



Employability and Career Pathways of Bachelor of Secondary Education Science Graduates from Central Philippines State University–Sipalay Campus: A Tracer Study

Regie G. Reyes

Nika Jean T. Larombe

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Correspondence: rreyes@cpsu.edu.ph

¹⁻² Central Philippines State University, Sipalay City, Philippines

Abstract

Graduate tracer studies serve as important mechanisms for evaluating curriculum effectiveness and graduate employability in higher education. This study assessed the employability, career outcomes, work attitudes, quality of education, and skills and abilities development of Bachelor of Secondary Education major in Science graduates from Central Philippines State University–Sipalay Campus for Academic Years 2021–2023. A descriptive quantitative research design employing total enumeration was used to gather data from 63 graduates through a structured tracer questionnaire. Frequency counts, percentages, weighted means, and standard deviations were utilized to analyze the data. The findings revealed that the graduates were predominantly young, female, single, bachelor's degree holders, and Licensure Examination for Professional Teachers passers. More than half were employed, although most occupied contractual positions and jobs outside their field of specialization. The graduates demonstrated very high levels of work attitude, expressed strong satisfaction with the quality of education received, and reported very high levels of professional skills and abilities development, particularly in teamwork, instructional competence, professional ethics, and teaching methodologies. However, technical and entrepreneurial skills received comparatively lower evaluations, indicating opportunities for curriculum enhancement. The study concludes that the Bachelor of Secondary Education major in Science program effectively prepares graduates with the competencies required for professional practice while highlighting the need to strengthen career placement initiatives, digital competencies, and entrepreneurial skills to improve employment stability and workforce alignment.

Keywords

graduate employability, tracer study, teacher education, curriculum evaluation, workforce readiness

How to Cite

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Author Contributions

The authors contributed to conceptualization, methodology, investigation, writing—original draft preparation, writing—review and editing, and supervision. The authors approved the final manuscript.

Ethics Statement

This study was conducted in accordance with ethical standards.

INTRODUCTION

Graduate employability has become a fundamental indicator of higher education quality because it reflects the extent to which academic programs prepare graduates to meet evolving labor market demands. Beyond academic achievement, higher

education institutions are increasingly expected to cultivate transferable competencies, including communication, collaboration, critical thinking, adaptability, leadership, and lifelong learning, that enable graduates to sustain productive careers across diverse professional settings. As labor markets continue to evolve because of technological advancement, globalization, and changing workforce expectations, universities are challenged to ensure that graduates possess both disciplinary expertise and employability skills. Consequently, graduate tracer studies have emerged as important quality assurance mechanisms that evaluate employment outcomes, curriculum relevance, and institutional responsiveness while providing evidence for continuous program improvement (Pardo-Garcia & Barac, 2020; Vezi-Magigaba & Utete, 2024). The development of graduates' career agency and self-efficacy further strengthens employability by enabling individuals to make informed career decisions, adapt to workplace changes, and pursue continuous professional growth (Koskela & Paloniemi, 2023; Mozahem, 2022). Likewise, strong academic self-efficacy has been shown to enhance persistence, self-regulation, and overall well-being, which are essential personal attributes that support graduates' successful transition from higher education to professional employment and long-term career development (Demir & Kuşcu Karatepe, 2025).

Within the Philippine higher education system, graduate employability has become an essential measure of institutional effectiveness and educational quality. Numerous graduate tracer studies consistently report that although education graduates generally obtain employment within a relatively short period after graduation, many initially accept contractual appointments, temporary positions, or occupations unrelated to their field of specialization because of limited permanent teaching vacancies and increasing labor market competition. Nevertheless, graduates continue to demonstrate adaptability by utilizing transferable competencies acquired during their academic preparation across various employment sectors (Arbis et al., 2023; Cruz & Cruz, 2023; Enriquez et al., 2024; Lagatic et al., 2024; Villanueva & Binay-an, 2021). Similar employment patterns have also been observed among graduates of computing and information technology programs, indicating that career progression depends not only on academic qualifications but also on labor market opportunities, institutional support, and graduates' capacity to adapt to changing employment conditions (Cofino et al., 2026; Francisco & Cagas, 2025). Moreover, effective institutional governance, strategic leadership, and evidence-based decision-making have been recognized as important factors that strengthen institutional quality, curriculum responsiveness, and graduate employability initiatives in higher education. These governance principles support continuous quality improvement and reinforce universities' capacity to produce competent and workforce-ready graduates who respond effectively to evolving societal and industry needs (Valdez et al., 2022).

