

Employability Metrics of Bachelor of Secondary Education Graduates from 2013 to 2017: A Five Year of Findings and Analysis

Caren C. Orlanda-Ventayen, Rosario DL. Valencerina

Pangasinan State University, Lingayen Campus

Lingayen, Pangasinan, Philippines

Abstract - The concept of tracing the employability rate of Pangasinan State University is to determine how programs serve and deliver quality education. Generally, this study aimed to determine the employability rate and the of BSEd graduates of the Pangasinan State University Lingayen Campus from 2013 to 2017 and identify the factors that affect it for the five-year time frame. Based on the result of the study, Bachelor of Secondary Education Graduates of Pangasinan State University are generally employed within the two years of graduation. The graduates of the university for each year from 2013 to 2017 are employed as fast as other graduates for every year. The rate of employability of the single, those who passed the LET, and those who received awards in bachelors are as fast as the rate of employability of the married, those who passed non-LET Board examinations, and those who did not receive awards in bachelor. Furthermore, the rate of employability of those who participated in trainings, those who earned post-bachelor's like master's degree and doctorate degree, and those who earned national certificates is not as fast as those who did not participate in trainings, those who did not earn post-bachelor's degree, and those who did not earn national certificates. Lastly, the sustainability plan was proposed in order to maintain the employability of the graduate students, which is based on the Strategic Plan of the Pangasinan State University.

Keywords – social science instruction, vertical articulation, curriculum development

INTRODUCTION

Pangasinan State University is now level IV in SUC leveling that offers a broad spectrum of varied programs to its clients, enabling them to acquire knowledge, skills, and attitude towards academic and global competence. Exposing learners to true to life experiences workplace situation helps to enhance learning. Focusing on some specializations under Bachelor in Secondary education in PSU, it has reached its 3rd level accreditation in Lingayen Campus. In connection with the university's vision, to become ASEAN state university in 2020, it has been benchmarked with various universities in ASEAN countries and exchanging practice teachers to extremely develop teacher aspirants to be globally competitiveness skills and knowledge, preparing them to be work ready.

The concept of tracing the employability rate of the PSU is to determine how programs and curriculum are implemented that serves as a

program indicator to determine the quality of education being offered. Furthermore, CHED requirements every HEIs to conduct a tracer study for it is being needed by higher education accrediting body such as the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACUP), Inc.

Generally, this study aimed to determine the employability rate and the of BSEd graduates of the Pangasinan State University Lingayen Campus from 2013 to 2017 and identify the factors that affect it for the five-year time frame. Specifically, this study sought answers to the following problems: (1) What is the personal profile of the students of the Pangasinan State University (PSU) Lingayen Campus who are graduates of the Bachelor of Secondary Education (BSEd) Program from 2013 to 2017 in terms of sex, civil status, professional examination passed, number of trainings attended, highest educational attainment, national certificates earned and

awards. (2) What is the employability rate of the PSU Lingayen Campus BSEd graduates from 2013 to 2017? (3) Is there a significant difference between the employability rate of the PSU Lingayen Campus BSEd graduates from 2013 to 2017? (4) Is there a significant relationship between the employability rate of the PSU Lingayen Campus BSEd graduates and the selected profile variables from 2013 to 2017? (5) Based on the result of the study, what sustainability measures could be proposed?

METHODOLOGY

This study will use descriptive-correlation method wherein this paper will determine the variables affecting graduates' employability rate of Pangasinan State University each year from AY 2013-2017 under BSEd program limited to Lingayen Campus alumni. This method involves collecting data using graduate tracer study (GTS) provided by CHED.

Research design aims to study the correlation between Variables affecting employability rate of every alumni in the university, this includes professional development such as licensure examination (LET), experience, time, educational attainment, trainings and advance studies attended. The researcher will study whether there is a significant correlation between dependent variables to the dependent variable, which is the employability. The analysis will be compared by each year to make a significant prediction which would be used in the development of each specialization program design and implementation using gathered data.

Locale and the Population of the Study

Since that Pangasinan State University alumni come from different municipalities in Pangasinan, the locale of this study will cover all municipalities in the province including students coming from some parts of the Philippines and in other countries as well as for graduates working abroad.

