of 0.76 was obtained using Cronbach's Alpha. The validity of the questionnaire was ensured by means of conducting field trials and subjecting to expert's checking. The experts include senior faculty of the Mathematics and Physics Department.

The study used the frequency count, percentage, mean and analysis of variance (ANOVA). Frequency count and percentages were used to describe the profile of the respondents. Mean, weighted mean, and general weighted mean were used to describe the learning environment which includes the teachers' competent, students services and physical facilities. In the analysis of data, the following rating scale was used to interpret the result.

4.21 – 5.00	Very Satisfactory
3.41 – 4.20	Satisfactory
2.61 – 3.40	Fair
1.81 – 2.60	Below Satisfactory

1.0 – 1.80 Needs Improvement

Analysis of Variance (ANOVA) was used to test if there a significant difference among the year levels of the students in terms of teachers' competence, students' services and physical facilities offered by the college.

### 3. RESULTS AND DISCUSSION

#### Profile of the Respondents

The profile of the respondents were described by students' gender, civil status, average monthly family income, and average grade.

**Table 1.** Profile of the Respondents

Gender	1	2	3	4	Frequency	Percentage
<b>Male</b>	14	1	4	11	30	41%
<b>Female</b>	20	1	11	11	43	59%
<b>Total</b>	<b>34</b>	<b>2</b>	<b>15</b>	<b>22</b>	<b>73</b>	<b>100%</b>
Civil Status	1	2	3	4	Frequency	Percentage
<b>Single</b>	33	2	15	22	72	98.63%
<b>Married</b>	1	0	0	0	1	1.37%
<b>Total</b>	<b>34</b>	<b>2</b>	<b>15</b>	<b>22</b>	<b>73</b>	<b>100%</b>
Average Monthly Family Income	1	2	3	4	Frequency	Percentage
<b>10 000 –below</b>	30	2	6	12	50	68.49%
<b>10 001 – 20 000</b>	2	0	6	7	15	20.55%
<b>20 001 – 30 000</b>	2	0	2	2	6	8.22%
<b>30 001 – 50 000</b>	0	0	1	1	2	2.74%
<b>50 001 – above</b>	0	0	0	0	0	0%
<b>Total</b>	<b>34</b>	<b>2</b>	<b>15</b>	<b>22</b>	<b>73</b>	<b>100%</b>
<b>Average Grade</b>	<b>2.5</b>	<b>2.7</b>	<b>2.45</b>	<b>2.39</b>	<b>2.51</b>	

Students were dominated by female with a percentage of 59% and male with only 41%. The ratio of male to female is 2:3 which means that for every 2 male students there were 3 female students.

Almost all students are single with a percentage of 98.63% and only one student is married with a percentage of only 1.37%.

The table also shows that over half of the respondents belong to the low family income of Php 10 000.00 and below with a percentage of 68.49%. There were 20.55% students with average monthly family income of Php 10 001.00 to Php 20 000.00. Almost only 11% students belong to the average monthly family income of Php 20 001.00 and above. According to the National Statistics Coordinate Board, as cited by Remo in the Philippine Daily Inquirer in February, 2013, a family of five living in the National Capital

Region should earn nowadays at least Php 10 000.00 a month in order to meet their basic needs. Based on this data, it appears that the monthly family income far below this amount can hardly meet the other needs of a family like education of children. This could be one of the reasons why the students in this study enrolled in a state-funded institution charging lower or no tuition fees.

The average grade of the students in the College of Arts and Sciences was 2.51 which means that they belong to the average academic performance.

#### Teachers' Competence

The teachers' competence were described in terms of instruction, attitude and physical aspects. Table 2 shows the teachers' competence in terms of instruction, attitude and physical aspects of the teachers.

