Employability of teacher education graduates of Nueva Ecija university of science and technology, San Isidro campus

Dr. Krissina F Posadas, Dr. Arnie C Osabel, Maria Theresa A Dela Cruz, Mark Ren D Villaflor, Neriza C Suarez, Jennifer T Flores, Jonathan L Mañas, Celestina S Yago and Dr. Dennis M Adrales

DOI: https://doi.org/10.22271/allresearch.2021.v7.i6c.8650

Abstract

Higher Education Institutions (HEIs) are responsible for supplying the labor market with professionals that not only possess knowledge, but also the competencies and skills demanded by the workplace. In order to evaluate the relevance of their program offerings to the demand of the labor market, colleges and universities, like the Nueva Ecija University of Science and Technology (NEUST), conduct tracer studies on the employability of their graduates. With this, the researchers conducted this tracer study to determine the employability of the teacher education graduates of NEUST, San Isidro Campus from 2016 to 2020. It further aimed to trace their employment and the skills or competencies that they have acquired from the university which proved to be useful in their current employment, as well as their correlation with each other. It used descriptive-correlation method. The findings revealed that there is positive correlation between the graduates’ select profile variables and their employment and their perceived useful competencies and skills. There was also a direct correlation between their employment and their perceived useful competencies and skills. Recommendations for future tracer study initiatives were also made.

Keywords: employability, employability competencies, labor market

Introduction

The concept of employability has been the focus of interest of Higher Education Institutions (HEIs) for the past decades. Several studies aimed at tracer and employability studies are carried out to gather essential information relating to the employment profile of graduates (Aquino, et al., 2015) [9] and to design a responsive curriculum for each program to fit the demand of potential employers (Woya, 2019) [15].

With the current competitive market, it is not surprising that HEIs puts emphasis in developing job-related skills among its students in order to prepare them for their future workplace. Teacher Education Institutions (TEIs) are not an exemption to this. TEIs aim to improve the quality of education and delivery to increase the employability of their teacher graduates.

Moreover, with thousands of teacher graduates produced by different Philippine colleges and universities annually, developing the employability skills of students has become increasingly important. Therefore, the employability of its teacher graduates has become an important factor to reflect the success of any teacher education institution in its role as mandated by the Philippine Constitution (Leyaley, 2016) [9]. Beyond the academic knowledge, Navida (n.d.) and Cardona and Andres (2014) argued that the academic institutions in higher education are responsible in ensuring that their graduates are prepared to enter and meet the demands of the labor market. This further reinforces the need for tracer studies on graduates’ employability.

Defined by Leyaley (2016) [9] as the graduate’s capacity to function effectively in a job, employability is an essential skill that graduates need in order to secure and maintain an employment. It includes competence-based dimensions (Romgens, Scoupe, and Beausaert,
null

2019) [12], which means that employability is more than just looking into who and how many of the graduates are employed or not. It also involves the identification of the knowledge, competences, soft and hard skills, and attributes that influences the graduates’ performance in the contemporary labor market.

The College of Education at the Nueva Ecija University of Science and Technology (NEUST) is one with the goal of providing competitive training to teacher-education students in order to give them the best chance at employment in the teaching profession. With hundreds of annual graduates, the college also aims to monitor the teacher-education graduates’ employment and determine the competencies and skills that proved to be useful in the current labor market. Among these employability competencies are written/oral communication skills, information literacy (Leyaley, 2016) [9], team work/ collaboration skills, time management, decision-making skills (Abelha, et al. 2020) [2], critical analysis and evaluation, presentation skills, hard work, independent study skills, and technology literacy, etc. (Boholoano, 2012) [4]. It is in this context that this study was conducted. It aimed to describe the employability of the teacher education graduates in terms of their current employment and the competencies and skills they have acquired from the university that are useful in their employment. This further aimed to provide data that the university’s curriculum designers, policy makers, and educators may use in developing suitably skilled teacher graduates to the workplace.

Statement of the Problem
This study aimed to describe the employability of the Teacher Education graduates of Nueva Ecija University of Science and Technology, San Isidro Campus from the academic year 2016 to 2020. Specifically, it sought to answer the following questions:

1. How may the profile of the respondents be described in terms of:
   - Sex;
   - Age;
   - Civil status;
   - Year graduated;
   - Course;
   - Major/field of specialization; and
   - Eligibility?

2. How may the employability of the respondents be described in terms of:
   - Employment;
   - Nature of employment
   - Type of institution;
   - Employment status;
   - Monthly income; and
   - Length of job search after graduation?