The respondents of this study were the alumni of Bachelor of Secondary Educations of

Pangasinan State University, Lingayen Campus from 2013 to 2017.

Table 1 Shows the total number of Graduates

Specialization / Major	2013	2014	2015	2016	2017
English	59	53	40	58	45
Social Studies	48	45	41	52	54
Filipino	0	38	39	58	44
Tle	31	29	23	57	50
Physical Science	43	47	27	43	50
Total	181	212	170	268	253

In measuring the number of respondents, the researcher will use stratified sampling for the number of graduates of each specialization vary, and this is to minimize error in estimating total sample size. The method will be used for the population is heterogeneous and varies sample size each year. This method is better than simple random sampling in case of this study for it divides the population into subgroups then random samples are taken to make population proportion from each of the strata created.

All in all, the total number of BSEd graduates from Pangasinan State University Lingayen Campus from the academic year 2013-2017 is 1084. Since the number of graduates varies from a year to another, stratified random sampling will be used.

Data Gathering Instrument

The survey questionnaire was adopted from the Graduate Tracer Study Questionnaire from the Commission on Higher Education. Since the questionnaire is being validated and revised by the Commission on Higher Education, validation is not necessary.

Data Gathering Procedures

To start the data gathering procedure, the researcher asked permission from the Campus Executive Director of PSU Lingayen Campus to conduct the study. A letter addressed to the university registrar was secured to gather basic information to locate reach respondents.

The researcher got for any means of reaching respondents, address, contact number if possible and since that the respondents are in diverse in location, most especially to some who are working abroad, the researcher will also send the survey questionnaire through email and try to reach them out through social media account if applicable.

Statistical Treatment of Data

Aside from the frequency counts and distribution, the researcher used a percentage to measure the employability rate of the graduates. The researcher Single Factor Analysis of Variance at 0.05 level of alpha with 9 degrees of freedom, and lastly Using chi-square test of independence at 0.05 level of alpha.

Table 2.1. Frequencies and Percentages on the Personal Profile of the Pangasinan State University Lingayen Campus 2013 to 2017 BSEd graduates (n=450)

Personal Profile	Employed		Not Employed	
	F	%	F	%
Sex				
Male	65	16.62	25	42.37
Female	326	83.38	34	57.63
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>
Civil Status				
Single	330	84.40	46	77.97
Married	61	15.60	13	22.03
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>
Professional Examination Passed				
LET	382	97.70	56	94.92
Non-LET	5	1.28	1	1.69
None	4	1.02	2	3.39
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>
Participation in Trainings				
With Participation	131	33.50	0	0.00
Without Participation	260	66.50	59	100.00
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>

The profile of respondents was divided into two. First is the employed graduates of the Bachelor of Secondary Education Graduates and those who are not employed within 2 years, as stated in the instrument used in SUC Leveling. This means those who are employed after 2 years of graduation are considered "Not Employed".

Generally, out of 450 respondents, there

RESULTS AND DISCUSSION

The first problem discussed the personal profile of the students of the Pangasinan State University (PSU) Lingayen Campus who are graduates of the Bachelor of Secondary Education (BSEd) Program from 2013 to 2017 in terms of sex, civil status, professional examination passed, participation to training, highest educational attainment, national certificates earned and awards. By determining the profile of the graduates, an employability result is a powerful tool which documented the employment characteristics of the different profile of the Pangasinan State University graduates of 2013-2017.

are 59 who are not employed within 2 years after graduation. Majority of the respondents are female with 83.38 percent or 326 for the employed and 57.63 percent or 34 for unemployed. This shows that most of the students under the Education program are female. The result of the study in terms of Sex agrees with several surveys that women dominate the education system [2], [3].

Majority of the respondents are Single with 84.40 percent or 330 for employed and 77.97 percent or 46 respondents for unemployed. The result shows that those who find their job are still single. In terms of Professional Education Passed, majority of the respondents for both employed and unemployed has Passed the Licensure Examination for Teachers. The result of passing the Licensure Examination for Teachers is high at Pangasinan

State University, and these means that student who failed in the first take, may take another chance to re-take the examination.

Lastly, in terms of Participation in training, Majority of the respondents who are employed has participation in training. While all the respondents who are unemployed have no participation in training. The result shows that Training presents a prime opportunity to expand the knowledge base of all employees [4].

