Tracer Study of PNU Graduates

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Abstract

Undoubtedly, tracer study results is a powerful tool which documented the employment characteristics, transition to employment and the level of satisfaction of the PNU graduates of 2009-2011 in terms of the level of satisfaction of the University services, learning environment and facilities. It also looked into the skills and competencies of the different bachelors' degree programs in teacher education provided during the pre-service training if these existing programs were still effective, adequate and relevant in responding to the rapid and complex changes as brought about by emerging developments such as the international standards in academic programs, the upcoming ASEAN 2015 integration, the Competency Framework of South East Asian (SEA) Teachers in the 21st Century, among others.

Keywords: Tracer Study, PNU Graduates, Teacher Education

Introduction

In addressing the emerging and complex nature and challenges of the 21st century, higher education stands out as one of the major keys to cope with reforms. Through its essential functions of instruction, research, extension and production, higher education makes-up a vital and strategic part in development. Moreover, Executive Order # 83, series of 2012 establishes the Philippine Qualifications Framework, which mandates agency responsibilities like DepEd, CHED, TESDA, PRC and DOLE to review learning standards in basic education, technical skills development and higher education and in the alignment of licensure examination. Earlier, in the 2011 State of the Nation Address (SONA) of President Aquino, as quoted

"… ngayon pa lang, nagtatagpo na ang kaisipan ng DOLE, CHED, TESDA at DepEd upang tugunan ang isyu ng job mismatch, susuriin ang mga curriculum para maituon sa mga industriyang naghahanap ng empleyado, at gagabayan ang mga estudyante sa pagpili ng mga kursong hitik sa bakanteng trabaho."

The Commission on Higher Education was created with a vision to become the key leader of the Philippine higher education system to work effectively in partnership with the major higher education stakeholders in building the country's human capital and innovation capacity toward the development of a Filipino nation. This, in effect, mandates CHED to promote relevant, efficient and quality higher education.

On Tracer Studies

The ILO Thesaurus 2005 defines a tracer study as an assessment tool where the "impact on target groups is traced back to specific elements of a project or programme so that effective and ineffective project components may be defined." Further, Schomburg (2003, p. 6) shares that graduate survey results are important for "analysis of relationship between higher education and work." Moreover, Millington (2001) states that "they provide quantitative structural data on employment and career, the character of work and related competencies, and information on the professional orientation, and experiences of their graduates." Additionally, the collected data is an important indicator of the quality of higher education. In the Philippines, the Commission on Higher Education requires all HEIs to conduct a tracer study and is equally reflected as one of the required documents by any higher education accrediting body such as the Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP), Inc.

By conducting a survey on the cohort of graduates from a specific institution, profession, discipline, level of education, their employment characteristics, competencies and skills development, and have a comparative analysis, the information gained from these can be used by the graduate's alma mater and other education stakeholders for curriculum development and other emerging reforms.

Finally, INCHER-Kassel, Germany, believes that tracer study data offers the "Career Service and the study counseling insights about study and professional careers that they can pass on to the students."

The Philippine Normal University

The Philippine Normal University, the National Center for Teacher Education by virtue of R.A. 9647, the only specialized Teacher Education University offering a variety of at least 26 undergraduate specializations and 46 graduate academic programs and established as the first higher education institution on September 1, 1901, realizes its mandate to take the lead in teacher education in terms of curricular development and research, pre-service and in-service training programs and education leadership.

The University conducts this evaluation of the impact of Teacher Education on the graduates as one of its research priorities. This shows PNU's accountability to its stakeholders. Part of this is PNU's current initiatives to revise, improve and develop the program it offers and to have an initial basis for the development of a new teacher education curriculum considering the development in the implementation of the K-12 enhanced basic education curriculum of DepEd. Moreover, it intends to determine if the curricular programs are being implemented appropriately at the classroom level and if it is eliciting the desired effect on student achievement and employability. As a means of curriculum evaluation, tracer studies also help identify curriculum weaknesses and strengths. Some judgments about what aspects of the curriculum can be retained, enhanced or written off can be made if there is an evaluation data on which such decisions are based.

Moreover, tracer studies according to Garcia (2003) as cited by Gines (2004) pointed out that tracer studies is an important source of information to know what happened to graduates of academic programs in Higher Education Institutions (HEIs). Further findings of tracer studies can be used to define/redefine HEIs mission and market niche and show how academic programs and course offering can be adjusted to reflect institutional goals. Findings can also be used by stakeholders in deciding where to look for skills. Lastly, the evaluation shall provide a basis for further improving existing and or developing a new teacher education curriculum and implementation process. It is in this context that after the approval of the curriculum in April 2005 and its implementation in June of the same year, a tracer study was conducted to these undergraduate batches of graduates (2009, 2010 and 2011) to provide data for the review and evaluation of the curricular programs of PNU.

Specifically, the study is designed to

1. Establish the profile of the PNU graduates in terms of
   (a) Employment Characteristics and (b) Transition to Employment
2. Assess the graduates' level of satisfaction with the university's services, learning environment and facilities
3. Determine the extent to which the various curricular programs contributed to the development of the graduates'
   (a) communication skills; (b) human relations skills; c) leadership skills; (d) problem solving skills; and
   (e) research skills
4. Assess the degree of effectiveness, adequacy and relevance of the University's curricular programs
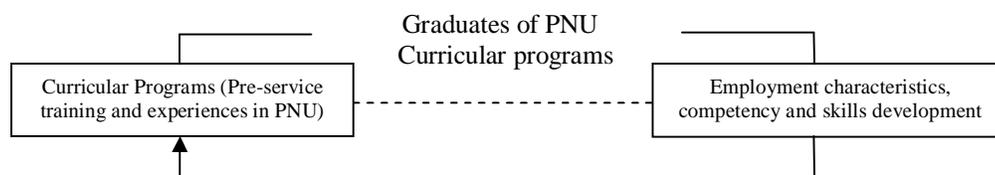
Figure 1: Conceptual Framework of the Study

Figure 1 refers to the graphical conceptual framework of the study. The curricular programs refer to the pre-service training and experiences of the PNU graduates in the thirteen (13) undergraduate specialization programs, namely:

1) BSE Mathematics, 2) BS Mathematics for Teachers, 3) BSE Biology, 4) BS Biology for Teachers, 5) BS Physics for Teachers, 6) BS Library Information Science, 7) BSE Filipino, 8) BSE in Speech and Theater Arts, 9) BSE Music Education, 10) BSE Physical Education, 11) BSE History, 12) BSE in Values Education, and 13) Bachelor in Elementary Education (BEEd).

Each of these programs has a minimum of 63 units of General Education, 54 units of Professional Education and 57 units of specialization.

All have a one quarter or two (2) months of practice teaching in-campus and off-campus. The framework suggests that services, learning environment, facilities and the graduates competencies (knowledge, skill and attitude) in their specializations and other competencies such as communication skills, human relations skills, leadership skills and research skills are reflected in the assessment of employment characteristics, adequacy and relevance of graduate competence and other skills, as acquired at PNU and needed in the workplace. Such feedbacks are necessary to determine the impact of the 13 curricular programs, which could provide information needed, to reform the existing programs and bring about appropriate fit between requirements of the world of work and the offerings of the University (Millington, 2001).