3. What competencies or skills acquired by the graduates from the university were useful to employment?
4. Is there significant relationship between the respondents’ profile and their employability?
5. Is there significant relationship between the respondents’ profile and the competencies and skills they acquired from the university?

null

6. Is there significant relationship between the respondents’ employability and the competencies and skills they acquired from the university?

Null Hypotheses
1. There is no significant relationship between the respondents’ profile and their employability.
2. There is no significant relationship between the respondents’ profile and the competencies and skills they acquired from the university.
3. There is no significant relationship between the respondents’ employability and the competencies and skills they acquired from the university.

Materials and Methods
Research Design
This research utilized the descriptive-correlation design to determine the employability of the teacher education graduates of the Nueva Ecija University of Science and Technology in terms of their employment and employability competencies and skills.

Respondents of the Study
This study involved 678 teacher education graduates of the Nueva Ecija University of Science and Technology, San Isidro Campus from 2016 to 2020.

Instrumentation
The questionnaire used in this study was developed based on the statement of the problem and drawn after a review of literatures related to the study. The instrument is a three-part questionnaire – a profile part, an employment part, and the employability competence checklist part. The instrument’s face and content validity were evaluated by experts. It was pilot tested to elementary and secondary teachers who were not respondents to this study. Changes recommended by the validation panel, when appropriate, and those identified as needed during the pilot test were incorporated into the instrument.

Procedure
After a series of evaluation, pilot-testing and validation of the instrument, the researchers distributed them to the graduates by sending the link to the google form via the FB messenger app. This is to gather data faster, observing health and safety protocols.

Statistical Treatment
Frequency count and percentage were used in determining the profile variables and employment information of the graduates, while ranking was utilized in describing the useful employability competencies and skills. Correlation formulas were used in determining the correlation of the respondents’ profile variables with their employment and their competencies/skills, as well as the correlation between the graduates’ employment and their competencies/skills.

Results
This section presents the analysis and interpretation of the data gathered from the participants of the study.

1. Profile of the Respondents
Table 1 presents the profile of the 678 respondents in terms of their sex, age, civil status, the year they graduated, their course, major or field of specialization, and their eligibility.
Table 1: Profile of the Respondents

| Characteristics          | Category             | No. of Respondents | Percentage |
|--------------------------|----------------------|--------------------|------------|
| Sex                      | Male                 | 158                | 23.3%      |
|                          | Female               | 520                | 76.6%      |
| Age                      | 20 - 29 years old    | 652                | 96.2%      |
|                          | 30-39 years old      | 23                 | 3.4%       |
|                          | 40-49 years old      | 3                  | 0.4%       |
| Civil Status             | Single               | 608                | 89.7%      |
|                          | Married              | 70                 | 10.3%      |
| Year Graduated           | 2016                 | 92                 | 13.6%      |
|                          | 2017                 | 141                | 20.8%      |
|                          | 2018                 | 195                | 28.8%      |
|                          | 2019                 | 211                | 31.1%      |
|                          | 2020                 | 39                 | 5.8%       |
| Course                   | Bachelor of Elementary Education | 234 | 34.5% |
|                          | Bachelor of Secondary Education | 410 | 60.5% |
|                          | Bachelor of Science in Industrial Education | 34 | 5% |
| Major/Field of Specialization | Basic Education | 234 | 34.5% |
|                          | English              | 122                | 18%        |
|                          | General Science      | 88                 | 13%        |
|                          | Music, Arts, Physical Education and Health | 137 | 20.2% |
|                          | Mathematics          | 63                 | 9.29%      |
|                          | Industrial Education | 34                 | 5.01%      |
| Eligibility              | Licensure Examination for Teachers | 448 | 66.1% |
|                          | Civil Service Eligibility | 2 | 0.3% |
|                          | Both                 | 12                 | 1.8%       |
|                          | None                 | 215                | 31.7%      |
|                          | Others (TOEIC)       | 1                  | 0.1%       |

2. Employment of the Respondents

Table 2 presents the data regarding the 678 graduates’ employment in terms of their employment, nature of employment, type of institution that they are affiliated to, their employment status, their monthly income, as well the length of time it took them before landing their first job.

