Tracer Study of the Teacher Education Graduates

Susan D. Gopez, Arnold A. Eniego*

College of Education, Arts and Sciences, National University – Manila, Philippines
Corresponding Author: aaeniego@national-u.edu.ph

Abstract: This study aims to establish the profile of National University – College of Education, Arts, and Sciences (NU–CEAS) graduates from the years 2013 to 2017 in terms of the following: (1) employment status and transition to employment; (2) level of satisfaction of NU's services, facilities, and learning environment; (3) level of contribution of the program in the skills development of the graduates; and (4) level of effectiveness, adequacy, and relevance of NU–CEAS programs. A total of 50 samples in this descriptive study were considered and drawn from three undergraduate teacher education programs: BSEd English, BSEd Mathematics, and BEEd. The participants were interviewed using a modified tracer study instrument of CHED through e-communications: Skype, mobile phones, Viber, WeChat, email, or Facebook Messenger. The study shows that (a) most respondents are employed, took the licensure examination, and the majority chose communication and language courses to be included in the teacher education program; (b) graduates have a moderate to high satisfaction rating on the learning facilities of the university while a low to high rating on student support services; (c) their program majorly contributed to their professional and personal growth and all aspects of it such as teacher-student relationships, quality of instruction, and relevance to their profession, among others, are rated very good. In addition, most of the respondents reported that their soft skills such as dependability, teamwork, and critical thinking were developed in their degree program; (d) and finally, graduates responded positively when asked to give their overall assessment of their CEAS teachers, the program they graduated on, and school experience. It is recommended to continue conducting tracer studies for future CEAS graduates and utilize the results of this study to improve NU–CEAS programs and the university's services.

Keywords: graduates; teacher education; tracer study

1. INTRODUCTION

More than honing and developing the capabilities of college students, higher education institutions prepare them to become productive and valuable citizens of the country (Rojas & Rojas, 2016). The notion is especially true for higher education institutions (HEIs) that offer teacher education programs. In 2019, the Commission of Higher Education (CHED) reported 138,496 Education and Teacher Training graduates from HEIs in the Philippines for the school year 2016–2017, and some of these graduates came from NU. The NU–CEAS Teacher Education Department offers a Bachelor of Elementary Education (BEEd) and Secondary Education (BSEd) with specializations in English and Mathematics. Each program comprises at least 45 units of Professional Education, at least 51 units of Specialization, and at least 50 units of General Education. The College envisions itself as a leading teacher education institution committed to national and

global leadership, excellence, and innovation rooted in value-laden transformation. For the said Vision to be a reality, the department must constantly assess and improve the quality of its programs. One way to do this is by conducting tracer studies.

Graduate Tracer Studies involve identifying, analyzing, and evaluating the program views and transition to work experiences of graduates from HEIs and aim to use the collected information to improve the program offerings (Badiru & Wahome, 2016). Such studies are examples of empirical research that provide quality insights to HEIs in developing and preparing their students' activities and training (Menez, 2012). In addition, these alumni surveys allow HEIs to track the career progression of their graduates and provide recommendations to policy-making bodies on essential issues relevant to the institution (Mubuuke et al., 2014). With this, rich information and data can be obtained through tracer studies involving NU graduates. Information on graduates' assessment of NU programs can be analyzed. Further, this will help the teacher education department of CEAS improve its programs.

This tracer study has these objectives:
1. Establish the employment status and transition to employment profiles of NU-CEAS graduates.
2. Assess the level of satisfaction of NU–CEAS graduates with the NU services, facilities, and learning environment.
3. Examine how well the degree program aided in the development of the following skills of NU–CEAS graduates:
   a. Problem-solving
   b. Leadership
   c. Human relation
   d. Communication; and
   e. Research
4. Determine the level of effectiveness, adequacy, and relevance of NU-CEAS programs.

2. METHODOLOGY

This tracer study used a descriptive survey method. The researchers modified the survey questionnaire of the tracer study of the Commission of Higher Education (CHED) to attain the objectives. The National University Alumni Office (NUAO) was requested to provide the list of graduates who will serve as respondents of the tracer study. Names, addresses, and contact numbers of the identified respondents were prepared. The participants were contacted, informed consent was obtained, and the survey was given to them. Of all the names, 50 consented and participated in the study. The 50 respondents are composed of one (1) who graduated from SY 2012–2013, seven (7) from SY 2014–2015, seventeen (17) from SY 2015–2016, and twenty-five (25) from SY 2016–2017.