**Table 2.** Teachers' Competence

Teachers' Competence	1st Year		2nd Year		3rd Year		4th Year		Over-all	Interpretation
	M	VI	M	VI	M	VI	M	VI	M	VI
<b>Instruction</b>	3.23	F	5.0	VS	4.106	S	3.992	S	4.082	S
<b>Attitude</b>	3.094	F	5.0	VS	4.106	S	4.054	S	4.064	S
<b>Physical Aspect</b>	3.226	F	5.0	VS	4.36	VS	4.418	VS	4.251	VS
<b>GWM</b>	<b>3.183</b>	<b>F</b>	<b>5.0</b>	<b>VS</b>	<b>4.191</b>	<b>S</b>	<b>4.155</b>	<b>S</b>	<b>4.132</b>	<b>Satisfactory</b>

The data in the table revealed that the competence of the teachers from first years was fair with a mean of 3.183. This means that students were not that satisfied in the teachers' teaching performance. Some students commented that some teachers are not approachable and questions were not entertained right away. One student also commented that the schedule of time of classes should be followed and the teacher should teach first the lesson before giving any seatwork or activities.

However, the table also revealed opposite findings from the second year, third year and fourth year with the mean of 5.0, 4.191 and 4.155 respectively which were interpreted as very satisfactory and satisfactory. For the higher years, the teachers were

competent and they were satisfied with the kind of teaching the teachers offer to them.

The teachers were obtained a satisfactory rating in terms of instruction and attitude while very satisfactory in terms of physical aspects. In general, the competence of the teachers in terms of the instruction, attitude and physical appearance was satisfactory with a mean of 4.132. Despite of the comments of the first years, students agreed that teachers were good and competent in the field of teaching in terms of instruction, attitude, and physical aspects.

### Students' Services

Table 3 shows the assessment of students to different services offered by the college.

**Table 3. Students' Services**

Students' Services	1st Year		2nd Year		3rd Year		4th Year		Over-all	Interpretation
	M	VI	M	VI	M	VI	M	VI	M	VI
<b>Scholarship/Financial Assistance Services</b>	2.942	F	5.0	VS	3.76	S	3.946	S	3.912	S
<b>Health Services</b>	2.988	F	4.2	S	4.16	S	3.818	S	3.792	S
<b>Food Services</b>	3.078	F	3.0	F	3.628	S	3.708	S	3.354	F
<b>Library/ Learning Resources Center Services</b>	3.214	F	4.2	S	4.026	S	3.436	S	3.719	S
<b>Guidance and Counseling Services</b>	3.16	F	4.5	VS	4.2	S	4.074	S	3.984	S
<b>Student Organization and Development Services</b>	3.052	F	5.0	VS	4.0	S	3.79	S	3.961	S
<b>Student Welfare and Security Services</b>	3.21	F	2.0	BS	2.948	F	2.662	F	2.705	F
<b>Testing Center Services</b>	3.054	F	4.0	S	3.986	S	4.036	S	3.769	S
<b>Sports and Cultural Development Services</b>	3.182	F	4.3	VS	3.894	S	3.818	S	3.798	S
<b>Registrar's Office Services</b>	3.436	S	5.0	VS	4.414	VS	4.138	S	4.247	VS
<b>Alumni and Placement Services</b>	3.024	F	5.0	VS	4.054	S	4.026	S	4.026	S
<b>Student Publication Services</b>	3.096	F	5.0	VS	4.082	S	4.074	S	4.063	S
<b>GWM</b>	<b>3.12</b>	<b>F</b>	<b>4.267</b>	<b>VS</b>	<b>3.929</b>	<b>S</b>	<b>3.794</b>	<b>S</b>	<b>3.778</b>	<b>Satisfactory</b>

From the table, first year students were not satisfied with the services offered by the college with a mean score of 3.12 interpreted as fair. All services were fair to them except for

the registrar's office services which gained the highest mean of 3.436 interpreted as satisfactory. In contrast, students from the second year level were very much satisfied with the services being offered to them, as

shown by the mean score of 4.267 interpreted as very satisfactory. This result was with exception to student welfare and security services and food services which only gained a mean score of 2.0 and 3.0 interpreted as below satisfactory and fair, respectively. Likewise, the third year and fourth year level were also satisfied with the services offered to them with a mean score of 3.929 and 3.794 respectively, both interpreted as satisfactory. These results were also with exception to student welfare and security services which gained only a mean score of 2.948 and 2.662, respectively interpreted as fair.