Despite the growing body of graduate tracer research, important empirical and contextual gaps remain. Existing studies have predominantly examined graduate employability across broad teacher education populations or multiple academic programs, providing limited evidence specific to Bachelor of Secondary Education graduates majoring in Science. Furthermore, previous investigations have primarily focused on employment rates and graduate profiles while giving comparatively less attention to employment relevance, career pathways, work attitudes, perceived quality of educational preparation, and graduates' assessment of workplace competencies. These dimensions are essential for understanding not only whether graduates obtain employment but also how effectively teacher education programs prepare them for sustainable and professionally relevant careers. Addressing these gaps provides more comprehensive evidence regarding curriculum responsiveness and workforce preparedness within specialized teacher education programs (Arbis et al., 2023; Enriquez et al., 2024; Villaflor et al., 2026).

The present study examined the employability and career paths of Bachelor of Secondary Education major in Science graduates from Central Philippines State University–Sipalay Campus who completed the program during Academic Years 2021–2023. Specifically, the study investigated graduates' demographic characteristics, employment status, career trajectories, relevance of employment to their field of specialization, work attitudes, perceived quality of educational provision, and workplace competencies acquired during their university education. The findings are expected to provide empirical evidence that will support curriculum enhancement, strengthen institutional quality assurance initiatives, improve career guidance and graduate support services, and inform strategic decision-making for program development. By generating institution-specific tracer evidence, the study contributes to the growing body of graduate employability research while providing practical insights that support continuous improvement of teacher education programs and their responsiveness to contemporary workforce demands.

METHODOLOGY

Design

This study employed a descriptive quantitative research design to examine the employability and career pathways of Bachelor of Secondary Education major in Science graduates from Central Philippines State University–Sipalay Campus. The descriptive research design was considered appropriate because it systematically described graduates' demographic characteristics, employment outcomes, work attitudes, perceived quality of educational provision, and skills and abilities development without manipulating any research variables. The design enabled the researchers to generate objective quantitative evidence regarding graduates' employment experiences and career trajectories, thereby providing empirical information useful for curriculum enhancement, graduate support services, and institutional quality assurance. This methodological approach is consistent with the quantitative research paradigm, which emphasizes the objective measurement and statistical description of observable phenomena (Liu, 2022).

Sampling

The study employed a total enumeration sampling technique to ensure complete representation of the target population. All sixty-three (63) graduates of the Bachelor of Secondary Education major in Science program from Academic Years 2021, 2022, and 2023 were included in the study. Since the population was relatively small and accessible through institutional

records, all identified graduates were invited to participate. All sixty-three graduates completed the tracer survey, resulting in a 100% response rate. Full participation strengthened the representativeness of the findings by eliminating sampling error and providing a comprehensive description of the employability and career outcomes of the entire graduate cohort. The respondents comprised graduates from three graduating batches, namely 2021 (n = 10), 2022 (n = 24), and 2023 (n = 29).

Instrument

Data were collected using a researcher-adapted graduate tracer questionnaire based on the instrument developed by Enriquez et al. (2024). The questionnaire was contextualized to align with the objectives of the present investigation while retaining the core constructs commonly employed in graduate tracer studies. It consisted of structured items covering graduates' demographic profile, employment status, career pathways, current job position, work attitudes, perceived quality of educational provision, and skills and abilities developed during their academic preparation. Responses for work attitudes, quality of education, and skills development were measured using a five-point Likert scale, while demographic and employment-related information was collected using categorical response items.