Table 2: Employment of the Respondents

| Characteristics          | Categories             | No. of Respondents | Percentage |
|--------------------------|------------------------|--------------------|------------|
| Employment               | Employed               | 469                | 69.2%      |
|                          | Unemployed             | 145                | 21.4%      |
|                          | Self-Employed          | 64                 | 9.4%       |
| Nature of Employment     | Teaching               | 358                | 52.8%      |
|                          | Not Teaching-Related   | 175                | 25.8%      |
|                          | Not Applicable         | 145                | 21.4%      |
| Type of Institution      | Public                 | 143                | 21.09%     |
|                          | Private                | 293                | 43.22%     |
|                          | Not Applicable         | 242                | 35.69%     |
| Employment Status        | Permanent              | 223                | 32.89%     |
|                          | Part-Time/Contractual  | 279                | 41.15%     |
|                          | Not Applicable         | 176                | 25.96%     |
| Monthly Income           | Less than 10,000       | 186                | 27.43%     |
|                          | 10,001 - 20,000        | 205                | 30.24%     |
|                          | 20,001 - 30,000        | 120                | 17.7%      |
|                          | 30,001 - 40,000        | 12                 | 1.77%      |
|                          | More than 40,000       | 9                  | 1.33%      |
|                          | Not Applicable         | 146                | 21.53%     |
| Length of Job Search after Graduation | less than a month | 157                | 23.2%      |
|                          | 1-6 months             | 155                | 22.9%      |
|                          | 7-12 months            | 79                 | 11.7%      |
|                          | more than a year       | 171                | 25.2%      |
|                          | Not Applicable         | 116                | 17.1%      |

3. Employability Competencies/Skills

Table 3 presents the competencies/skills that the respondents perceived to be useful in their employment.

Table 3: Useful competencies or skills in employment

| Competencies or Skills               | No. of Respondents | Percentage | Rank |
|--------------------------------------|--------------------|------------|------|
| Written/Oral Communication Skills    | 558                | 82.3%      | 1    |
| Hard Work                            | 545                | 80.4%      | 2    |
| Team Work/ Collaboration Skills      | 521                | 76.8%      | 3    |
| Time Management                      | 496                | 73.2%      | 4    |
4. Relationship the Respondents’ Profile and their Employment

Table 4: Correlation of the Employability of Graduates and Respondents’ Profile

| Respondents’ Profile | Correlation | Decision | Interpretation |
|----------------------|-------------|----------|---------------|
| Sex                  | 0.648**     | Reject Ho| Significant   |
| Age                  | 0.033       | Accept Ho| Not Significant|
| Civil Status         | 0.587**     | Reject Ho| Significant   |
| Year Graduated       | 0.904**     | Reject Ho| Significant   |
| Course               | 0.007       | Accept Ho| Not Significant|
| Major                | 0.009       | Accept Ho| Not Significant|
| Eligibility          | 0.884**     | Reject Ho| Significant   |

*p<0.05, **p<0.01

5. Relationship Between the Respondents’ Profile and their Perceived Useful Employability Competencies/Skills

Table 5: Correlation of the Graduates Profile and their perceived useful employability Competencies/Skills

| Respondents’ Profile | Correlation | Decision | Interpretation |
|----------------------|-------------|----------|---------------|
| Sex                  | -0.043      | Accept Ho| Not Significant|
| Age                  | -0.031      | Accept Ho| Not Significant|
| Civil Status         | 0.057**     | Reject Ho| Significant   |
| Year Graduated       | 0.814**     | Reject Ho| Significant   |
| Course               | 0.964**     | Reject Ho| Significant   |
| Major                | 0.973**     | Reject Ho| Significant   |
| Eligibility          | 0.941**     | Reject Ho| Significant   |

*p<0.05, **p<0.01

6. Relationship Between the Graduates’ Employment and their Perceived Useful Employability Competencies/Skills

Table 6: Correlation Analysis the Graduates’ Employment and their Perceived Useful Employability Competencies/Skills

| Factors     | Decision | Interpretation |
|-------------|----------|----------------|
| Employability| 0.958**   | Reject Ho      |

