

# Employability and Employment Outcomes of Technical-Vocational Teacher Education Graduates: A Tracer Study

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## ABSTRACT:

This study was conducted to investigate the employability and employment outcomes of Bachelor of Technology and Livelihood Education (BTLED) and Bachelor of Technical-Vocational Teacher Education (BTVTED) graduates through a tracer study. A descriptive-correlational study was conducted, using data from 428 graduates of a state university in Northern Luzon, Philippines who finished their studies from 2018 to 2024. A validated researcher-developed questionnaire addressed employment status, job relevance, time to first employment, licensure, professional development, and perceived competency utilization. Data were analyzed using descriptive statistics and correlational analyses. The results show that most of the graduates got employed within one year after graduation and several of them got positions related to their field of study. Completion of licensure examination, attending professional development activities, and self-assessment of technical and transferable skills were linked to good employment outcomes. There were also some graduates who were seen to have delayed employment and job mismatch. The results illustrate the complex nature of employability and imply that factors such as curriculum relevance, licensure support, and work-integrated learning are important in enhancing the employment outcomes of technical-vocational teacher education graduates.

**Keywords:** employment outcomes; graduate tracer study; teacher education; technical-vocational education; work readiness

## Introduction

Graduate employability still remains a primary concern for higher education systems worldwide. Professional programs have to ensure the alignment between academic preparation and the labor market demands to the degree that their graduates have market skills which will allow them to easily enter the labor market (Cabutotan, 2025). During the last few decades, besides access and completion rates,

higher education institutions are increasingly being evaluated based on the capability of their graduates to find relevant, stable, and timely employment (Eimer & Bohndick, 2023). This change mirrors the broader economic and social transformations that feature, among other aspects, increased labor market competition, skills mismatches, and altered expectations of professional readiness (Marois et al., 2025).

In this light, teacher education has a special role. In comparison to many other degree programs, teacher education graduates start a regulated profession where employability is influenced not only by academic credentials but also by licensure requirements, institutional reputation, and conformity with national education policies. Besides, one can say that for technical-vocational teacher education programs, the employability criterion is widened to include the possession of industry-relevant technical competencies along with pedagogical skills (Nugraha et al., 2020). Graduates are expected to have the capability of teaching both theoretical concepts and practical skills that meet the needs of the changing workforce.

International texts have generally presented employability as a layered concept that depends on personal traits, schooling, and professional record along with external labor market factors (Ergün & Şeşen 2021). The publications argue that higher education definitely improves the chances of getting a job but it does not ensure that one will be employed especially in the situations where the main considerations of the hiring companies are the availability of the job, the location, and the professional regulation (Portocarrero et al., 2025). Hence, graduates' tracing or follow-up studies have become a widely recognized method of studying graduates' transition from education to employment and, in addition, for evaluating the extent to which academic programs meet the requirements of workplaces (Garcia et al., 2024).

In the Philippine context, the capability of education graduates to be absorbed by the job market is one of the most frequently targeted policy problems (Corpin, 2025). Teacher education programs, particularly those following the Technical-Vocational-Livelihood (TVL) track, are deliberately designed to help achieve the country's development objectives by enabling the production of skilled graduates who are capable of contributing to skills development, readiness of the workforce, and lifelong learning (Ferrer, 2022). In spite of these objectives, previous researches revealed the existence of late employment, job mismatch, and

differential outcomes depending on whether or not one has a license to practice and on the access to professional development activities. Nevertheless, most of the current data have been either aggregated across various fields of study or focused on general education graduates thus, they have been poorly informative at a program-specific level.

On the other hand, at the sub-national tier particularly in Northern Luzon, there is a dearth of original reports about the career competitiveness and job placements of graduates from technical-vocational teacher education programs (TESDA, 2025). The institution seriously lacks in basin-type investigation of the graduates which will delve into the relationships among academic preparation, licensing, and competency utilization as part of the job attainment process at the level of particular program.

In light of this, the present research endeavored to explore the employability and employment status of the BTLED and BTVTED graduates of a local university in Northern Luzon. The study mainly intended to describe the graduates' employment status, the relevance of their jobs to their course, and the duration of their search for the first job, as well as to find out the degree of association between the different sets of academic and professional characteristics and these three indicators of employability and employment status.

## **Methodology**

### **Research Design**

The research utilized a descriptive–correlational tracer study design. This design was well-suited for recording the employment status of graduates and analyzing the relationship between a few academic and professional variables and the employability indicators without suggesting the cause.

### **Participants and Setting**

The subjects were graduates of the BTLED and BTVTED programs of a public university in Northern Luzon, Philippines. The study was limited to graduates of the 2018 to 2024

academic years. 428 graduates responded, covering specializations in Home Economics, Food Service Management, Electronics Technology, Garments and Fashion Design, and Technical Livelihood Education.