Collection

Prior to data collection, permission to conduct the study was secured from the appropriate university authorities. Graduate records obtained from the institution served as the basis for identifying potential respondents. The researchers administered the tracer questionnaire through online and direct communication using electronic mail, telephone calls, social media platforms, and personal coordination with graduates. Completed questionnaires were reviewed for completeness, verified for consistency, and encoded for statistical analysis. These procedures ensured comprehensive data collection and complete participation from all identified graduates included in the study.

Analysis

Descriptive statistical techniques were employed to analyze the collected data. Frequency counts and percentages were used to summarize the respondents' demographic characteristics, employment status, professional eligibility, graduating batch, and current job positions. Weighted means and standard deviations were computed to determine the graduates' level of work attitude, evaluation of the quality of educational provision, and assessment of the skills and abilities developed through the Bachelor of Secondary Education major in Science program. These statistical procedures facilitated the objective interpretation of graduates' employability outcomes and career pathways while providing evidence regarding the effectiveness of the teacher education program in preparing graduates for professional practice.

Ethical Considerations

The study adhered to established ethical standards governing educational research. Approval to conduct the tracer study was obtained from the appropriate university authorities prior to data collection. Participation was voluntary, and all respondents were informed of the objectives and nature of the study before providing their consent. Confidentiality and anonymity were maintained by excluding personally identifiable information from the dataset, and all information collected was used solely for academic and research purposes. Respondents were informed of their right to decline participation or withdraw from the study at any point without penalty. The findings were reported only in aggregate form to safeguard participants' privacy and ensure compliance with ethical research practices.

Study Limitations

The study was limited to graduates of the Bachelor of Secondary Education major in Science from Central Philippines State University–Sipalay Campus who completed the program during Academic Years 2021–2023. Consequently, the findings may not be generalized to graduates from other higher education institutions or academic disciplines. In addition, the study relied on self-reported responses, which may be influenced by respondents' personal perceptions and recall. Nevertheless, the use of total enumeration, standardized data collection procedures, complete participation of the target population, and appropriate descriptive statistical analyses enhanced the credibility, reliability, and representativeness of the findings within the context of the study.

RESULTS AND DISCUSSION

Table 1 presents the distribution of Bachelor of Secondary Education major in Science graduates according to graduating batch. The findings indicate that the largest proportion of respondents graduated in 2023, followed by the 2022 and 2021 cohorts. More importantly, all identified graduates participated in the tracer study, resulting in a 100% response rate across all graduating batches. The complete participation of the target population enhances the reliability and representativeness of the study because the findings reflect the employment experiences of the entire graduate population rather than a sample. A high response rate minimizes sampling bias and strengthens the validity of tracer studies as institutional quality assurance tools. Similar studies have emphasized that comprehensive graduate participation produces more reliable evidence regarding curriculum relevance, employment outcomes, and graduate preparedness, thereby providing a stronger basis for evidence-based institutional planning and continuous quality improvement (Arbis et al., 2023; Cofino et al., 2026).

The larger number of graduates in the most recent cohort may indicate increasing enrollment, improved student retention, or enhanced program completion within the teacher education program. Such growth demonstrates the institution's continuing contribution to the preparation of qualified science educators who may support regional educational development. Continuous graduate monitoring therefore remains essential for evaluating whether curriculum improvements and institutional interventions effectively translate into positive employment outcomes over time.