Methodology

Research Design

This study used the descriptive survey covering the employment characteristics and transition to employment of the PNU graduates. It is, in part a curricular product evaluation that documented curricular effectiveness, relevance and adequacy by determining how well the product (the graduates) has achieved the goal of their respective programs, the 13 academic undergraduate bachelors' programs.

Respondents and Sampling Plan

This study was initially designed to obtain both qualitative and quantitative data for the graduates of the 26 programs and their employers. The actual respondents included a random sample for the three batches of the University's curricular programs for 2009-2011 with a total of 710 which is 41% of the sample size desired (1444 graduates) which is 50%. This, of the total population, however, falls within the expected response rate of 30 to 60 percentage recommended by Schomburg (2003) on the conduct of graduate tracer studies. These respondents came from the 13 programs out of the 26 programs. More so, a limited number of employer respondents were retrieved, thus, were not included in the study as initially planned.

Instruments and Data Gathering Procedure

This research used two (2) sets of data gathering tools:

1. The tracer study questionnaire developed by CHED where this researcher was one of the members in developing the instrument. This researcher then a CHED – Technical Working Group (TWG) member where one task expected of its members is to be involved in the development and content validation of this instrument. This questionnaire has two parts; Part 1 – is on Biographical Data covering a) personal data, b) educational background, c) employment characteristics, d) employment history, e) professional achievement, f) transition, and Part II - is on Retrospective Evaluation of the Program covering a) satisfaction with the services, learning environment, facilities, b) adequacy of skills learned, c) adequacy and relevance of curricular program in terms of competencies. This tracer study questionnaire was used to obtain quantitative and qualitative feedback for the graduates about their course-related skills, attitude, reactions, and suggestions. Part of this tracer study questionnaire was a rating scale intended to determine the adequacy and relevance of the different course competencies of the 13 programs. The questionnaire was made available in the graduate respondents through the web.

2. Focus Group Discussions (FGDs). This strategy was facilitated through guide questions used during the FGDs with at least 10 to 15 graduates per program. This was employed to gather the graduates' collective experiences while taking major courses including the strengths of the courses and changes which may improve the course and their delivery.

The researchers initially set up a directory of the graduates covered by this study. It took some time before they have been tracked and were further instructed to accomplish the web-based questionnaire.

Data Analysis

Data analysis in this study primarily employed frequency counts, percentage, mean and ranking. Interpretations of means were based on the following scales:

SCALE	SATISFACTION	ADEQUACY	RELEVANCE
1.00-1.50	Very Low satisfaction	Not Adequate	Not Relevant
1.51-2.50	Low Satisfaction	Somewhat adequate	Somewhat Relevant
2.51-3.50	Moderate Satisfaction	Adequate	Relevant
3.51-4.50	High Satisfaction	Very Adequate	Very Relevant
4.51-5.00	Very High Satisfaction	Extremely Adequate	Extremely Relevant

Qualitative data were coded and clustered thematically.

Results and Discussion

1. On Profile of the PNU Graduates in terms of Employment Characteristics and Transition to Employment.

Employment characteristics refer to gender, age, reasons for enrolling at PNU and enrollment in other courses, current employment status and extent of use of skills in current employment.

Of the total 710 respondents across the thirteen academic programs covering three (3) batches from 2009 to 2011 there are 76% females and only 24% males. This shows that teaching profession is more attractive to females than males.

Table 1: Frequency & Percentage Distribution of Respondents according to Gender

PROGRAM	Frequency		
	Male	Female	N
BSE Filipino	9	40	49
BLIS	2	15	17
BEED	12	170	182
BSE PE	24	24	48
BSE Music	6	12	18
BSE VE	5	16	21
BSE STA	9	25	34
BSE History	13	14	27
BSMT	35	79	114
BSE Math	14	63	77
BSPT	8	11	19
BSBT	17	43	60
BSE Bio	13	31	44
TOTAL	167	543	710
%	23.52	76.48	100

Table 2 shows that about 80% of the respondents are in their early 20s (22-24 years old) at the time of the study.

Table 2: Frequency and Percentage Distribution of Respondents according to Age

PROGRAM	Frequency by Age														
	20	*21*	*22*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*	*32*	*37*	*51*	N
BSE Filipino	0	10	18	11	8	1	0	1	0	0	0	0	0	0	49
BLIS	0	0	3	2	4	6	0	0	1	0	0	0	0	1	17
BEED	3	4	49	56	67	3	0	0	0	0	0	0	0	0	182
BSE PE	0	4	13	6	14	4	4	1	0	1	1	0	0	0	48
BSE Music	0	2	4	3	4	3	1	0	0	0	0	1	0	0	18
BSE VE	0	3	4	6	3	4	1	0	0	0	0	0	0	0	21
BSE STA	0	3	14	8	7	2	0	0	0	0	0	0	0	0	34
BSE History	0	9	3	7	3	2	2	0	0	1	0	0	0	0	27
BSMT	0	17	22	37	30	5	2	0	1	0	0	0	0	0	114
BSE Math	0	7	14	31	20	2	2	0	0	0	0	0	1	0	77
BSPT	1	4	5	6	1	0	2	0	0	0	0	0	0	0	19
BSBT	3	11	11	19	12	1	2	0	1	0	0	0	0	0	60
BSE Bio	2	2	13	15	10	0	1	0	0	1	0	0	0	0	44
TOTAL	9	76	173	207	183	33	17	2	3	3	1	1	1	1	710
%	1.27	10.70	24.37	29.15	25.77	4.65	2.39	0.28	0.42	0.42	0.14	0.14	0.14	0.14	100

With regard to reasons of the graduates for enrolling in PNU, Table 3 reveals affordable tuition fee as rank 1, followed by personal prestige of being at PNU, prospect for better employment and career advancement as second, third and fourth ranks in this order.

Presumably, it can be concluded that while economics is the major reason, the graduates are also looking for quality institution that will give them better prospect for better employment and career.

Table 3: Reasons for Enrolling at PNU

PROGRAM	Frequency by Reason*							
	Affordable Tuition Fee	Personal prestige of being at PNU	Prospect for better employment	Prospect for career advancement	School Location	Fulfillment of dream to study at PNU	Availability of Scholarship	Others**
BSE Filipino	34	34	28	23	8	25	11	4
BLIS	12	6	7	6	5	7	4	0
BEED	127	110	108	38	96	46	16	2
BSE PE	35	32	25	21	15	14	17	2
BSE Music	18	12	9	6	4	6	5	1
BSE VE	18	13	13	10	9	5	1	1
BSE STA	21	20	21	18	10	8	2	5
BSE History	21	19	18	19	4	9	3	2
BSMT	84	73	72	23	17	23	10	7
BSE Math	43	33	24	18	6	27	19	3
BSPT	5	6	4	1	4	0	17	2
BSBT	48	43	32	30	19	11	12	1
BSE Bio	31	32	27	26	14	15	13	3
TOTAL	497	433	388	239	211	196	130	33
%	70.00	60.99	54.65	33.66	29.72	27.61	18.31	4.65
Rank	1	2	3	4	5	6	7	8

* Multiple responses possible; **Reasons not specified in the questionnaire

As to enrollment in other courses prior to studying at PNU, Table 4 yields a majority or 92.68% who did not enroll in any other course/s, hence, PNU was the first choice of the graduates.