### Instruments and Measures

The data that were gathered came through a questionnaire developed by the researchers, which was first validated by experts in the field and pilot-tested before it was given to the respondents. The questionnaire included graduate profile, employment status, degree-field job relevance, time to first job, licensure status, professional development participation, and perceived competency utilization. The extent to which the graduates agreed with the statements about the relevance and utilization of competencies was measured with the help of Likert-scale questions.

### Data Collection Procedures

Before the conduct of data collection, the necessary permission was received from the university administration. Mixed modes of distribution, such as online platforms and face-to-face coordination with the alumni office, were employed to disseminate the

questionnaires. Alumni's participation was on a voluntary basis and they were properly informed and consent was secured. Responses that had been completed were examined for completeness and only those that met the criteria were included in the analysis.

### Data Analysis Techniques

Graduate profiles and employment outcomes were summarized using descriptive statistics such as frequency, percentage, and mean. Correlational analyses were carried out in order to identify the relationships between the various employability indicators and the selected academic and professional variables. The findings were presented in aggregate form.

### Ethical Considerations

The study strictly adhered to the ethical standards for social science research and the necessary ethics approval was obtained through the Institutional Ethics Review Board. The participants were made aware of the study's objective, their confidentiality was guaranteed, and they were informed of their right to discontinue participation whenever they wished. The data collected were anonymized and only used for research purposes.

## Results and Discussion

### Employment Status and Transition to First Employment

**Table 1. Employment Status and Transition to First Employment of Graduates (n = 479)**

| Indicator                           | Frequency | Percentage (%) |
|-------------------------------------|-----------|----------------|
| <b>Nature of Current Employment</b> |           |                |
| Permanent                           | 239       | 49.9           |
| Part-time                           | 109       | 22.8           |
| Self-employed                       | 23        | 4.8            |
| None                                | 55        | 11.5           |
| Did not answer                      | 53        | 11.1           |
| <b>Time to First Employment</b>     |           |                |
| 4–6 months                          | 242       | 50.5           |
| 7–12 months                         | 180       | 37.6           |
| Not yet employed                    | 55        | 11.5           |

Table 1 revealed that a significant share of Technical-Vocational Teacher Education graduates were employed when the survey was conducted, with almost half being in permanent

jobs. International tracer studies frequently see early employment and employment stability as the main indicators of graduate employability, especially for teacher education graduates in

regulated professions. More than half of the graduates finding jobs in less than 6 months is a result consistent with international studies which show that professionally-oriented and skills-based programs usually help graduates to have smoother transitions to the labor market.

Nonetheless, the fact that there were graduates who were either unemployed or had non-permanent jobs indicates that the employability

outcomes vary. A number of international studies state that employment transitions depend not only on individual skills but also on labor market conditions, hiring practices of institutions, and demand for teachers in certain areas (Samakao & Masaiti, 2025). In the case of the Philippines, it is possible that these differences result from the supply of teaching jobs, the licensure procedures, and the limitations of geographic mobility.

### Job Search Methods and Employment Access

**Table 2. Methods of Securing First Employment**

| Job Search Method   | Frequency  | Percentage (%) |
|---------------------|------------|----------------|
| Walk-in application | 332        | 69.3           |
| Online platforms    | 147        | 30.7           |
| <b>Total</b>        | <b>479</b> | <b>100.0</b>   |

Walk-in applications still account for the majority of job access strategies, a fact that implies the continuance of relying on traditional job search methods. International employability studies reveal a trend towards a heavy usage of digital recruitment platforms; nevertheless, the present case-study is representative of patterns typical to the regional and developing labor markets where, the role of the personal presence, institutional networks, and hiring practices local to the area remains strong.

Such a scenario entails that the notion of employability has to be interpreted as very much

dependent on the specific context. Even though turning to digital skills and competencies is a trend being increasingly driven worldwide, graduates' getting a job, in most cases, may still be a matter of using the good old ways, particularly in public school settings and private institutions where formal online recruitment is hardly ever done (Tee et al, 2024). The present research, thus, underscores the necessity of institutional career guidance being synchronized not with theoretical global trends but with real labor market practices.

### Relevance of Employment to Field of Specialization

**Table 3. Relevance of Current Employment to Field of Specialization**

| Relevance Level | Frequency  | Percentage (%) |
|-----------------|------------|----------------|
| Highly relevant | 424        | 88.5           |
| Not that much   | 55         | 11.5           |
| <b>Total</b>    | <b>479</b> | <b>100.0</b>   |

The vast majority of graduates said that their jobs were very relevant to their specializations. Job relevance is often used internationally as a measure of qualitative employability and goes beyond employment simply attaining. It reveals

the extent to which graduates' academic learning is actually utilized in their work.