Table 2.2. Frequencies and Percentages on the Personal Profile of the Pangasinan State University Lingayen Campus 2013 to 2017 BSEd graduates ($n=450$)

Personal Profile	Employed		Not Employed	
Highest Educational Attainment				
Bachelor's degree	216	55.24	53	89.83
Master's degree	174	44.50	6	10.17
Doctorate degree	1	0.25	0	0.00
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>
National Certificates Earned				
With national certificates	276	70.59	3	5.08
Without national certificates	115	29.41	56	94.92
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>
Awards Received in Bachelor's				
With academic award/s	16	4.09	0	0.00
Without academic award/s	375	95.91	59	100.00
<i>Sub-total</i>	<i>391</i>	<i>100.00</i>	<i>59</i>	<i>100.00</i>

In terms of highest educational attainment, majority of the respondents is still bachelors degree holder with 55.24 percent or 216 respondents. It is followed by the respondents with a Master's degree with 44.5 percent or 174 respondents. Lastly, there is a sole Doctorate degree.

For the National Certificates earned, the majority of the employed respondents has earned National Certificate with a total of 276 respondents or 70.59 percent. While for the unemployed respondents, the majority of them has no National Certificate. The result of the study shows the importance of additional skills certificate for employment. According to a one prestigious University that certification programs are important because it ensures the competence of professionals through a measurement of skills and knowledge.

Certification exams go beyond training by providing a measurement of knowledge and skills. When employers are looking to hire or promote, education, skills certification is an important determining factor, which is why it's important for teachers to earn certificates [5].

Lastly, in terms of an academic award, the majority of the respondents has no academic award. But noticeably, all graduates with the award is employed and there are no graduates with award who are unemployed.

Employability rate of the PSU Lingayen Campus BSEd graduates

Producing graduates equipped for their future is a key part of higher education. Producing employable graduates' forms part of the process of educating. It encompasses the full educational spectrum of values from imparting

knowledge and understanding to developing skills and attributes.

Based on the result of the study, the Employability Rate of PSU Lingayen Campus BSEd Graduates for 2013 to 2017 shows the

increasing number of graduates that are employed after graduation. Revisiting the definition of employability based on the SUC Leveling instrument shows that graduates are employed after the first 2 years of graduation.

Table 3. Frequencies and Percentages on the Employability Rate of PSU Lingayen Campus BSEd Graduates for 5 years ($n=450$)

Category	2013	2014	2015	2016	2017
Employed	5	113	111	138	24
Not Employed	1	12	17	28	1
Total	6	125	128	166	25
Rate	83.33%	90.40%	86.72%	83.13%	96.00%

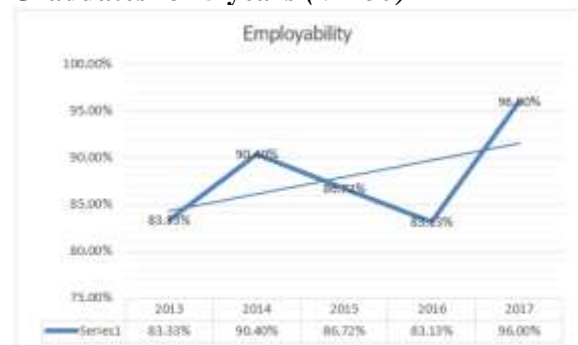
Table 3 shows the frequency and percentage of the employability rate of the PSU. Based on the table, the employability rate for BSEd Graduates for the past 5 years is more than 80 percent. Based on the indicators set by the SUC Leveling instrument by the Commission on Higher Education, a maximum possible allocation point is given to the SUC that reaches 80 percent and above of its graduate are employed after 2 years of graduation [1].

The researcher acknowledges the limitation of the result of the study in the year of 2013 and 2017, where there are only a few numbers of respondents. While for the year 2014 to 2016, an adequate number of respondents to determine the accurate employability of the respondents.

University, Lingayen Campus BSEd Graduate for 5 years is increasing from the year 2013 to 2017. This implies that a continuous increase in employability rate is observed.

One factor that contributes to the employability of the graduates is the exposure in Practice Teaching. Some study shows that there are differences between first, second and final year students in terms of employability skills, which could explain an observed lack of engagement with employability-related development for the early years in college [6]. During the Practice Teaching of the student, the senior student developed their social skills that contribute to the employability skills of the student to be ready in employment [7].