Table 4: Enrollment in Other Courses

PROGRAM	Enrolled		Did not Enroll		N
	f	%	f	%	
BSE Filipino	12	24.49	37	75.51	49
BLIS	2	11.76	15	88.24	17
BEED	9	4.95	173	95.05	182
BSE PE	2	4.17	46	95.83	48
BSE Music	1	5.56	17	94.44	18
BSE VE	1	4.76	20	95.24	21
BSE STA	0	0	34	100	34
BSE History	6	22.22	21	77.78	27
BSMT	5	4.39	109	95.61	114
BSE Math	5	6.49	72	93.51	77
BSPT	1	5.26	18	94.74	19
BSBT	5	8.33	55	91.67	60
BSE Bio	3	6.82	41	93.18	44
TOTAL	52	7.32	658	92.68	710

For current employment status, a total of 95% were employed at the time of the study as shown in Table 5.

Table 5: Frequency and Percentage Distribution of Respondents according to Current Employment Status

PROGRAM	Employed		Not Employed		N
	f	%	f	%	
BSE Filipino	49	100	0	0	49
BLIS	17	100	0	0	17
BEED	178	97.80	4	2.20	182
BSE PE	44	91.67	4	8.33	48
BSE Music	17	94.44	1	5.56	18
BSE VE	21	100	0	0	21
BSE STA	34	100	0	0	34
BSE History	26	96.30	1	3.70	27
BSMT	105	92.11	9	7.89	114
BSE Math	75	97.40	2	2.60	77
BSPT	19	100	0	0	19
BSBT	53	88.33	7	11.67	60
BSE Bio	40	90.91	4	9.09	44
TOTAL	678	95.49	32	4.51	710

Interestingly, almost 97% were employed full time and self-employed leaving only 3% who were working just part-time which may be interpreted as underemployed.

Glaringly, it can be concluded that a great number of the PNU graduates from 2009-2011 were employed full-time at the time of the study.

Table 6: Frequency and Percentage Distribution of Respondents according to Employment Status

PROGRAM	Fulltime		Part-Time		Self-Employed		N
	f	%	f	%	f	%	
BSE Filipino	48	97.96	1	2.04	0	0	49
BLIS	15	88.24	1	5.88	1	5.88	17
BEED	179	98.35	1	0.55	2	1.10	182
BSE PE	44	91.67	0	0	4	8.33	48
BSE Music	17	94.44	1	5.56	0	0	18
BSE VE	21	100	0	0	0	0	21
BSE STA	31	91.18	2	5.88	1	2.94	34
BSE History	23	85.19	2	7.41	2	7.41	27
BSMT	103	90.35	5	4.39	6	5.26	114
BSE Math	76	98.70	1	1.30	0	0	77
BSPT	17	89.47	1	5.26	1	5.26	19
BSBT	51	85.00	3	5.00	6	10.00	60
BSE Bio	40	90.91	3	6.82	1	2.27	44
TOTAL	665	93.66	21	2.96	24	3.38	710

Table 7.1 reveals that of the 710 graduate respondents across the 13 programs, 66.76 percent apply their knowledge and technical skills in their current employment to a great extent while 30.42 percent use it to some extent. It is therefore significant to note that most of the employed graduate respondents were able to use their acquired knowledge and technical skills to a great extent.

The following tables 7.1 to 7.7 show the use of skills in current employment.

Table 7.1: Extent of Use of Knowledge and Technical Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	26	53.06	21	42.86	1	2.04	1	2.04	0	0	49
BLIS	10	58.82	7	41.18	0	0	0	0	0	0	17
BEED	117	64.29	65	35.71	0	0	0	0	0	0	182
BSE PE	32	66.67	13	27.08	3	6.25	0	0	0	0	48
BSE Music	13	72.22	3	16.66	1	5.56	1	5.56	0	0	18
BSE VE	16	76.19	4	19.05	1	4.76	0	0	0	0	21
BSE STA	18	52.94	13	38.24	2	5.88	1	2.94	0	0	34
BSE History	22	81.48	4	14.81	1	3.70	0	0	0	0	27
BSMT	92	80.70	18	15.79	4	13.51	0	0	0	0	114
BSE Math	41	53.25	35	45.45	1	1.30	0	0	0	0	77
BSPT	14	73.68	5	26.32	0	0	0	0	0	0	19
BSBT	40	66.67	20	33.33	0	0	0	0	0	0	60
BSE Bio	33	75.00	8	18.18	2	4.55	0	0	1	2.27	44
TOTAL	474	66.76	216	30.42	16	2.25	2	0.28	1	0.14	710

With regard to the extent of use of communication skills in current employment, 68.31 percent confirmed that they apply it to a great extent while 29 percent apply it to some extent. Conclusively, a great number of PNU alumni for 2009-2011 have maximized the use of their communication skills in their work at the time of the study. (Table 7.2)

Table 7.2: Extent of Use of Communication Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	35	71.43	13	26.53	0	0	1	2.04	0	0	49
BLIS	13	76.47	4	23.53	0	0	0	0	0	0	17
BEED	115	63.19	67	36.81	0	0	0	0	0	0	182
BSE PE	25	52.08	21	43.75	2	4.17	0	0	0	0	48
BSE Music	12	66.67	4	22.22	2	11.11	0	0	0	0	18
BSE VE	17	80.95	4	19.05	0	0	0	0	0	0	21
BSE STA	29	85.29	5	14.71	0	0	0	0	0	0	34
BSE History	19	70.37	8	29.63	0	0	0	0	0	0	27
BSMT	87	76.31	22	19.30	5	4.39	0	0	0	0	114
BSE Math	45	58.44	29	37.66	2	2.60	1	1.30	0	0	77
BSPT	13	68.42	5	26.32	1	5.26	0	0	0	0	19
BSBT	42	70.00	17	28.33	1	1.67	0	0	0	0	60
BSE Bio	33	75.00	9	20.45	0	0	1	2.27	1	2.27	44
TOTAL	485	68.31	208	29.30	13	1.83	3	0.42	1	0.14	710

Table 7.3 discusses the extent of use of human relation skills in current employment, where a majority of the respondents or 65.07 percent have affirmed its application to a great extent. A total of 30.70 percent said they use to some extent. Conversely, almost 4 percent have limited and very limited use of human relation skills at work. Again, it can be concluded that a significant great number of the graduates use human relation skills in dealing with students and parents especially BSE in Speech and Theater Arts and BSE Values Education.