*p<0.05, **p<0.01

Discussion

This study involved 678 teacher-education graduates of the Nueva Ecija University of Science and Technology, San Isidro Campus from 2016 to 2020. Of these, 520 or 76.6% were female. This is consistent with Gines’ (2014) argument that teaching is more attractive to women than to men. Also, the findings showed that 608 or 89.7% were relatively young within the age bracket of 20 to 29 years old. Table 1 presents that of the traced graduates, 92 or 13.6%, 141 or 20.8%, 195 or 28.8%, 211 or 31.1 %, and 39 or 5.8% graduated on 2016, 2017, 2018, 2019, and 2020, respectively. Out of these graduates, 410 or 60.5% were Bachelor of Secondary Education graduates, of which 137 or 20.2 % were MAPEH majors, while 448 or 66.1% of the graduates had recorded a 94.3% employment rate. Of the skills enumerated, written/oral communication skills, hard work, team work/collaboration skills ranked first, second, and third, respectively. This implies that in order to secure and maintain employment, graduates must possess written and oral communication the most, which is not surprising considering that a teacher, according to Silver (2018), must have good communication skills in order to listen to students and explain things clearly to them; to communicate genuine concern and care by their tone of voice and use of body language; to communicate with parent to report student progress; and to interact with colleagues and supervisors.
Additionally, all other employability skills enumerated - hard work, team work/collaboration, time management, technology literacy, decision making skills, presentation skills, independent study skills, critical analysis and evaluation, and information literacy - received over 50% of the respondents’ approval in terms of their usefulness (Table 3). This implies that the Education Department of the university hones the skills and competencies that were relevant to the current industry. Therefore, the university may use this as a reflection of the sufficiency and effectiveness of their teacher education programs, but the administration may still need to initiate improvement plans to better the employability of their graduates. Correlation analysis of the graduates’ profile and their employment showed that the graduates’ sex, civil status, year graduated, and eligibility had positive correlation with their employment. The graduates’ sex showed a significant relationship with their employment, which is similar to the report of Napallaton and Baquiller (2017) [10] that more females are employed in both private and public institutions than males. This could further be attributed to the fact that there were more female graduates than males in the College of Education. Also, the results showed that the respondents’ civil status had relationship with their employment. Moreover, the year that the respondents graduated and eligibility had significant relationship with their employment which could be attributed to the fact that graduates of 2019 and 2020 were still unable to take the Board Licensure Examination for Professional Teachers (BLEPT) due to its postponement in light of the pandemic. Hence, they are unlikely to get permanent employment, nor be employed in a teaching position in the Department of Education or state universities, unlike those who graduated earlier. According to Caingcog and Barroso (2020) [5], employment in government institutions generally involves hiring and ranking process that require work experience and eligibility. Thus, landing a permanent position in public schools would be unlikely for fresher graduates than those who graduated earlier. In conclusion, there is significant relationship between the respondents’ sex, civil status, year graduated, and eligibility and their employment. Therefore, the null hypothesis is rejected. Therefore, the null hypothesis is rejected. Moreover, correlation analysis of the graduates’ profile and their competencies/skills they find useful in their employment reveals that their civil status, year graduated, course, major, eligibility had relationship with their perceived useful employability competencies/skills. In a study conducted by Leyaley (2015) results showed that the employability competence and skills perceived to be useful by the graduates varied depending on their course or program and area of specialization or major. Overall, the graduates’ civil status, year graduated, course, and major have positive correlation with the employability competencies and skills they perceive to be useful in the job. Therefore, the null hypothesis is rejected.

Finally, the findings of the study revealed that the graduates’ employment and their perceived useful employability competencies/skills have significant relationship. This implies that the nature of employment, the employment status, and monthly income, and the length of time it took for the graduates to land their first job related to their perceived useful employability competencies and skills. Therefore, the null hypothesis is rejected. This concurs to the findings of Abas, et al. (2020) [1], who also found out that the graduates’ skills and competencies affect their employability. This means that it is important that the graduates acquire both knowledge and skills before they are sent into the workplace or the labor market. If the university hopes for its graduates to have a chance at a decent employment related to their field of specialization, then students must be equipped with necessary and appropriate skills and competencies needed in their field, because according to Leyaley (2015), most employers require specific employability skills that will be useful in the attainment of their institution’s vision and mission.

In conclusion, the higher education institution has an important role to play in helping their graduates secure and maintain a job related to their training. The HEIs administration and faculty members can do this by helping the students acquire the necessary and relevant skills demanded by the labor market. They may initiate improvement plans of their program offerings that will highlight the importance of the acquisition of competencies and skills for the improvement of the graduates’ employability. Moreover, the university may also engage their faculty members in trainings to update their approach and delivery of instruction congruent to the demands of their students and their future. According to Woya (2019) [15], delivery of education is one of the effective measurements of education quality, and education quality is vital in learning outcomes for a job.