From this, it can be seen that the technical-vocational teacher education curriculum graduates was job opportunities the underlying

issues the curriculum graduates. Where there is a profession such as the one situation, such as aligning involving professional licensing, the implementation of standardized competency frameworks, and the definition of roles comes about. Also, there are still people who graduate

and get a job which is not very relevant to their specialization. It means that job mismatch is still a major concern and it is supported by international studies which show that different jobs can be found among graduates with professional training (Autentico & Alerta, 2022).

### Factors Influencing Employability

**Table 4. Factors Influencing Employability**

| Factor                            | Mean        | Interpretation            |
|-----------------------------------|-------------|---------------------------|
| Competency match with industry    | 5.00        | Extremely affected        |
| Professional licensure            | 4.99        | Extremely affected        |
| Work experience                   | 4.98        | Extremely affected        |
| School reputation                 | 4.98        | Extremely affected        |
| Academic performance              | 4.95        | Extremely affected        |
| Networking/connections            | 4.94        | Extremely affected        |
| Availability of job opportunities | 4.93        | Extremely affected        |
| <b>Overall Weighted Mean</b>      | <b>4.97</b> | <b>Extremely affected</b> |

Graduates believed that employability is depend on a variety of interrelated factors, with competency alignment, licensure, and work experience being the most significant ones. Employability frameworks used worldwide consistently highlight that employability is not limited to holding an academic degree but also includes acquiring professional qualifications, undergoing experiential learning, and having social capital.

The fact that licensure was rated very highly is an indication of the regulated nature of the

teaching profession, where a formal certification is the main requirement for entry. Likewise, the significance given to the institutional reputation and networking goes hand in hand with the international studies that show that employability is determined both by the attributes of the individual and the structural factors. These findings confirm the idea of employability as a multidimensional concept, which can be understood as the result of several factors rather than just one (degree completion).

### Curriculum Relevance and Competency Utilization

**Table 5. Perceived Relevance of Curriculum to Employment**

| Indicator                               | Mean        | Interpretation             |
|-----------------------------------------|-------------|----------------------------|
| Curriculum equipped relevant job skills | 4.97        | Very high relevance        |
| Courses reflected industry practices    | 4.95        | Very high relevance        |
| OJT aligned with labor market demands   | 4.92        | Very high relevance        |
| Willingness to recommend the program    | 4.97        | Very high relevance        |
| Need for curriculum updating            | 4.96        | Very high relevance        |
| <b>Overall Weighted Mean</b>            | <b>4.96</b> | <b>Very high relevance</b> |

Graduates' high ratings of curriculum employment relevance reveal that academic preparation was believed to have been closely aligned with the labor market needs. Studies internationally on technical and vocational education put emphasis on the role of work-integrated learning, industry alignment, and competency-based curricula in facilitating employability.

The poor evaluation by graduates of on-the-job training highlight the lack of importance given to the experiential component that helps students to see the relationship between theory and practice. However, the fact that the curriculum is still perceived as outdated corresponds to an international situation whereby curricula geared towards employability should be kept dynamic and responsive to constantly changing industry and educational standards. In other words, this result implies that the current preparation is well liked, however, faculty continuous curriculum review is necessary (Phillips et al., 2023).

### Conclusion

Through this tracer study, it is found that graduates of technical-vocational teacher education (TVTE) programs mostly enjoy positive employability and employment results, especially when these are coupled with acquisition of licensure and further professional development. Majority of the graduates got employed within a reasonable timeframe after graduation and their jobs were aligned with the

training they received. The evidence from the study adds up to program-specific employability outcomes and reminds us of the need for curriculum relevance, licensure preparedness, and work-related competence development. The findings could be used as a basis for curriculum revision, enhancement of career guidance services, and formulation of institutional strategies for the purpose of promoting the employability of technical-vocational teacher education graduates.

### Recommendations

The research focused on graduates from one public university only, which may limit the generalizability of the findings to other colleges or areas. Information was collected through self-report measures, hence the data might be influenced by participants' memory or their desire to give socially acceptable responses. Also, a cross-sectional study through a tracer design can only provide a snapshot of the recent situation, thus a limit exists in analyzing long-term career paths.

Researchers in the future may use longitudinal methods to follow-up on the employment progress at different time points, add the viewpoint of employers to confirm the application of competencies, and carry out comparative studies among different institutions or regions so as to further explain the employability results of technical-vocational teacher education graduates.

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### AUTHOR DECLARATION

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- The author declares that there are no conflicts of interest, whether financial or non-financial, that could have influenced the research, authorship, or publication of this manuscript.