Data were tabulated, tallied, and analyzed. The data in this study were processed using statistical tools such as frequency counts, percentages, and means to achieve the study's goals. Most items in the instrument used a Likert scale of 1–5, with only one item that used a scale of 1–4. Mean interpretations are based on the conventions in Table 1 and Table 2.

Table 1. Interpretation of Some Means in the Study[*]

Scale	Satisfaction Rating	Contribution Rating	Extent/Overall Assessment	Frequency Rating	Overall Experience
1.00 – 1.50	Very Low	Poor	Not at All	Never	Strongly Disagree
1.51 – 2.50	Low	Fair	Very Little	Rarely	Disagree
2.51 – 3.50	Moderate	Significant	Some	Sometimes	Neutral
3.51 – 4.50	High	Major	A lot	Often	Agree
4.51 – 5.00	Very High	Remarkable	Very Much	Very Often	Strongly Agree

[*]The interpretation in this tabulation does cover the contents of Table 9.

Table 1 was used to interpret the computed mean for the respondents' satisfaction rating, contribution rating, extent/overall assessment, frequency rating, and overall experience.

Table 2. Interpretation of Means in Table 9

Scale	Degree Rating
1.00 - 1.50	Poor
1.51 - 2.50	Fair
2.51 - 3.50	Very Good
3.51 - 4.00	Excellent

Table 2 will was used to interpret the means in each aspect of the respondents' program in Table 9.

3. RESULTS AND DISCUSSION
3.1. Employment Profile and Transition to Work of Respondents

Table 3. Employment Profile of Respondents

Employment Status	Frequency	%
Employed	45	90
Unemployed	5	10
Total	50	100

Table 3 shows that 45 out of 50 or 90% of the respondents are employed during the study, while 5 out of 50 or 10% are unemployed. This number is slightly higher than the 85.19% employed NU computer engineering graduates from 2010 to 2017 in the tracer study of Alejo, M. et al. in 2021 and the 67.1% employed NU BS Nursing graduates from 2007 to 2018 in the tracer study of Brosola, D. in 2019.

Table 4. Suggested Courses/Training for Inclusion in the Curriculum to be Competitive in the Academe

Course/Training	Frequency	%
Communication	35	70
Human Resources	19	38
IT	14	28
Language	22	44

Table 4 shows that 35 of 50 or 70% of respondents suggested including communication courses in the curriculum for teachers to be competitive as they transition in the academe. Language is a far second at 22 suggestions or 44% of the respondents. Nineteen respondents suggested human resources courses, while 14 suggested IT-related courses. The result is in tune with the study by Martin in 2014, which highlights the significance of proficiency in communication for employability.

Table 5. Number of Respondents who took Professional/Licensure Examinations

Response	Frequency	%
Yes	38	76
No	12	24
Total	50	100

Most schools require teachers to be licensed before accepting their applications. In fact, for public schools here in the Philippines, a teacher's license is one of the requirements. Table 5 shows that 38 or 76% of the respondents took a professional/licensure examination, while 12 did not at the time of the study. Presumably, most took their licensure exams since earning a license is a step closer to getting a teaching position in a learning institution.

3.2. Graduates' level of satisfaction with NU services, facilities, and learning environment

Table 6. Graduates' Level of Satisfaction of NU's Student Support Services

Staff	Mean	Interpretation
Administrative Staff	3.54	High Satisfaction
Librarians	3.40	Moderate Satisfaction
Guidance Counselor	2.44	Low Satisfaction
Laboratory Technicians (ITRO)	3.08	Moderate Satisfaction
Research Personnel	2.90	Moderate Satisfaction
Office of Student Affairs Staff	3.12	Moderate Satisfaction

NU's admin staff got the highest satisfaction mean of 3.54 from the graduates. This is followed by Librarians, Office of Student Affairs Staff, Laboratory Technicians (ITRO), and Research Personnel with moderate satisfaction of 3.40, 3.12, 3.08, and 2.90, respectively. Meanwhile, the Guidance Counselors received the lowest satisfaction mean of 2.44.

Table 7. Graduates' Level of Satisfaction with NU's Facilities/Learning Facilities

Facilities	Mean	Interpretation
Classrooms	3.94	High Satisfaction
Consultation Room	3.62	High Satisfaction
Library	3.78	High Satisfaction
Guidance Office	3.36	Moderate Satisfaction
Computer Lab	3.42	Moderate Satisfaction
Social Hall	3.30	Moderate Satisfaction
Gym	3.30	Moderate Satisfaction
Chapel	3.64	High Satisfaction
Audio-Visual Room	3.48	Moderate Satisfaction
Canteen	3.54	High Satisfaction
Clinic	3.64	High Satisfaction

Table 7 shows that the respondents are highly satisfied with the Classrooms, Library, Chapel, Clinic, Consultation Room, and Canteen. Meanwhile, they are moderately satisfied with the other university facilities, such as the Audio-Visual Room, Computer Lab, Guidance Office, Social Hall, and Gym. The statement means that in terms of school facilities, the facilities/learning facilities at the National University satisfied the respondents. In particular, the

Classrooms received the highest mean rating of 3.94, implying that NU classrooms are satisfying for learners to stay and study.