Figure 1. Trendline on the Employability Rate of PSU Lingayen Campus BSEd Graduates for 5 years ($n=450$)



As shown in Figure 1, the trendline on the employability rate of the Pangasinan State

Difference between the employability rate from 2013 to 2017

The table shows the comparison between the employability rate of Pangasinan State University, BSEd Graduates for the last 5 years.

Using Single Factor Analysis of Variance at 0.05 level of alpha with 9 degrees of freedom, Table 4 shows no significant difference between and within the employability rates of Pangasinan State University Lingayen Campus BSEd graduates of 2013, 2014, 2015, 2016 and 2017 ($p\text{-value}=0.58>0.05$). This means that graduates of the university for each year from 2013 to 2017 are employed as fast as other graduates for every year.

Table 4. The ANOVA Table on Significant Difference Between the Employability Rate of PSU Lingayen Campus BSED Graduates for five (5) years (0.05a)

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
2013	2	6	3	8
2014	2	125	62.5	5100.5
2015	2	128	64	4418
2016	2	166	83	6050
2017	2	25	12.5	264.5

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	9863	4	2465.75	0.778281	0.584188	5.192168
Within Groups	15841	5	3168.2			
Total	25704	9				

The result of the study agrees with the reasons of increasing employment of the education graduates students is the implementation of the K to 12 Program. Where the Department of Education is in need of more teachers than before [8], [9].

K12 was started the last 2012-2013 with the introduction of a revitalized curriculum to incoming grade 1 and 7 students in public schools. The pioneer students of this program are expected to graduate in 2025. Hence it is

expected that more teachers are needed to accommodate the growing number of students.

Factors affecting the employability rate of the PSU Lingayen Campus

This result of the study understands the correlation of the profile variables if there is a relationship between the employability rate of the Pangasinan State University BSED Graduates for the year 2013 to 2017.

The table shows the correlation of the BSED graduates and the selected personal profile variables from 2013 to 2017.

Table 5. Crosstab values and interpretation on the relationship between the profile variables and Employability Rate of PSU Lingayen Campus BSED Graduates from 2013 to 2017

Profile Variables vs Employability Rate	X ²	df	p	I
Sex	21.24**	1	0.0000	s
Civil Status	1.54	1	0.2140	ns
Professional Examination Passed	2.26	2	0.3228	ns
Participation to Trainings	27.88**	1	0.0000	s
Highest Educational Attainment	25.52**	2	0.0000	s
National Certificates Earned	93.36**	1	0.0000	s
Awards Received in Bachelor's	2.50	1	0.1136	ns

Legend: s – significant; ns – not significant

Using chi-square test of independence (cross-tab) in the MegaStat at 0.05 level of alpha, Table 5 reveals no significant relationship ($p\text{-value} > 0.05 > 0.01$) between civil status, professional examination passed, and awards

received in Bachelor's degree and the employability rate.

This implies that the rate of employability of the single, those who passed the LET, and those who received awards in bachelor's degree are as fast as the rate of

employability of the married, those who passed non-LET Board examinations, and those who did not receive awards in bachelor's.

The result of the study disagrees with several employability studies that single and passed the board examination, and those with awards tend to employ faster than those who are married and without licensure examination [10]–[12].

Further, Table 5 reports a significant relationship ($p\text{-value} < 0.001$) between sex, participation to trainings, highest educational attainment, and national certificates earned, and the employability rate.

This implies that the rate of employability of the male, those who participated in trainings, those who earned post-bachelor's like master's degree and doctorate degree, and those who earned national certificates is not as fast as those who are female, did not participate in trainings, those who did not earn post-bachelor's degree, and those who did not earn national certificates.

The result of the study contradicts with several studies in other countries that graduates with a masters degree may be employed faster than those who are graduates with a bachelors degree [13]. National statistics reveal that the first degree is losing ground in favor of the master degree. Unemployment rates, including long-term unemployment, are higher for first-degree holders than for master degree holders, indicating that the labor market assigns more value to the latter [14]. In the Philippines, the situation may be different because the department of education accepts fresh graduates to employ in the agency.