Table 1
Distribution of Respondents by Year (N = 63)

Batch	Number of Graduates	Number of Respondents	Percentage (%)	Interpretation
2021	10	10	100	All graduates participated; smallest group (15.87% of total)
2022	24	24	100	Moderate-sized group; increased number of graduates (38.10%)
2023	29	29	100	Largest group of graduates (46.03%); all responded
Total	63	63	100	Full participation across all batches

Table 2 summarizes the graduates' demographic characteristics and employment profile. The findings reveal that the respondents were predominantly young, female, single, bachelor's degree holders, and holders of Licensure Examination for Professional Teachers eligibility. Nevertheless, although many graduates possessed the required professional qualifications, employment remained largely contractual, while a substantial proportion of graduates had not yet secured employment. These findings indicate that successful completion of teacher education and professional licensure alone does not immediately translate into stable employment. Graduate employability is influenced not only by academic preparation but also by labor market conditions, institutional recruitment systems, and the availability of permanent teaching positions. Similar tracer studies reported that education graduates commonly experience temporary employment arrangements before obtaining regular appointments because of limited government vacancies and increasing competition within the teaching profession (Arbis et al., 2023; Cruz & Cruz, 2023; Enriquez et al., 2024).

The predominance of female graduates is likewise consistent with demographic trends observed across teacher education programs, where women continue to comprise the majority of future educators. Meanwhile, the relatively high proportion of professionally licensed graduates demonstrates the effectiveness of the institution in preparing students for national licensure examinations, an important indicator of program quality and graduate readiness. Collectively, these findings suggest that while the institution effectively develops academically qualified graduates, strengthening career placement services, employer partnerships, and alumni support programs may further improve employment stability and professional career advancement.

Table 2
Distribution of Respondents According to Age, Sex, Civil Status, Highest Educational Attainment, Year Graduated, Employment Status, and Eligibility (N = 63)

Variable	Category	Frequency	Percentage (%)
Age	20–25	52	82.54
	26–30	6	9.52
	31–35	4	6.35
	36–40	1	1.59
Sex	Male	15	23.81
	Female	48	76.19
Civil Status	Single	54	85.71
	Married	9	14.29
Highest Educational Attainment	Bachelor's Degree	54	85.71
	With MA Units	9	14.29
	Master's Degree	0	0.00
Year Graduated	2021	10	15.87
	2022	24	38.10
	2023	29	46.03
Employment Status	Permanent	0	0.00
	Casual	1	1.59
	Contractual/Part-Time	36	57.14
	Self-employed	0	0.00
	Unemployed	26	41.27
Eligibility	LET/LEPT	46	73.02
	Civil Service	1	1.59
	None	16	25.39

Table 3 presents the distribution of employed graduates according to their current occupations. The findings indicate that graduates obtained employment across various sectors, including local government units, private schools, government agencies, business process outsourcing companies, and other private organizations. Only a relatively small proportion of employed graduates occupied teaching positions directly related to science education. This employment distribution demonstrates that graduates possess transferable competencies applicable beyond classroom teaching. Communication, leadership, problem-solving, and interpersonal skills acquired through teacher education enable graduates to adapt successfully to diverse professional environments despite limited opportunities within the education sector. Similar tracer studies have reported that education graduates frequently pursue employment outside their field of specialization because of workforce competition, limited permanent teaching positions, and broader employment opportunities in other industries (Lagatic et al., 2024; Villanueva & Binay-an, 2021).

The findings likewise highlight the multidimensional nature of employability. Contemporary labor markets increasingly value graduates who possess transferable competencies that facilitate occupational flexibility and career resilience. Consequently, teacher education institutions should continue integrating career readiness, digital competence,

entrepreneurship, and workplace adaptability into the curriculum to complement pedagogical expertise and improve graduates' long-term employability (Pardo-Garcia & Barac, 2020; Vezi-Magigaba & Utete, 2024).