3.3. Contribution of NU–CEAS Programs to the development of its graduates

Table 8. Contribution of NU–CEAS Programs to Personal/Professional Growth

Aspect	Mean	Interpretation
Profession	4.12	Major
Research Capability	3.86	Major
Learning Efficiency	3.92	Major
Communication Aspects	3.88	Major
People Skills	4.08	Major
Meeting Present and Future Professional Needs	4.04	Major
Exposure to Local Community within the Field of Specialization	3.96	Major
Opportunities Abroad	3.24	Significant
Personality Development	4.00	Major
Values Formation	4.12	Major
Decision-Making	4.06	Major

As seen in Table 8, the contribution of NU–CEAS programs in almost every aspect of personal and professional growth listed above was major. Of these aspects, the top five include Profession and Values Formation with a mean rating of 4.12, people skills with a mean of 4.08, Decision-Making with a mean of 4.06, and Meeting Present and Future Professional Needs with a mean of 4.04. This means that CEAS programs had a major contribution not only to one's professional ability but also to one's moral values.

Table 9 uses a different scale as compared to other tables. The respondents were instructed to rate some aspects of their completed degree program at NU on a scale of 1 to 4. The numbers are interpreted as 1 for Poor, 2 for Fair, 3 for Very Good, and 4 for Excellent.

As reflected in Table 9, on average, a very good rating was given by the respondents to all aspects of their degree program. The aspect that got the highest rating at 3.24 is Teacher-Student Relationships. From here, we can assume that most graduates have a good relationship with their mentors at National University. Next, a mean rating of 3.18 is their degrees' relevance to their profession. This means that their current work is mostly related to their degree. Teaching and Learning Environment also received a high mean of 3.14, which supports the satisfaction rating of facilities/learning facilities discussed in Table 7. Finally,

Quality of Instruction and Class Size received a very good mean rating of 3.12. This implies that graduates think that NU-CEAS provides quality instruction to its students.

Table 9. Graduates' Rating of some Aspects of their Degree Program

Aspect	Mean	Interpretation
Range of Courses	2.92	Very Good
Relevance to your profession	3.18	Very Good
Extracurricular Activities	2.86	Very Good
Premium given to Research	2.94	Very Good
Interdisciplinary Learning	2.90	Very Good
Teaching and Learning Environment	3.14	Very Good
Quality of Instruction	3.12	Very Good
Teacher-Student Relationships	3.24	Very Good
Library Resources	2.66	Very Good
Class Size	3.12	Very Good

Although all aspects are rated very good, the Library Resources and Extracurricular Activities rating needs improvement. This means that NU-CEAS must improve the available materials in the library and host extracurricular activities that students can enjoy.

Table 10 shows that NU-CEAS programs contributed a lot to the development of various skills of respondents. The ability to Confidently learn independently had the highest average with 4.30. A close second, with a mean of 4.24, is the Ability of respondents to work effectively with education leaders, supervisors, principals, and others. Other notable skills with a high mean rating include Critical thinking, the Ability to solve complex problems in educational management and teaching, and oral and written communication skills in school management and supervision. Training these skills ensures the production of educated and skillful graduates working in the field (Hanapi & Nordin, 2014).

Table 10. The extent to which the Degree Program contributed to the Development of the Graduates' Skills

Skills/Ability	Mean	Interpretation
Critical Thinking Skills	4.12	A lot
Ability to solve complex problems in educational management and in teaching	4.12	A lot
Ability to work effectively with education leaders, supervisors, principals, and others	4.24	A lot
Confidence to learn independently	4.30	A lot
Skills in oral and written communication skills on school management and supervision	4.10	A lot
Ability to apply decision-making and problem-solving skills in pedagogical and educational supervision issues	4.04	A lot
Knowledge and skills in different teaching pedagogy	4.00	A lot
Skills in doing administrative work and responsibilities	3.84	A lot
Ability to engage in self-directed learning by forecasting personal and professional needs and opportunities	4.02	A lot
Ability to write and present scholarly and professional outputs in seminars and conferences	3.80	A lot
Problem-solving skills	4.08	A lot
Information Technology Skills	3.80	A lot
Leadership Skills	4.04	A lot