Lastly, despite the efforts of the researchers to collect data from the entire target population, many of the graduates were unable to respond to the questionnaire. Therefore, future researchers may conduct a study to a more focused scope. The College of Education must also consistently conduct a tracer study on the employability of their graduates to serve as an evaluating factor in the performance of its programs. Future researchers may also conduct a tracer study that includes the employers or direct supervisors of the graduates in order to get their feedback on the efficacy and performance of the graduates.

Acknowledgements
The researchers would like to express their deepest gratitude to the following key persons for allowing and helping them conduct this study:

• Dr. Ma. Teresita C. Vega, Director of NEUST-SIC;
• Dr. Pastora S. De Guzman, Chairperson of NEUST-SIC College of Education; and
• College of Education graduates from 2016 to 2020 who served as the study’s respondents.

Above all, to God almighty for the gift of life and wisdom for without His divine guidance, this research work will not be possible.

References
1. Abas JAML, Alaba LM, Ganzan BJM, Descamento RE. A Tracer Study among Teacher Education Graduates from S.Y. 2012-2016. SMCC Teacher Education Journal, 2020, 2. Retrieved from https://sherj.smccnasipit.edu.ph/articles/education2/Abas.pdf
2. Abelha M, Fernandes S, Mesquita D, Seabra F, Ferreira-Oliveira AT. Graduate Employability and Competence Development in Higher Education-A
Systematic Literature Review Using PRISMA 2020. doi:10.3390/su12155900

3. Aquino AB, Punongbayan AJ, Macalaguim LP, Bauyon SM, Rodriguez RA, Quizon GR. Teacher education graduate tracer study from 2010 to 2014 in One State University in Batangas, Philippines. Asia Pacific Journal of Multidisciplinary Research 2015;3(35):45-50.

4. Boholano H. Employability of Teacher Education Graduates of an Asian Public University. JPAIR Multidisciplinary Research. 2012 DOI: 10.7719/jpair.v9i1.12

5. Caingcoy ME, Barroso DA. Cross-Sectional Inquiry on Employability and Employment Status of Bachelor of Secondary Education Graduates (2016-2018): A Tracer Study 2020. Retrieved from https://bit.ly/332ud8y

6. Cardona RS, Andres Jr, EM. The Employability of Mathematics Education Graduates (2008-2013) of a Teacher Education Institution (TEI) in The Philippines 2013. Retrieved from https://bit.ly/3eK2ChN

7. Gines AC. Tracer study of PNU graduates. American International Journal of Contemporary Research, 2014;4(3):81-98. Retrieved from http://www.aijcrnet.com/journals/Vol_4_No_3_March_2014/10.pdf

8. Labor, Employment. Philippine Statistics Authority. 2017. Retrieved from https://bit.ly/2QEWpvQ

9. Leyaley RVG. The Employability Skills of Teacher Education Graduates of the Kalinga-Apayao State College. International Journal of Scientific Engineering and Research (IJSER). 2016;4(6) Retrieved from https://www.ijser.in/archives/v4i6/IJSER15815.pdf

10. Napallaton MM, Baquiller GE. Profile and Employability Performance of Jose Rizal Memorial State University – Tampilisan Campus Bachelor of Elementary Education Graduates. JPAIR Institutional Research Journal 2017;10(1):45-53. Retrieved from https://bit.ly/2XhGCnD

11. Navida GS. (n.d.). Employability of the Bachelor of Secondary Education Graduates of Pangasinan State University Alaminos City Campus. Journal of Education, Management and Social Sciences. 2(1). Retrieved from https://bit.ly/2/psurj.org/wp-content/uploads/2019/02/JEMMS-2019-001.pdf

12. Römgens I, Scoupe R, Beausaert S. Unraveling the concept of employability, bringing together research on employability in higher education and the workplace. Studies in Higher Education 2019;45(12). Retrieved from https://www.tandfonline.com/doi/full/10.1080/03075079.2019.1623770

13. Silver S. What Are the Benefits of Communication Skills to Teachers?. 2018. Retrieved from https://bit.ly/3gRYor4

14. Torres GC. Tracer Study: A Basis for Continuing Professional Education (CPE) For BEED and BSED Graduates. San Pablo Colleges Research Journal 2015;6(1). Retrieved from https://bit.ly/2BB8U3V

15. Woya AA. Employability among Statistics Graduates: Graduates’ Attributes, Competence, and Quality of Education. Hindawi Education Research International 2019. Retrieved from https://bit.ly/3gydL7X