Table 3
Distribution of Responses as to Their Current Job Positions (n = 37)

Current Job Position	Frequency	Percentage (%)
Local Government Unit (LGU)	9	24.32
Department of Education (DepEd)	3	8.11
Philippine Statistics Authority (PSA)	2	5.41
Business Process Outsourcing (BPO)/Call Center Agent	5	13.51
Private School Teacher	5	13.51
Hospitality	2	5.41
Mall Cashier	1	2.70
Office Staff	3	8.11
Department of Social Welfare and Development (DSWD)	1	2.70
Water District	1	2.70
Food Company Staff	1	2.70
Oil Company Staff	1	2.70
Textile Company	3	8.11
Total	37	100.00

Table 4 presents the graduates' assessment of their work attitudes. The findings indicate that all indicators received a very high evaluation, with the highest rating obtained for seeking assistance whenever clarification was needed and the lowest rating associated with adapting to different workplace environments. Nevertheless, every indicator remained within the very high descriptive category. The consistently high ratings demonstrate that graduates possess professional behaviors essential for workplace effectiveness. Positive work attitudes, including collaboration, responsibility, punctuality, openness to feedback, and interpersonal competence, facilitate successful integration into professional organizations and contribute to long-term career success. Previous studies consistently identify these behavioral competencies as significant determinants of graduate employability because employers increasingly prioritize professional attitudes alongside technical knowledge (Pardo-Garcia & Barac, 2020; Vezi-Magigaba & Utete, 2024).

These findings may be explained through Social Cognitive Theory, which proposes that individuals with strong self-efficacy actively seek support, regulate their learning, and demonstrate greater persistence when confronted with workplace challenges (Mozahem, 2022). Likewise, Human Agency Theory emphasizes that individuals intentionally shape their professional development through reflective learning, adaptive decision-making, and continuous improvement (Koskela & Paloniemi, 2023). Accordingly, the graduates' positive work attitudes suggest that the program successfully develops professional dispositions necessary for sustained employability and career advancement.

Table 4
Level of the Bachelor of Secondary Education Major in Science Graduates' Attitude to Work

Indicator	Mean	SD	Verbal Interpretation
I am very interested, happy and satisfied with my work and it is very important for me.	4.62	0.496	Very High
I like the kind of job and work I am doing.	4.65	0.485	Very High
I accepted assignments and tasks given to me at work without complaints.	4.62	0.496	Very High
I arrived on time to prepare my work and extend working hours if necessary.	4.69	0.471	Very High
I can work better and function under different working environments and situations.	4.58	0.643	Very High
I participated in all activities and events inside my workplace.	4.62	0.571	Very High
I have a good relationship with my colleagues and co-employees.	4.69	0.471	Very High
I submitted necessary documents and papers on time and beat deadlines.	4.69	0.471	Very High
I performed my task and job with excellence and outstanding quality.	4.65	0.485	Very High
I seek assistance and help from others whenever I have clarifications and queries.	4.77	0.430	Very High

Scale: 1.00–1.80 = Very Low; 1.81–2.60 = Low; 2.61–3.40 = Moderate; 3.41–4.20 = High; 4.21–5.00 = Very High.

Table 5 presents the graduates' evaluation of the quality of education provided by the institution. The results indicate that all indicators were rated as strongly agree, with professional ethics, faculty competence, confidence in performing professional responsibilities, and overall educational quality receiving the highest evaluations. Learning resources obtained the lowest mean rating, although they remained within the strongly agree category. These findings suggest that the institution effectively prepares graduates for professional practice by developing pedagogical competence, ethical responsibility, communication skills, and workplace confidence. The consistently high evaluations demonstrate that graduates perceive the curriculum, instructional practices, and faculty expertise as relevant to workplace expectations. Similar tracer studies have shown that graduates who receive strong pedagogical preparation and meaningful practical experiences demonstrate greater confidence and improved employment outcomes (Arbis et al., 2023; Enriquez et al., 2024; Villafior et al., 2026).

However, the relatively lower evaluation of learning resources indicates opportunities for further institutional investment. Contemporary science education increasingly depends on modern laboratories, digital technologies, simulation tools, and technology-enhanced learning environments. Strengthening these resources may further improve instructional effectiveness and graduate preparedness for increasingly technology-driven educational settings (Pardo-Garcia & Barac,

2020; Vezi-Magigaba & Utete, 2024). These findings therefore reinforce the importance of continuous curriculum review and infrastructure development as integral components of institutional quality assurance.