Table 7.3: Extent of Use of Human Relations Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	30	61.23	16	32.65	3	6.12	0	0	0	0	49
BLIS	11	64.71	5	29.41	1	5.88	0	0	0	0	17
BEED	106	58.24	74	40.66	2	1.10	0	0	0	0	182
BSE PE	33	68.75	13	27.08	2	4.17	0	0	0	0	48
BSE Music	10	55.55	5	27.78	2	11.11	1	5.56	0	0	18
BSE VE	17	80.95	3	14.29	1	4.76	0	0	0	0	21
BSE STA	27	91.18	6	8.82	0	0	1	2.94	0	0	34
BSE History	21	77.78	6	22.22	0	0	0	0	0	0	27
BSMT	84	73.68	25	21.93	5	4.39	0	0	0	0	114
BSE Math	38	49.35	34	44.16	5	6.49	0	0	0	0	77
BSPT	11	57.89	7	36.84	1	5.26	0	0	0	0	19
BSBT	43	71.67	15	25.00	2	3.33	0	0	0	0	60
BSE Bio	31	70.45	9	20.45	3	6.82	0	0	1	2.27	44
TOTAL	462	65.07	218	30.70	27	3.80	2	0.28	1	0.14	710

As to extent of use of leadership skills in current employment, 53.38 percent of 710 graduates apply it to a great extent and 36.62 percent apply it to some extent. As compared with the use of other skills such as technical, communication, and human relation skills, the use of leadership skills is much lower presumably because they are still young and relatively new in the profession that opportunity for leadership has not been afforded. (Table 7.4)

Table 7.4: Extent of Use of Leadership Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	27	55.10	17	34.70	3	6.12	2	4.08	0	0	49
BLIS	9	52.94	4	23.53	4	23.53	0	0	0	0	17
BEED	97	53.30	82	45.05	2	1.10	1	0.55	0	0	182
BSE PE	29	60.42	16	33.33	3	6.25	0	0	0	0	48
BSE Music	12	66.67	5	27.78	1	5.56	0	0	0	0	18
BSE VE	17	80.95	3	14.29	1	4.76	0	0	0	0	21
BSE STA	24	70.59	6	17.65	3	8.82	0	0	1	2.94	34
BSE History	20	74.07	7	25.93	0	0	0	0	0	0	27
BSMT	31	27.19	47	41.23	36	31.58	0	0	0	0	114
BSE Math	32	41.56	38	49.35	7	9.09	0	0	0	0	77
BSPT	13	68.42	6	31.58	0	0	0	0	0	0	19
BSBT	38	63.33	20	33.33	2	3.33	0	0	0	0	60
BSE Bio	30	68.18	9	20.45	4	9.09	0	0	1	2.27	44
TOTAL	379	53.38	260	36.62	66	9.30	3	0.42	2	0.28	710

Table 7.5: Extent of Use of Research Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	21	42.86	18	36.73	8	16.33	2	4.08	0	0	49
BLIS	9	52.94	6	35.29	2	11.76	0	0	0	0	17
BEED	77	42.31	99	54.40	4	2.20	1	0.55	1	0.55	182
BSE PE	18	37.50	17	35.42	12	25	0	0	1	2.08	48
BSE Music	7	38.90	8	44.44	3	16.67	0	0	0	0	18
BSE VE	11	52.38	7	33.33	2	9.52	1	4.76	0	0	21
BSE STA	20	58.82	8	23.53	5	14.71	1	2.94	0	0	34
BSE History	18	66.67	5	18.52	3	11.11	1	3.70	0	0	27
BSMT	29	25.44	48	42.10	36	31.58	1	0.88	0	0	114
BSE Math	33	42.86	39	50.65	4	5.19	1	1.30	0	0	77
BSPT	8	42.10	8	42.10	3	15.79	0	0	0	0	19
BSBT	29	48.33	21	35.00	9	15.00	1	1.67	0	0	60
BSE Bio	24	54.55	13	29.55	4	9.09	2	4.55	1	2.27	44
TOTAL	304	42.82	297	41.83	95	13.38	11	1.55	3	0.42	710

As shown in Table 7.5, less than half or 42.82 percent affirmed the use of research skills to a great extent while 41.83 percent claimed only to some extent. The result is understandable because they are still considered service teachers and are not yet required to conduct researches at this point.

Table 7.6: Extent of Use of Problem-Solving Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	19	38.78	27	55.10	1	2.04	2	4.08	0	0	49
BLIS	11	64.71	5	29.41	1	5.88	0	0	0	0	17
BEED	100	54.95	80	43.96	2	1.10	0	0	0	0	182
BSE PE	21	43.75	22	45.83	3	6.25	1	2.08	1	2.08	48
BSE Music	11	61.11	5	27.78	2	11.11	0	0	0	0	18
BSE VE	15	71.43	6	28.57	0	0	0	0	0	0	21
BSE STA	21	61.77	8	23.53	5	14.70	0	0	0	0	34
BSE History	22	81.48	5	18.52	0	0	0	0	0	0	27
BSMT	68	59.65	43	37.72	3	3.6	0	0	0	0	114
BSE Math	38	49.35	37	48.05	2	2.60	0	0	0	0	77
BSPT	14	73.68	5	26.32	0	0	0	0	0	0	19
BSBT	34	56.67	23	38.33	3	5.00	0	0	0	0	60
BSE Bio	24	54.55	17	38.64	2	4.55	0	0	1	2.27	44
TOTAL	398	56.06	283	39.86	24	3.38	3	0.42	2	0.28	710

Table 7.6 reveals that the extent of use of the problem solving in current employment is more than half or 56.06 percent who apply to a great extent while 39.86 percent use it to some extent. The data presupposes that most of the 710 respondents in the study have obtained a good level of problem solving skill as applied in their current employment.

Table 7.7: Extent of Use of Information Technology Skills in Current Employment

PROGRAM	To A Great Extent		To Some Extent		Limited		Very Limited		Not at All		N
	f	%	f	%	f	%	f	%	f	%	
BSE Filipino	18	36.73	22	44.90	5	10.21	3	6.12	1	2.04	49
BLIS	9	52.94	8	47.06	0	0	0	0	0	0	17
BEED	122	67.03	58	31.87	1	0.55	1	0.55	0	0	182
BSE PE	16	33.33	22	45.83	8	16.67	2	4.17	0	0	48
BSE Music	8	44.44	7	38.90	3	16.67	0	0	0	0	18
BSE VE	14	66.67	6	28.57	1	4.76	0	0	0	0	21
BSE STA	9	26.47	16	47.06	9	26.47	0	0	0	0	34
BSE History	17	62.96	9	33.33	1	3.70	0	0	0	0	27
BSMT	28	24.56	30	26.31	44	38.60	12	10.53	0	0	114
BSE Math	38	49.35	30	38.96	9	11.69	0	0	0	0	77
BSPT	9	47.37	8	42.10	1	5.26	1	5.26	0	0	19
BSBT	36	60.00	17	28.33	7	11.67	0	0	0	0	60
BSE Bio	24	54.55	13	29.55	6	13.64	0	0	1	2.27	44
TOTAL	348	49.01	246	34.65	95	13.38	19	2.68	2	0.28	710

As to the extent of use of information technology skills, Table 7.7 reveals that 49.01 percent of the respondents claimed use to a great extent while 34.64 percent claimed application to some extent only. It is assumed that while the respondents were equipped with this information technology skill, they lack the opportunity to use it extensively probably because of lack of equipment and facilities in their place of work.