Proposed Sustainability Measures based on the Strategic Goals of the University

SG 1: Excellent Student Learning and Career Development

To maintain excellent student learning, The faculty members of the Pangasinan State University specifically in the Teacher Education Program should engage and enroll in the Graduate Education programs such as Master of Arts in Education, Doctor of Education and equivalent degrees. The faculty members could

also apply for Scholarship offered by the Commission on Higher Education for Graduate Programs locally and internationally.

Enrollment in Graduate Studies helps the faculty members to be part of professional peer tutoring, as peers are an important part of every doctoral learning community [15]. It could also be a ground of professional teachers to upgrade their knowledge and recent changes in doctoral education for supervisors who are developing early career researchers in terms of the need to develop their professionalism [16].

SG 2: Strong Research Culture and Technology Transfer

The faculty members of the teacher education should engage in research writing, presentation, and publication in order to achieve a stronger research culture in the program. Based on the instrument of the SUC Leveling, to achieve the highest points in terms of research, faculty from SUC should have at least 40 percent of faculty-researcher with at least 2 publication or awards in research [1].

Peer tutoring is also another way to sustain strong research culture among the faculty members, and knowledge could be transferred to the student s one of the employability skill that could help them to land teaching job or promotion into higher position such as Master Teacher [17].

SG 3: Good Governance

In today's volatile environment, the implementation of good governance practices can lead to a reduction in an institution's cost of capital. An institution that is seen to be stable, reliable, and able to mitigate potential risks will be able to help the students learn about good leadership. Future teachers are also future class managers and future leaders. Leadership skills equipped with Good governance may help the student's employability increases. Because a good teacher is important in thinking about educational reform [18].

SG 4: Sustainable Social Responsiveness

The extension program of the University should continuously involve the student. In the case of the Teacher Education Program,

continuous improvement is necessary for sustainable social responsiveness.

SG 5: Responsive to Globalization and Diversity

Teacher education is an even more future-oriented business for it aims to prepare teachers for future educational institutions [19], [20]. Preparing teachers in globalization is an advantage for both the institution and students. Teacher Education program may sustain the international exposure of students such as International Practice Teaching. Globalization would also helps the teachers to acquire instructional competences and professional characteristics, and technological competencies towards employability and teaching [21]–[24].

SG 6: Customer Focus

The institution itself is customer focus. Thus the teacher education program should maintain the importance of student as clients. While many critics oppose the traditional business philosophy that 'the customer is always right' and maintain that pandering to students' short-term demands is damaging to the learning process few studies explore alternative notions of what it means to ensure student satisfaction where the teacher education program could adopt [25].

CONCLUSIONS AND RECOMMENDATION

It is concluded that the employability rate for BSEd Graduates for the past 5 years is more than high and excellent.

It is recommended that the student organization that provides services, programs, projects, and should have intervention programs dedicated to informing them about "decision making in career advancement". Specifically, they should be well informed about teacher rankings through points, compensation benefits as a public school teacher, and career opportunities in the education sector.

Lastly, The University must consistently commit itself to conduct regular tracer studies on the employment status of the BSED graduates of Batch 2018 onwards, as well as to further batches and graduates. This will serve as the evaluating factor in the programs implemented

by the University, specifically in the BSED program.

REFERENCES

- [1] P. Licuanan and F. B. Abad, "DEPARTMENT OF BUDGET AND MANAGEMENT COMMISSION ON HIGHER EDUCATION TO PRESIDENTS OF STATE UNIVERSITIES AND COLLEGES (SUCs) AND ALL OTHERS CONCERNED SUBJECT FY 2016 LEVELING INSTRUMENT," 2016.
- [2] S. Schwartz, "The Teaching Force Is Mostly Female. Is That Bad for Boys? - Teaching Now - Education Week Teacher," 2018. [Online]. Available: https://blogs.edweek.org/teachers/teaching_now/2018/07/teaching_force_is_mostly_female_bad_for_boys.html. [Accessed: 19-May-2019].
- [3] E. Maurer, "Why are So Many Teachers Women? | National Women's History Museum." [Online]. Available: <https://www.womenshistory.org/articles/why-are-so-many-teachers-women>. [Accessed: 19-May-2019].
- [4] 2020projectmanagement.com, "The Importance of Training and Development in the Workplace," 2019. [Online]. Available: <https://2020projectmanagement.com/resources/project-management-training-and-qualifications/the-importance-of-training-and-development-in-the-workplace>. [Accessed: 19-May-2019].
- [5] Towson, "Why Certifications Are Important - Towson University Continuing Education," 2015. [Online]. Available: <http://continuingeducation.towson.edu/why-certifications-are-important/>. [Accessed: 19-May-2019].
- [6] A. Tymon, "The student perspective on employability," *Stud. High. Educ.*, 2013.
- [7] R. Hogan, T. Chamorro-Premuzic, and R. B. Kaiser, "Employability and Career