Table 5
Level of the Bachelor of Secondary Education Major in Science Graduates' Evaluation of the Quality of Education Provision of the Institution

Indicator	Mean	SD	Verbal Interpretation
The curriculum of my degree program was relevant to the demands of my profession.	4.65	0.485	Strongly Agree
The instruction I received prepared me well for my professional tasks.	4.73	0.452	Strongly Agree
Faculty members were knowledgeable and competent in their subject areas.	4.81	0.402	Strongly Agree
The program provided sufficient opportunities for hands-on and practical learning experiences (e.g., practicum, internship).	4.77	0.430	Strongly Agree
Learning resources such as library, laboratory, and instructional materials were adequate for my learning needs.	4.58	0.578	Strongly Agree
The program enhanced my critical thinking and problem-solving abilities.	4.77	0.430	Strongly Agree
The program developed my professional ethics and work values.	4.85	0.368	Strongly Agree
The program helped me acquire communication and interpersonal skills necessary for the workplace.	4.77	0.430	Strongly Agree
The education I received increased my confidence in performing professional responsibilities.	4.81	0.402	Strongly Agree
The overall quality of education prepared me adequately for employment in my field of study.	4.81	0.402	Strongly Agree

Scale: 1.00–1.80 = Strongly Disagree; 1.81–2.60 = Disagree; 2.61–3.40 = Neutral; 3.41–4.20 = Agree; 4.21–5.00 = Strongly Agree.

Table 6 presents the graduates' assessment of the skills and abilities developed through the Bachelor of Secondary Education major in Science program. The findings reveal that all competencies were evaluated at a very high level, indicating that the program effectively develops the professional capabilities required for successful employment. The highest-rated competencies included the ability to work independently and collaboratively, application of the Code of Ethics for the teaching profession, knowledge of various teaching methodologies acquired through seminars and workshops, and competence in preparing and evaluating instructional materials. In contrast, technical and entrepreneurial skills received the lowest mean rating, although they likewise remained within the very high category. The prominence of instructional competence, teamwork, ethical practice, and professional independence demonstrates that the teacher education curriculum effectively integrates theoretical knowledge with practical teaching experiences. These competencies are fundamental characteristics of effective beginning teachers because they facilitate instructional effectiveness, collaborative practice, and responsible professional conduct. Similar tracer studies consistently report that employers highly value graduates who demonstrate strong pedagogical competence, teamwork, communication, and ethical professionalism because these attributes enhance workplace performance and long-term employability (Arbis et al., 2023; Enriquez et al., 2024; Villaflor et al., 2026).

The comparatively lower rating assigned to technical and entrepreneurial skills reflects evolving workforce expectations rather than deficiencies in the program. Rapid technological advancement and educational digitalization require contemporary teachers to demonstrate proficiency in educational technologies, innovation, digital resource development, and entrepreneurial thinking. Higher education institutions are therefore encouraged to strengthen technology integration, digital literacy, and entrepreneurial education to improve graduates' responsiveness to changing educational environments and broader labor market demands (Pardo-Garcia & Barac, 2020; Vezi-Magigaba & Utete, 2024). The findings may also be interpreted through Human Agency Theory, which posits that individuals actively develop professional competence through intentional learning, reflective practice, and continuous adaptation to changing environments (Koskela & Paloniemi, 2023). Likewise, Social Cognitive Theory emphasizes that self-efficacy strengthens individuals' confidence in applying acquired knowledge and skills to real-world professional situations (Mozahem, 2022). The graduates' consistently high ratings across all competencies therefore suggest that the program effectively cultivates not only academic knowledge but also the confidence and professional agency necessary for sustained career development. The findings affirm that the Bachelor of Secondary Education major in Science program successfully develops well-rounded graduates who possess the pedagogical, interpersonal, ethical, and professional competencies required for contemporary teaching practice. Nonetheless, continuous curriculum enhancement through expanded technology integration, entrepreneurship education, interdisciplinary learning, and experiential training will further strengthen graduate competitiveness and ensure sustained responsiveness to the evolving demands of the education sector and the broader labor market.