Table 8: Skills Supposedly Provided During Pre-Service Training

Tables 8.1 – 8.7 present the percentage distribution of skills supposedly provided during the pre-service training of the PNU graduates.

Table 8.1: Knowledge and Technical Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	49	100	0	0	49
BLIS	17	100	0	0	17
BEED	182	100	0	0	182
BSE PE	47	97.92	1	2.08	48
BSE Music	17	94.44	1	5.56	18
BSE VE	21	100	0	0	21
BSE STA	33	97.06	1	2.94	34
BSE History	27	100	0	0	27
BSMT	113	99.12	1	0.88	114
BSE Math	77	100	0	0	77
BSPT	19	100	0	0	19
BSBT	59	98.33	1	1.67	60
BSE Bio	40	90.91	4	9.09	44
TOTAL	701	98.73	9	1.27	710

Table 8.2: Communication Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	49	100	0	0	49
BLIS	16	94.12	1	5.88	17
BEED	182	100	0	0	182
BSE PE	47	97.92	1	2.08	48
BSE Music	17	94.44	1	5.56	18
BSE VE	21	100	0	0	21
BSE STA	34	100	0	0	34
BSE History	27	100	0	0	27
BSMT	113	99.12	1	0.88	114
BSE Math	76	98.70	1	1.30	77
BSPT	19	100	0	0	19
BSBT	57	95.00	3	5.00	60
BSE Bio	43	97.73	1	2.27	44
TOTAL	701	98.73	9	1.27	710

Table 8.3: Human Relations Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	48	97.96	1	2.04	49
BLIS	16	94.12	1	5.88	17
BEED	181	99.45	1	0.55	182
BSE PE	46	95.83	2	4.17	48
BSE Music	16	88.89	2	11.11	18
BSE VE	21	100	0	0	21
BSE STA	31	91.18	3	8.82	34
BSE History	26	96.30	1	3.70	27
BSMT	113	99.12	1	0.88	114
BSE Math	76	98.70	1	1.30	77
BSPT	18	94.74	1	5.26	19
BSBT	59	98.33	1	1.67	60
BSE Bio	43	97.73	1	2.27	44
TOTAL	694	97.75	16	2.25	710

Table 8.4: Leadership Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	49	100	0	0	49
BLIS	16	94.12	1	5.88	17
BEED	180	98.90	2	1.10	182
BSE PE	48	100	0	0	48
BSE Music	18	100	0	0	18
BSE VE	21	100	0	0	21
BSE STA	33	97.06	1	2.94	34
BSE History	27	100	0	0	27
BSMT	113	99.12	1	0.88	114
BSE Math	75	97.40	2	2.60	77
BSPT	17	89.47	2	10.53	19
BSBT	59	98.33	1	1.67	60
BSE Bio	43	97.73	1	2.27	44
TOTAL	699	98.45	11	1.55	710

Table 8.5: Research Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	49	100	0	0	49
BLIS	16	94.12	1	5.88	17
BEED	181	99.45	1	0.55	182
BSE PE	44	91.67	4	8.33	48
BSE Music	18	100	0	0	18
BSE VE	21	100	0	0	21
BSE STA	34	100	0	0	34
BSE History	27	100	0	0	27
BSMT	113	99.12	1	0.88	114
BSE Math	75	97.40	2	2.60	77
BSPT	16	84.21	3	15.79	19
BSBT	57	95.00	3	5.00	60
BSE Bio	42	95.45	2	4.55	44
TOTAL	693	97.61	17	2.39	710

Table 8.6: Problem-Solving Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	48	97.96	1	2.04	49
BLIS	16	94.12	1	5.88	17
BEED	182	100	0	0	182
BSE PE	44	91.67	4	8.33	48
BSE Music	17	94.44	1	5.56	18
BSE VE	21	100	0	0	21
BSE STA	32	94.12	2	5.88	34
BSE History	27	100	0	0	27
BSMT	114	100	0	0	114
BSE Math	76	98.70	1	1.30	77
BSPT	19	100	0	0	19
BSBT	59	98.33	1	1.67	60
BSE Bio	40	90.91	4	9.09	44
TOTAL	695	97.89	15	2.11	710

Table 8.7: Information Technology Skills

PROGRAM	Provided		Not Provided		N
	f	%	f	%	
BSE Filipino	46	93.88	3	6.12	49
BLIS	16	94.12	1	5.88	17
BEED	180	98.90	2	1.10	182
BSE PE	44	91.67	4	8.33	48
BSE Music	16	88.89	2	11.11	18
BSE VE	20	95.24	1	4.76	21
BSE STA	28	82.36	6	17.64	34
BSE History	26	96.30	1	3.70	27
BSMT	109	95.61	5	4.39	114
BSE Math	73	94.81	4	5.19	77
BSPT	14	73.68	5	26.32	19
BSBT	56	93.33	4	6.67	60
BSE Bio	40	90.91	4	9.09	44
TOTAL	668	94.08	42	5.92	710

As shown in these tables, all the seven (7) skills such as knowledge and technical, communication, human relations, leadership, research, problem-solving and information technology skills were provided ranging from a high of 98.73 percent to a low of 94.08 percent. Only information technology skills got a 94.08 percent which is equally very high, however, with the proliferation of electronic gadgets and IT facilities, this should be one skill that teacher education institution like PNU should further strengthen to facilitate learning and use as a variety of teaching/learning deliveries.

Table 9: Use of Skills/Qualifications in Current Employment which are not related to Undergraduate Degree

PROGRAM	YES		NO		N
	f	%	f	%	
BSE Filipino	13	26.53	36	73.47	49
BLIS	4	23.53	13	76.47	17
BEED	3	1.65	179	98.35	182
BSE PE	6	12.5	42	87.50	48
BSE Music	6	33.33	12	66.67	18
BSE VE	4	19.05	17	80.95	21
BSE STA	9	26.47	25	73.53	34
BSE History	7	25.93	20	74.07	27
BSMT	9	7.89	105	92.11	114
BSE Math	5	6.49	72	93.51	77
BSPT	4	21.05	15	78.95	19
BSBT	20	33.33	40	66.67	60
BSE Bio	12	27.27	32	72.73	44
TOTAL	102	14.37	608	85.63	710

Table 9 reveals that 86% of the respondents across the 13 programs did not require skill/qualification in current employment that was not related to their undergraduate degrees.