- Success: Bridging the Gap Between Theory and Reality,” *Ind. Organ. Psychol.*, 2013.
- [8] D. H. Sarmiento and R. L. Orale, “Senior High School Curriculum in the Philippines,” *J. Acad. Res.*, 2016.
- [9] M. Okabe, “Where Does Philippine Education Go ? The K to 12 Program and Reform of Philippine Basic Education,” in *Institute of Developing Economies*, 2013.
- [10] T. L. Ramirez, L. T. Cruz, and N. V. Alcantara, “Tracer Study of RTU Graduates: An Analysis,” *Res. World J. Arts, Sci. Commer.*, 2014.
- [11] J. Dania, A. R. Bakar, and S. Mohamed, “Factors influencing the acquisition of employability skills by students of selected technical secondary school in Malaysia,” *Int. Educ. Stud.*, 2014.
- [12] L. Gracia, “Employability and higher education: contextualising female students’ workplace experiences to enhance understanding of employability development,” *J. Educ. Work*, 2009.
- [13] R. Bridgstock, “The graduate attributes we’ve overlooked: Enhancing graduate employability through career management skills,” *High. Educ. Res. Dev.*, 2009.
- [14] J. Winterton and N. Haworth, “Employability,” in *The Transformation of Employment Relations in Europe: Institutions and Outcomes in the Age of Globalization*, 2013.
- [15] E. M. Flores-Scott and M. Nerad, “Peers in doctoral education: Unrecognized learning partners,” *New Dir. High. Educ.*, 2012.
- [16] S. E. Taylor, “Changes in doctoral education,” *Int. J. Res. Dev.*, 2013.
- [17] M. A. Llego, “2019 DepEd Guidelines for Master Teacher Promotion - TeacherPH,” 2019. [Online]. Available: <https://www.teacherph.com/guidelines-master-teacher-promotion/>. [Accessed: 21-May-2019].
- [18] R. Connell, “Good teachers on dangerous ground: Towards a new view of teacher quality and professionalism,” *Crit. Stud. Educ.*, 2009.
- [19] U. Essays, “Globalisation and Workplace Diversity,” 2018. [Online]. Available: <https://www.ukessays.com/essays/commerce/globalisation-and-diversity-in-workplace-commerce-essay.php>. [Accessed: 21-May-2019].
- [20] Y. Zhao, “Preparing globally competent teachers: A new imperative for teacher education,” *J. Teach. Educ.*, 2010.
- [21] P. G. Queroda and I. Nama, “Instructional Competencies of Catholic School Teachers in Pangasinan, Philippines,” *Asian J. Multidiscip. Stud.*, vol. 1, no. 1, Sep. 2018.
- [22] P. Queroda, “Professional Characteristics of Education Teachers in Pangasinan,” *Southeast Asian J. Sci. Technol.*, vol. 2, no. 1, Apr. 2017.
- [23] R. E. Salcedo, “Social Science Instruction in State Universities and Colleges in Region 1: Basis for a Master of Arts in Social Science Education Curriculum,” *Asian J. Multidiscip. Stud.*, vol. 1, no. 1, Oct. 2018.
- [24] R. J. M. Ventayen, “Level of Competency in Computer Systems Servicing of Teachers in One Town in Northern Luzon: A Needs Assessment and Analysis,” *Asian J. Multidiscip. Stud.*, vol. 1, no. 1, 2018.
- [25] E. Mark, “Student satisfaction and the customer focus in higher education,” *J. High. Educ. Policy Manag.*, vol. 35, no. 1, pp. 2–10, Feb. 2013.