4. Assessment of Degree of Effectiveness, Adequacy, and Relevance of NU CEAS Programs

Table 11. Assessment of NU–CEAS Faculty

Skills/Ability	Mean	Interpretation
Faculty gave clear explanations	4.02	Often
Faculty made good use of examples and illustrations to explain difficult points	4.16	Often
Faculty gave assignments that helped in the learning process	4.14	Often
Faculty stimulated you intellectually	4.12	Often
Faculty commented on your work in ways that help you learn	4.16	Often
Faculty were helpful and approachable	4.18	Often
Faculty had a mastery of the subject matter taught	4.20	Often
Faculty made use of class time effectively	4.02	Often
Faculty were helpful in assisting student in writing their thesis/dissertation	4.16	Often
Faculty were knowledgeable on different approaches and strategies in teaching	4.20	Often

As shown in Table 11, all the skills/abilities listed in the survey are experienced often by the respondents during their stay at the National University. With a mean rating of 4.20, the respondents reported that NU–CEAS teachers had mastery of the subject they were handling and were knowledgeable about different approaches and strategies in teaching. In addition, the faculty were helpful and approachable, with a mean rating of 4.18. The table also shows that often, NU-CEAS faculty efficiently utilized illustrations and samples to clarify hard topics in class, provided feedback on their work that helped them advance their learning, helped assist students in writing their thesis/dissertation, provided homework that assisted in the learning process, and stimulated students intellectually. This table clearly shows the strength in the teaching of the teachers of NU–CEAS.

Table 12. Overall School Experience of Respondents

Question	Mean	Interpretation
Your college experience has helped you connect what you have learned in the classroom with real-life situations	4.38	Agree
Your college experience has helped you translate what you have learned inside the classroom into action	4.30	Agree
Your college experience has had a positive influence on your intellectual growth and interest in ideas	4.44	Agree
Your college experience has had a positive influence on your personal growth, attitudes, and values	4.50	Agree

Table 12 showcases the overall school experience of the respondents. The mean rating for each question indicates that graduates agree to all the questions in this survey section. With a mean rating of 4.50, the respondents agree that their college experience has positively influenced their personal growth, attitudes, and values. The second highest mean rating of 4.44 states that the respondents' college experience impacts the development of their intellect and curiosity. This result shows that, presumably, NU-CEAS graduates had a fruitful college experience.

Table 13. Overall Assessment of the Competitiveness of NU–CEAS Programs

Responses	Frequency	%
Very Much (5)	14	28
A Lot (4)	23	46
Some (3)	11	22
Very Little (2)	1	2
Not at All (1)	1	2
Total	50	100
Mean	3.96	

Table 13 shows the respondents' overall assessment of the competitiveness of NU-CEAS programs. Twenty-three, or 46% of the respondents, said the programs were competitive, while 14, or 28%, said the programs were very competitive.

4. CONCLUSIONS AND RECOMMENDATIONS

The tracer study conducted by the researchers revealed that most respondents are employed. Regarding the transition to employment, respondents suggested that communication and language-related courses/trainings must be included in the undergraduate curriculum to be competitive in the academe. Also, many respondents took their licensure exams during the study. The graduates have a moderate to high level of satisfaction with NU services, facilities, and learning environment. Regarding the contribution of NU–CEAS programs to the evolution of graduates in terms of professional and personal growth and their skills, the respondents reported that their program contributed a lot. This is like the result of the tracer study of Cañizares in 2015 with science and mathematics education graduates in which most of their respondents reported that their school contributed a lot to their ability to work with others. Finally, the respondent's overall assessment of NU-CEAS programs was generally positive, which means that their respective programs were effective, adequate, and relevant.

The researchers recommend conducting another tracer study for the school years 2017–2018 to 2021–2022. It is recommended that an item about their desire or plan to enroll for a master's degree or further studies be included. The epistemological aspect and items related to applying skills at the workplace should also be considered (De Guzman & De Costa, 2008). In addition, students' identification of desirable and valuable components of the curriculum should be explored further (Rowe, 2017). A separate tracer study is also highly recommended for the secondary and elementary departments. Also, because NU–CEAS programs already have communication courses and language courses, we recommend that departments offering these courses strengthen the said courses so future teachers taking the said course will be ready to work in the academe.