Table 6
Level of the Bachelor of Secondary Education Major in Science Graduates' Skills and Abilities Development

Skills and Abilities Development	Mean	SD	Verbal Interpretation
1. Organizational and leadership skills	4.58	.578	Very High
2. Problem-solving and critical thinking skills	4.65	.562	Very High
3. Ability to work independently as well as teamwork and team play	4.73	.452	Very High
4. Creative thinking, creativity, initiative, and risk-taking when necessary	4.69	.471	Very High
5. Time management and decision-making skills	4.58	.504	Very High
6. Writing competence and skills, including technical writing	4.58	.504	Very High
7. Communication and interpersonal skills	4.62	.571	Very High
8. Computer and ICT skills	4.50	.510	Very High
9. Technical and entrepreneurial skills	4.38	.637	Very High
10. Ability to work under pressure	4.50	.648	Very High
11. Ability to write the essentials and basics of effective lesson planning	4.58	.504	Very High
12. Application of the Code of Ethics in the teaching profession	4.73	.452	Very High

Skills and Abilities Development	Mean	SD	Verbal Interpretation
13. Knowledge of different teaching methodologies, techniques, and approaches acquired through seminars and workshops	4.73	.452	Very High
14. Expertise in multidisciplinary research essential for understanding students' needs and interests	4.69	.471	Very High
15. Training, seminars, and workshops on the preparation and evaluation of different instructional materials	4.73	.533	Very High

Interpretation: 1.00–1.80 = Very Low; 1.81–2.60 = Low; 2.61–3.40 = Moderate; 3.41–4.20 = High; 4.21–5.00 = Very High.

Conclusion and Recommendations

This tracer study examined the employability, career outcomes, work attitudes, perceived quality of education, and skills development of Bachelor of Secondary Education major in Science graduates from Central Philippines State University–Sipalay Campus for Academic Years 2021–2023. The findings revealed that the graduates were predominantly young, female, single, and professionally qualified, with a majority having passed the Licensure Examination for Professional Teachers. While many graduates successfully entered the workforce within a relatively short period after graduation, employment was primarily characterized by contractual appointments, local employment, and positions outside their field of specialization. These findings suggest that although the program effectively prepares graduates for workforce participation, employment stability and alignment between academic preparation and occupational placement continue to be influenced by prevailing labor market conditions and the limited availability of permanent teaching positions. The study further established that the graduates demonstrated very high levels of professional work attitudes, highly favorable perceptions of the quality of education provided by the institution, and very high levels of skills and abilities development. The highest-rated competencies included teamwork, professional ethics, instructional competence, and the application of effective teaching methodologies, while technical and entrepreneurial skills emerged as the area with the lowest, although still very high, evaluation. Overall, the findings indicate that the Bachelor of Secondary Education major in Science program effectively develops competent, ethical, and employable graduates equipped with both pedagogical and transferable workplace competencies. Nevertheless, continuous curriculum enhancement, stronger career support mechanisms, and expanded opportunities for technology integration and professional development remain essential to further improve graduates' employability and long-term career success.

The university should strengthen graduate employability through enhanced career guidance, industry and government partnerships, curriculum updates in digital literacy, educational technology, entrepreneurship, innovation, and workplace readiness, and improved learning facilities. The College of Teacher Education should sustain LET review programs, mentoring, and coaching to strengthen professional eligibility. Graduates are encouraged to pursue lifelong learning through postgraduate studies, certifications, and continuing professional development. Future researchers should conduct longitudinal and multi-institutional tracer studies to examine employability, career progression, job satisfaction, and the long-term effectiveness of teacher education programs.

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