In general, the scholarship/financial assistance services, health services, library services, guidance and counseling services, student organization and development services, testing center, sports and cultural development services, registrar's office, alumni and placement services and student publications services were all satisfactory with a mean ranging from 3.4 to 4.3. Among these services, registrar's office obtained the highest mean of 4.27 interpreted as very satisfactory. According to the students, registrar's staff were polite in any transactions they made and prompt in attending to their request.

However, the data on the table also revealed that two of the students' services obtained the lowest means with 2.705 and 3.354 interpreted as fair. These two were the student welfare and security services and food services. Students were not satisfied with the services being offered to them by the security personnel as well as the food personnel.

From the comments of the students, security personnel were not polite, skilled and fair to all students. They also commented that security guards were not stationed in appropriate places for the welfare of the students.

Students also commented that canteen staff must be polite and fair to all students. One student commented that the place was shown with the presence of flies "*langaw*" and the food they offer were not clean and nutritious.

Despite of all the comments to the security and food services, the general weighted mean of 3.522 was obtained by the students services interpreted as satisfactory.

### Physical Facilities

Table 4 shows the assessment of students to the physical facilities offered by the college.

**Table 4. Physical Facilities**

Physical Facilities	1st Year		2nd Year		3rd Year		4th Year		Over-all	Interpretation
	M	VI	M	VI	M	VI	M	VI	M	VI
<b>Library/Learning Resource Center</b>	3.194	F	5.0	VS	4.186	S	3.564	S	3.986	S
<b>Laboratories</b>	2.952	F	5.0	VS	4.08	S	3.5	S	3.883	S
<b>Classrooms</b>	2.772	F	3.7	S	3.452	S	2.992	F	3.229	F
<b>Instructional Equipment</b>	3.102	F	5.0	VS	3.748	S	3.21	F	3.765	S
<b>Audio Visual Room</b>	3.356	F	5.0	VS	4.066	S	3.998	S	4.105	S
<b>Comfort Rooms</b>	2.428	BS	3.8	S	2.748	F	2.054	BS	2.758	F
<b>Student Center/ Students' Lounges</b>	2.988	F	4.5	VS	2.92	F	2.402	BS	3.202	F
<b>Corridors/Alleys/Exit Ways</b>	2.848	F	5.0	VS	3.51	S	3.118	F	3.619	S
<b>GWM</b>	<b>2.955</b>	<b>F</b>	<b>4.562</b>	<b>VS</b>	<b>3.589</b>	<b>S</b>	<b>3.105</b>	<b>F</b>	<b>3.553</b>	<b>Satisfactory</b>

From the table, first year students were not satisfied with the physical facilities of the college with a mean score of 2.955 interpreted as fair. All services were fair to them except the comfort rooms which gained the lowest mean of 2.428 interpreted as below satisfactory.

In contrast, students from the second year level were very much satisfied with the physical facilities being offered to them, as shown by the mean score of 4.562 interpreted

as very satisfactory. This result was with exception to classrooms and comfort rooms which only gained a mean score of 3.7 and 3.8 respectively both interpreted as satisfactory.

Likewise, the third year level were also satisfied with the physical facilities of the college with a mean score of 3.589 interpreted as satisfactory but with exception to comfort rooms and student center which only gained a mean of 2.748 and 2.92, respectively both interpreted as fair.



The fourth year level students were not that satisfied with the physical facilities of the college which only gained a mean score of 3.105 interpreted as fair. The table further revealed that three of the physical facilities (classrooms, instructional equipment and corridors/alleys/exit ways) obtained a fair interpretation and two (comfort rooms and student center) obtained an interpretation of below satisfactory.