Table 10: Degree of Relation of Training Received in the Undergraduate Program to Tasks Performed in Current Employment

PROGRAM	VERY MUCH		MUCH		SLIGHTLY		NOT RELATED AT ALL		N
	f	%	F	%	f	%	f	%	
BSE Filipino	36	73.47	9	18.37	4	8.16	0	0	49
BLIS	11	64.71	3	17.65	0	0	3	17.65	17
BEED	130	71.43	52	28.57	0	0	0	0	182
BSE PE	37	77.08	7	14.58	4	8.33	0	0	48
BSE Music	12	66.67	4	22.22	2	11.11	0	0	18
BSE VE	14	66.67	7	33.33	0	0	0	0	21
BSE STA	19	55.88	12	35.29	1	2.94	2	5.89	34
BSE History	20	74.07	6	22.22	1	3.70	0	0	27
BSMT	32	28.07	78	68.42	4	3.51	0	0	114
BSE Math	34	44.15	40	51.95	3	3.90	0	0	77
BSPT	14	73.68	4	21.05	1	5.26	0	0	19
BSBT	37	61.67	19	31.67	3	5.00	1	1.67	60
BSE Bio	30	68.18	8	18.18	4	9.09	2	4.55	44
TOTAL	426	60.00	249	35.07	27	3.80	8	1.13	710

A great number (95.07%) of the respondents claimed that the training they received in the undergraduate program was very much and much related to the tasks they perform in their current employment (Table 10). This data supports the FGD conducted among selected respondents of the tracer study. Specifically, the respondents claimed that the General Education (GE) courses helped them in relating their Mathematics lessons, Language (English & Filipino), Social Sciences, and General Psychology and Values Education subjects to other subjects and to real life situations. The Professional Education (ProfEd) courses taught them to manage their classes and to plan their lessons well for a more efficient and effective teaching and learning of their majorship/specialization. More so, the use of teaching strategies specific to their specialization facilitated their lessons. Further, the assessment tools specific to the subjects and or majorship gave them the confidence to measure the competencies expected of the lessons. As to their specialization courses, they affirmed that the courses provided them sufficient content mastery. A number shared that the content knowledge and the use of pedagogical strategies and manipulative materials became an edge for them over the other teachers.

In relation to their practicum experience, the respondents articulated that the opportunity to teach in actual classroom settings was most essential in honing their skills as a teacher. However, a number of these respondents felt that one quarter (or two months) of practicum was insufficient. A semester of practicum was suggested as a better time frame for practicum. This would also address the concern of Erasmus students from the ten 3NS member institutions, where majority of length of their practicum is one semester. According to Nivera (2013), it is important to note that the respondents were unanimous in their view that their Field Study (FS) courses did not provide them with the slow immersion to schools, as planned by CHED. Instead, most of the time they visited schools for the sake of complying with the requirements, but these experiences were not processed in the classroom. FS teachers merely asked them to fill out worksheets, which they did oftentimes without anchoring their responses on their actual visits to the schools. Clearly, there is a need to re-evaluate the conduct of Experience Learning Courses, specifically the FS courses.

Table 11: Length of Time in Acquiring First Job

PROGRAM	RIGHT AFTER GRADUATION		LESS THAN A YEAR		MORE THAN A YEAR		OTHERS		N
	f	%	f	%	f	%	f	%	
BSE Filipino	43	87.76	4	8.16	1	2.04	1	2.04	49
BLIS	14	82.35	3	17.65	0	0	0	0	17
BEED	153	84.07	27	14.84	1	0.55	1	0.55	182
BSE PE	38	79.17	8	16.67	1	2.08	1	2.08	48
BSE Music	13	72.22	2	11.11	2	11.11	1	5.56	18
BSE VE	17	80.95	4	19.05	0	0	0	0	21
BSE STA	31	91.18	2	5.88	1	2.94	0	0	34
BSE History	22	81.48	3	11.11	1	3.70	1	3.70	27
BSMT	100	87.72	7	6.14	0	0	7	6.14	114
BSE Math	65	84.41	8	10.39	2	2.60	2	2.60	77
BSPT	16	84.21	3	15.79	0	0	0	0	19
BSBT	48	80.00	9	15.00	1	1.67	2	3.33	60
BSE Bio	35	79.55	6	13.64	2	4.55	1	2.27	44
TOTAL	595	83.80	86	12.11	12	1.69	17	2.39	710

Transition refers to the length of time acquiring the first job. Table 11 reveals that of the 710 respondents from the 13 academic programs, 83.80% find job right after graduation, while 12.11% land a job for less than a year. This means that PNU graduates regardless of their specializations are favored by schools over other teacher education graduates.

Table 12: Conditions in Acquiring First Job

PROGRAM	BY APPLICATION		BY INVITATION		POLITICAL CONNECTION		OTHERS		N
	f	%	F	%	f	%	F	%	
BSE Filipino	43	87.76	4	8.16	0	0	2	4.08	49
BLIS	15	88.24	1	5.88	1	5.88	0	0	17
BEED	176	96.70	6	3.30	0	0	0	0	182
BSE PE	40	83.33	5	10.42	1	2.08	2	4.17	48
BSE Music	17	94.44	1	5.56	0	0	0	0	18
BSE VE	19	90.48	1	4.76	0	0	1	4.76	21
BSE STA	30	88.24	2	5.88	0	0	2	5.88	34
BSE History	26	96.30	1	3.70	0	0	0	0	27
BSMT	108	94.74	3	2.63	0	0	3	2.63	114
BSE Math	73	94.80	2	2.60	2	2.60	0	0	77
BSPT	18	94.74	0	0	0	0	1	5.26	19
BSBT	56	93.33	4	6.67	0	0	0	0	60
BSE Bio	34	77.27	7	15.91	0	0	3	6.82	44
TOTAL	655	92.25	37	5.21	4	0.56	14	1.97	710

As to conditions in acquiring first job, a greater majority of 92.25% claimed that they were hired by application and only 5% was by invitation. In a similar tracer study, Anyanwu (2000) in his research at the University of Nigeria, indicated that more graduates got their first job by application to vacant position and less through political connections.

Table 13: Difficulties Encountered in Looking for a Job (N = 710)

Difficulties*	f	%	Rank
Few job vacancies / lack of position or item	332	46.76	1
Inadequate experience	222	31.27	2
Others**	118	16.62	3
Mismatch of educational qualifications	89	12.54	4
Personality factors	53	7.46	5.5
Passing the pre-employment interview	53	7.46	5.5
Lack of political patronage	35	4.93	7
Passing the pre-employment exam	34	4.79	8
Not meeting paper requirement/s	29	4.08	9
Inadequate knowledge or skills	10	1.41	10

* Multiple responses possible; **Difficulties not specified in the questionnaire

While the greater majority of PNU graduates were hired right after graduation and by application, they, however, still encountered difficulties in looking for a job. Few job vacancies/or lack of position or item ranked first with inadequate experience considering that they are still neophyte teachers, ranked as 2nd, and others which was not specified ranked 3rd. Others were mismatch of educational qualifications, personality factors among others. (Table 13)

Table 14: Factors Facilitating Acquisition of First Job

PROGRAM	Frequency by Factor*				
	AREA OF SPECIFICATION	REPUTATION OF COLLEGE/ UNIVERSITY	PERSONALITY FACTORS	SCHOLASTIC STANDING	OTHERS**
BSE Filipino	41	42	40	25	2
BLIS	17	9	7	8	0
BEED	123	133	35	95	3
BSE PE	43	35	34	16	1
BSE Music	18	13	12	3	1
BSE VE	15	19	13	8	1
BSE STA	27	26	30	12	3
BSE History	20	21	17	14	4
BSMT	100	39	58	26	6
BSE Math	47	41	44	14	1
BSPT	15	16	10	14	1
BSBT	50	53	42	35	3
BSE Bio	35	36	32	21	4
TOTAL	551	483	374	291	30
%	77.61	68.03	52.68	40.99	4.23
Rank	1	2	3	4	5

* Multiple responses possible; **Reasons not specified in the questionnaire

Table 14 shows that the area of specialization ranked 1st among the factors facilitating acquisition of first job, followed by reputation of college/university, personality factors and scholastic standing in this order. Anyanwu (2000) and Mancao (2010) support this finding in their tracer study stating that area of specialization, reputation of the university, personality and grades were major contributors to being employed.