Teacher Education department heads are encouraged to investigate why some graduates are not taking the LET exam. For the administrators, we recommend improving the services of offices with low satisfaction ratings from the respondents. It cannot be emphasized enough that quality of service greatly impacts universities' competitiveness and, therefore, must be prioritized and planned well (Sharabati et al., 2019). University services influence students' satisfaction, affecting the institution's image and its graduates' loyalty (Ali et al., 2016). Finally, we recommend that the faculty of NU–CEAS continue to exhibit skills and abilities rated high by the respondents and improve those skills rated not so high.

5. ACKNOWLEDGEMENT

6. REFERENCES

Alejo, M., Bagara M., Nalunat J., & Apduhan, J. (2021). Employability tracer study of the Computer Engineering graduates from a private university in the Philippines. *Journal of Sciences, Technology, and Arts Research*, 7(1), 3–16. Retrieved from https://national-u.edu.ph/wp-content/uploads/2022/04/2.-JSTAR7-1-COE-p.3-16.pdf

Ali, F., Zhou, Y., Hussain, K., Nair, P.K., & Ragavan, N.A. (2016), Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities, *Quality Assurance in Education*, 24(1), 70–94. https://doi.org/10.1108/QAE-02-2014-0008

Badiru, E.O & Wahome, M. (2016). Conducting graduate tracer studies for quality assurance in East African universities: A focus on graduate students voices on quality culture. *Journal of Education and Practice*, 7(6), 174–181. Retrieved from https://files.eric.ed.gov/fulltext/EJ1092473.pdf

Brusola, D. (2019). A tracer study of Bachelor of Science in Nursing graduates at National University. *Journal of Sciences, Technology, and Arts Research*, 5(1), 99–119. Retrieved from https://national-u.edu.ph/wp-content/uploads/2020/09/A-Tracer-Study.pdf

Cañizares, M. J. F. (2015). Tracing University of San Carlos' science and mathematics education graduates: How well are we in developing teacher professionals? *International Journal of Research Studies in Education*, 4(2). https://doi.org/10.5861/ijrse.2015.985

Commission on Higher Education. (2019). Higher education indicators 2019. Philippines. Retrieved from Higher Education Indicators 2019 - CHED

Commission on Higher Education. CHED Graduate Tracer Study. Philippines. Retrieved from CHED-00000016.pdf

De Guzman, A.B, & De Costa B.V (2008). Employment and employability of a selected group of Filipino college graduates. *KEDI Journal of Educational Policy*, 5 (1), 63–81.

Gines, A. C. (2014). Tracer study of PNU graduates. *American International Journal of Contemporary Research*, 4(3), 81–98. Retrieved from http://www.aijcrnet.com/journals/Vol_4_No_3_ March_2014/10.pdf

Hanapi, Z. & Nordin, M. S. (2014). Unemployment among Malaysia graduates: Graduates' attributes, lecturers' competency and quality of education. *Procedia - Social and Behavioral Sciences*, 112, 1056–1063. https://doi.org/10.1016/j.sbspro.2014.01.1269

Menez, N. L. (2012). Tracer study of the masters in business administration (MBA) graduates from 2008-2012. *Asia Pacific Journal of Education, Arts and Sciences*, 1(1), 14–18. Retrieved from https://research.lpubatangas.edu.ph/wp-content/uploads/2014/10/APJEAS-Tracer-Study-of-MBA-Graduates.pdf

Mubuuke, A.G, Businge, F., & Kiguli-Malwadde, E. (2014). Using graduates as key stakeholders to inform training and policy in health professions: The hidden potential of tracer studies. *African Journal of Health Professions Education*, 6(1), 52–55. Retrieved from http://www.ajhpe.org.za/index.php/ajhpe/article/view/302/233

Rowe, A. & Zegwaard, K. (2017). Developing graduate employability skills and attributes: Curriculum enhancement through work-integrated learning. *Asia-Pacific Journal of Cooperative Education*. 18. 87-99. Retrieved from https://researchcommons.waikato.ac.nz/bitstream/handle/10289/11267/2017%20rowe%20zegwaard%20Asia-Pacific%20Journal%20of%20Cooperative%20Education.pdf?sequence=2

Sharabati, A.-A.A., Alhileh, M.M. and Abusaimeh, H. (2019). Effect of service quality on graduates' satisfaction, *Quality Assurance in Education*, 27(3), 320–337. https://doi.org/10.1108/QAE-04-2018-0035

T. Rojas, T., & C. Rojas, R. (2016). College of Education Graduate Tracer Study (GTS): Boon or Bane? *European Scientific Journal*, 12(16), 63. Retrieved from https://doi.org/10.19044/esj.2016.v12n16p63