In general, the table shows that audio visual room obtained the highest mean among the physical facilities of the college with a score of 4.105 interpreted as satisfactory. According to the students, the audio visual room was conducive and well maintained. Library, instructional equipment, corridors/alleys/exit ways and laboratories likewise obtained a satisfactory interpretation with a mean score of 3.986, 3.765, 3.619 and 3.883, respectively.

However, many of the physical facilities gained a fair rating from the students which include the classrooms, student center

and comfort rooms. Some of the comments of the students were the following: no garbage cans/trash bins; students should be taught how to throw their rubbish properly; rooms, student center and hallways were unclean and disorganized; white boards inside the classrooms should be repaired and the like.

Comfort rooms obtained the lowest mean of 2.758. This implies that the students were not satisfied with the condition of the comfort rooms in the college. According to students, their main problem when it comes to physical facilities was the comfort rooms since most of the time, the water supply was not sufficient and the cleanliness was not maintained.

### Difference among Year Levels of the CAS Students

Table 5 shows the ANOVA results among the year levels of the students in terms of teachers' competence, students' services and physical facilities offered by the college.

**Table 5.** ANOVA Results of Teachers' Competence, Students' Services and Physical Facilities

ANOVA					
Teachers' Competence					
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	4.972	3	1.657	82.390	.000
<b>Within Groups</b>	.161	8	.020		
<b>Total</b>	5.133	11			
ANOVA					
Students' Services					
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	8.344	3	2.781	9.350	.000
<b>Within Groups</b>	13.089	44	.297		
<b>Total</b>	21.433	47			
ANOVA					
Physical Facilities					
	Sum of Squares	df	Mean Square	F	Sig.
<b>Between Groups</b>	13.664	3	4.555	16.703	.000
<b>Within Groups</b>	7.635	28	.273		
<b>Total</b>	21.300	31			

In terms of teachers' competence, it is clearly shows that there is a significant difference among the year levels of students in the college of Arts and Sciences in terms of teachers' competence as indicated by the F-value of 82.390. It implies that year levels varies with their assessments with regards to

the competence of their teachers. First years tend to be not so satisfied with the services offered to them by the college while the higher levels were satisfied. The expectation of the first year students were not met by the college in terms of the competence of their teachers.

In terms of students' services, it is likewise shows that there is a significant difference among the year levels of students as

indicated by the F-value of 9.350. It implies that year levels varies with their assessments with regards to the student services. First years tend to be not so satisfied with the services offered to them by the college while the higher levels were satisfied. The expectation of the first year students were not met by the college in terms of student services.

In terms of physical facilities, there is also significant difference among the year levels of students as indicated by the F-value of 16.703. It implies that year levels varies with their assessments with regards to the physical facilities. First year and fourth year students tend to be not satisfied with the services offered to them by the college while the second and third year levels were satisfied. The expectation of the first year and fourth year students were not met by the college in terms of physical facilities.

#### **4. CONCLUSION AND RECOMMENDATIONS**

Based on the results and findings, the CAS students are generally female, single, belonging to the low family income and with average academic performance. The competence of the teachers in terms of the instruction, attitude and physical aspects was satisfactory and students agreed that they were good and competent in the field of teaching. The students services were satisfactory. Registrar's staff were polite in any transactions they made and prompt in attending to students request, however, students were not satisfied with the services being offered to them by the security personnel as well as the food personnel. The physical facilities were satisfactory. The audio visual room was conducive and well maintained however, the classrooms, student center and comfort rooms were fair. There is a significant difference among the year levels of students in the college in terms of teachers' competence, student services and physical facilities.

From the study, it is recommended that the college should provide ways in promoting the different program offerings to increase its population. The competence of the teachers should be maintained and upgraded by means of attending seminars and trainings related to their field of specialization for the holistic learning of the students in the college. In addition, security personnel and canteen personnel should attend seminars and trainings

for the improvement of their services. Physical facilities such as the classrooms, student center and comfort rooms should also be maintained by specific person incharge for cleanliness and orderliness. Students should attend seminars on proper waste management and discipline to maintain the physical facilities and environment in good condition. Further studies about the significant difference among the programs in CAS may be explored.

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