2. The Graduates' Level of Satisfaction with the University Services, Learning Environment and Faculties.

The succeeding tables present the graduates' level of satisfaction with the services, learning environment and facilities of the University.

Table 15: Degree of Satisfaction with Services Provided at PNU

Services	Mean	Interpretation
Administrative Support	3.78	High Satisfaction
Faculty Support	4.22	High Satisfaction
Staff	3.77	High Satisfaction
Academic Advising	3.98	High Satisfaction
Guidance and Counseling`	3.73	High Satisfaction
Accommodation	3.80	High Satisfaction
Food Services	3.67	High Satisfaction
Library Services	3.89	High Satisfaction
Extension/Outreach/Community Involvement	3.80	High Satisfaction
Extra-curricular activities	3.91	High Satisfaction
Co-curricular activities	3.95	High Satisfaction
Security	3.83	High Satisfaction

In general, the data on the satisfaction with the services provided at PNU is interpreted with "High Satisfaction" with the faculty support yielding the highest mean $(\overline{x})$ of 4.22 and academic advising as 3.98 as next highest. Academic advising in a way is one big support the faculty members provide in the duration of the study of the students at PNU. Conversely, food service ranked lowest but still interpreted with "High Satisfaction."

Table 16: Degree of Satisfaction with the Learning Environment / Climate at PNU

Learning Environment/Climate	Mean	Interpretation
Teaching Staff		
Knowledge of content	4.34	High Satisfaction
Interaction with students	4.24	High Satisfaction
Creativity in teaching	4.17	High Satisfaction
Delivery Skills / Teaching Methods	4.26	High Satisfaction
Instructional Materials	4.06	High Satisfaction
Respect for Students	4.72	Very High Satisfaction
Atmosphere of political and cultural understanding	4.00	High Satisfaction

Table 16 shows that respect for students was rated a mean $(\overline{x})$ of 4.71 interpreted as "Very High Satisfaction", specifically on the teaching staff in terms of their knowledge of content, interaction with students, activity in teaching, delivery skills and teaching method. Among the factors, atmosphere of political and cultural understanding appeared to have been rated the lowest although interpreted under "High Satisfaction." Hence, it appears that PNU alumni were highly satisfied with the overall institutional climate of PNU especially with the respect accorded to them.

Table 17: Degree of Satisfaction with the Facilities at PNU

Facilities	Mean	Interpretation
Library	3.77	High Satisfaction
Science Laboratories	3.51	High Satisfaction
Computer Laboratories	3.45	Moderate Satisfaction
Equipment	3.49	Moderate Satisfaction
Classroom	3.57	High Satisfaction
Clinic	3.66	High Satisfaction
Canteen / Food Stalls	3.63	High Satisfaction
Recreational Facilities	3.54	High Satisfaction
Audio-Visual Room	3.64	High Satisfaction
Auditorium	3.74	High Satisfaction
Communication Facilities	3.49	Moderate Satisfaction
General conditions of Building and Grounds	3.63	High Satisfaction

As to the degree of satisfaction with the facilities at PNU, Table 17 shows that most of the facilities are rated with "High Satisfaction". Notably, the library gained the highest mean of 3.77. Only three of the facilities were rated with "Moderate Satisfaction." These are communication facilities, equipment and computer laboratories which garnered the lowest mean of $(\overline{x})$ 3.49. Apparently, the study revealed that the respondents are highly satisfied with the facilities of PNU. While the respondents in general were highly satisfied with the facilities, national and international standards have to be considered in improving the PNU facilities especially with the coming ASEAN 2015 integration.

3. *Extent to which the Curricular Program Contributed to the Development of the Graduates' skill*

The succeeding tables nos. 18-22 present the degree of adequacy of training on the five (5) clusters of skills provided by PNU to the undergraduate alumni.

Table 18: Adequacy of Training on Communication Skill

Communication Skills	Mean	Interpretation
1. Express ideas in clear and logical manner	4.06	Very Adequate
2. Use various forms and styles of written communication	4.02	Very Adequate
3. Use grammatically correct language and vocabulary	4.06	Very Adequate
4. Listen with objectivity to gain understanding of the ideas of others	4.14	Very Adequate
Overall Mean	4.07	Very Adequate

Table 18 shows that the overall communication skills of 4.07 was rated "Very Adequate" by the graduates. The ability to listen with objectivity to gain understanding of the ideas of others is noted highest with a mean $(\bar{x})$ of 4.14. Conversely, the use of various forms and styles of written communication gained the lowest mean $(\bar{x})$ of 4.02. Consequently, this study has proven that PNU has developed the communication skills of the graduates of 2009-2011 as "Very Adequate."

Table 19: Adequacy of Training on Human Relation Skills at PNU

Human Relations Skills	Mean	Interpretation
1. Demonstrate effective social behavior in a variety of setting and under different circumstances	4.06	Very Adequate
2. Respond to the needs of colleagues in the workplace	4.05	Very Adequate
3. Apply effective conflict resolution skills	4.00	Very Adequate
4. Foster professional relationships with people in the workplace	4.08	Very Adequate
5. Exhibit cooperative and supportive relations with others	4.12	Very Adequate
Overall Mean	4.06	Very Adequate

With regard to adequacy of training on human relation skills, it likewise resulted to an overall mean $(\bar{x})$ interpreted as "Very Adequate." Highest among the skills is the ability to exhibit cooperative and supporting relations with others with a mean $(\bar{x})$ of 4.12. On the other hand, the ability to apply effective conflict resolution skills has appeared at the bottom with a mean $(\bar{x})$ of 4.0. Hence, PNU has provided the alumni in these study with "Very Adequate" skills on human relations.

Table 20: Adequacy of Training on Leadership Skills at PNU

Leadership Skills	Mean	Interpretation
1. Stimulate collaborative efforts with colleagues in the workplace.	4.07	Very Adequate
2. Motivate, mobilize and inspire people to move toward the goal of the organizations	4.06	Very Adequate
3. Organize and coordinate people and tasks to achieve the organization's goal	4.04	Very Adequate
4. Facilitate effective implementation of programs of the departments/School/organization	4.01	Very Adequate
5. Maintain self-control in the midst of stressful encounters with group members.	4.06	Very Adequate
6. Take responsibility and risks in making decisions	4.10	Very Adequate
Overall Mean	4.06	Very Adequate

For adequacy of training in leadership skills, the ability to take responsibility and risks in making decisions ranked highest with a mean $(\bar{x})$ of 4.10 interpreted as "Very Adequate." While the ability to facilitate effective implementation of programs of the departments, and school-based organization has the lowest mean of 4.01 although interpreted too as "Very Adequate." Nevertheless, this study has shown that all other leadership skills have an overall mean $(\bar{x})$ of 4.06 interpreted as "Very Adequate." Thus, the results confirmed that PNU was able to harness the leadership skills of its graduates of 2009-2011.

Table 21: Adequacy of Training on Problem Solving Skills in PNU

Problem Solving Skills	Mean	Interpretation
1. Identify the underlying issues in a problem	4.04	Very Adequate
2. Examine alternative solutions and strategies to make an informed decision on the problem	4.05	Very Adequate
3. Develop a clear plan to solve the problem	4.05	Very Adequate
4. Evaluate action for making future decision	4.06	Very Adequate
Overall Mean	4.05	Very Adequate

The adequacy of training on problem-solving skills, the ability to evaluate action for making future decision earned a mean $(\bar{x})$ of 4.06. Conversely, the ability to identify underlying issues in a problem garnered the lowest mean $(\bar{x})$ of 4.04.

These abilities together with the problem-solving skills earned an overall mean ($\bar{x}$) of 4.05 interpreted as "Very Adequate." Therefore, the graduates involved in this study were sufficiently provided and trained in solving problems.

Table 22: Adequacy of Training on Research Skills in PNU

Research Skills	Mean	Interpretation
1. Identify research problems in one's discipline	3.85	Very Adequate
2. Formulate testable hypothesis	3.81	Very Adequate
3. Demonstrate knowledge of various data gathering techniques	3.86	Very Adequate
4. Apply appropriate statistics in processing data	3.78	Very Adequate
5. Analyze and interprets research results	3.85	Very Adequate
6. Draw conclusions and generalization from research data	3.88	Very Adequate
7. Use technology to acquire needed information	3.93	Very Adequate
Overall Mean	3.85	Very Adequate

As to the adequacy of training on research skills, the ability to use technology to acquire needed information gained the highest mean ($\bar{x}$) of 3.93. This is brought about by the fact that the use of technology in all aspects is very popular in the Philippines. On the other hand, the ability to apply appropriate statistics in processing data got the lowest mean ($\bar{x}$) of 3.79. Nonetheless, all research abilities yielded an overall mean ($\bar{x}$) of 3.85 interpreted as "Very Adequate." Hence, the data confirmed that PNU was able to develop the research skills of its graduate participants of 2009-2011.

On the whole, the five cluster of skills on communication, human relations, leadership, problem solving and research were not simply provided during the Pre-Service training of the alumni as shown on Tables 8.2, 8.3, 8.4, 8.5 and 8.6 but equally trained "Very Adequately." Hence, the graduate respondents of 2009-2011 were provided and trained "Very Adequately" on the cluster of skills highly expected of a teacher.

4. *Degree of Adequacy and Relevance of Pre-Service Training in Relation to Curricular Program Competencies*

Table 23 presents the degree of adequacy and relevance of the 13 pre-service training programs in relation to their program competencies. These competencies refer to the content knowledge, skills and attitude of each undergraduate specialization programs.

Glaringly, BSE in Values Education and BSE History garnered the highest mean ($\bar{x}$) scores of 4.62 and 4.53, respectively interpreted as "Extremely Adequate." The remaining 11 programs yielded a mean ($\bar{x}$) score interpreted as "Very Adequate." Likewise, the results for relevance of pre-service training of PNU, curricular program competencies are notable. Five programs are "Extremely Relevant" and eight are "Very Relevant." The former are BSE Values Education and BSE History. It is worth noting that both BSE VE and BSE History have "Extremely Adequate" pre-service training relevant program competencies as revealed by the alumni respondents. On the whole, the curricular programs of PNU are affirmed to be "Very Adequate" and "Very Relevant" according to the graduates of 2009-2011.

Table 23: Adequacy and Relevance of Pre-Service Training in Relation to Curricular Program Competencies

PROGRAM	NO. OF COMPETENCIES	Adequacy		Relevance	
		Mean	Interpretation	Mean	Interpretation
BSE Filipino	45	4.27	Very Adequate	4.30	Very Relevant
BLIS	39	3.80	Very Adequate	3.90	Very Relevant
BEED	108	4.32	Very Adequate	4.40	Very Relevant
BSE PE	12	4.47	Very Adequate	4.57	Extremely Relevant
BSE Music	23	4.45	Very Adequate	4.63	Extremely Relevant
BSE VE	21	4.67	Extremely Adequate	4.64	Extremely Relevant
BSE STA	24	4.27	Very Adequate	4.38	Very Relevant
BSE History	24	4.53	Extremely Adequate	4.72	Extremely Relevant
BSMT	16	3.98	Very Adequate	4.06	Very Relevant
BSE Math	18	4.13	Very Adequate	4.33	Very Relevant
BSPT	25	4.09	Very Adequate	4.40	Very Relevant
BSBT	14	4.38	Very Adequate	4.52	Extremely Relevant
BSE Bio	14	4.37	Very Adequate	4.47	Very Relevant

Conclusions and Recommendations

This tracer study is a collaborative work of the faculty researchers from the 13 academic programs. The project's output is significant primarily to recognize and address the existing curriculum's strengths and weaknesses, its adequacy, quality and relevance of pre-service training in relation to the competencies needed in the market both locally and internationally. Hence, the following are the summary of conclusions and recommendations:

PNU graduates are predominantly females and in their early twenties; that they enrolled at PNU because of affordable tuition fee and the personal prestige attached to the name for better employment and career advancement. A great number of them were employed immediately after graduation by application and not by political connections.

Having provided very adequately the skills such as knowledge and technical, communication, human relations, leadership, research, problem solving, and other competencies specific to the area of specialization were major factors on top of area of specialization and reputation of PNU considered for immediate job acquisition.

The graduates' level of satisfaction with the University's services, learning environment and facilities were generally of high satisfaction, however, computer laboratories with moderate satisfactory is still very much desired especially with the rapid advancement of technology needed for learning and connecting with the world.

The existing undergraduate curricular programs although still very adequate and very relevant should be at par with the international standards, responsive to the coming ASEAN 2015 integration, relevant to the competency framework of South East Asian Teachers of the 21st century, and lifelong learning skills.

The very rich pool of information and other variables derived from tracer studies are important indicators of the quality of higher education.

Further, based on the findings and conclusions of this study, other recommendations are as follows:

- Institutionalize system-wide the conduct of tracer studies every other school year to include not only the graduates but also the employers as respondents;
- Intensify and offer attractive incentives to graduating high school male students to enter the teaching profession;
- Have a one-semester practicum time frame to align with other 3NS institutions;
- Re-evaluate the conduct of Experiential Learning Courses, especially FS courses;
- Develop innovative curricular programs that are pro-poor to alleviate poverty; and
- Develop other innovative curricular programs both for undergraduate and graduate levels to catch up with the ASEAN 2015 integration;

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