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Engaging BSIT Graduates: A Study on Employability of the Bachelor of Science in Information Technology (BSIT) of Central Philippines State University-Main Campus

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ABSTRACT

Tracer studies are a valuable method for systematically documenting employment attributes, the shift from academic to professional life, and the overall job satisfaction of CPSU-BSIT graduates between 2018 and 2022. The present study focuses on evaluating the ongoing effectiveness, adequacy, and relevance of the Bachelor of Science in Information Technology (BSIT) programs provided by Central Philippines State University (CPSU). In essence, the study aims to determine whether the BSIT programs are still meeting the educational and professional needs of students and whether they are sufficiently preparing graduates for careers in the IT field. This study utilized a descriptive approach and was conducted at the College of Computer Studies of CPSU in Kabankalan City, Negros Occidental. An online survey was conducted with 223 respondents out of 272 alumni from the graduating batches of 2018, 2019, 2020, 2021, and 2022. The survey used a standardized questionnaire provided by the Commission on Higher Education (CHED). The survey results indicated that most participants are presently engaged in employment, predominantly in private companies or organizations. The majority of them obtained employment within six months after completing their studies and are employed in the local area. Nevertheless, a certain group of graduates encountered delays that prolonged beyond one year, mainly due to the repercussions of the COVID-19 pandemic. The respondents proposed improvements to the physical infrastructure of the College, particularly targeting the establishment of specialized laboratories focused on programming, networking, and multimedia applications. Moreover, they stressed the need to broaden both local and international collaborations to enable faculty and student immersion programs.

KEYWORDS

Employability Study, Bachelor of Science in Information Technology (BSIT) Higher Education Institutions, Central Philippines State University, Tracer

1. Introduction

The dynamic and ever-evolving information technology sector (IT) is fueled by the demand for digital solutions across businesses and ongoing technological breakthroughs. The potential impact of higher education on the growth of a vibrant and self-sufficient economy, the enhancement of quality of life, and the ability to generate a growing pool of highly skilled, adaptable, technical, scientific, and managerial personnel that can compete globally is anticipated to be substantial. [1] The Commission on Higher Education (CHED) emphasizes the need to carry out graduate tracer studies in institutions of higher education [2]. The study of [3] recommended that the Universities provide more faculty development programs to improve their teaching competencies, conduct curriculum reviews, and upgrade the instructional facilities of the institution. Improvement of graduate employability has

emerged as a key objective of higher education (HE) in the twenty-first century [4]. The paper of [5] Employability is a phenomenon that reflects the present economic and political condition of a country. Investments in personal capacities are crucial for employability, as the demands of the labor market in recruitment surpass the physical and mental capabilities of employees [6]. Ensuring the employability of graduating students is crucial for a smooth transition from university to the workforce.

Universities serve as sources of knowledge and skills, while representatives of the industry act as potential employers. Students aim to gain high employability, and the government plays a role in creating a favorable environment for collaboration among these parties [7]. According to [8], one of the challenges faced in implementing the 6-3-3-4 educational policy is ensuring the availability of well-trained technical teachers who can effectively teach technical and vocational subjects in schools. The 6-3-3-4 education system was implemented in Nigeria in 1983 with the primary goal of addressing the educational needs of its population and providing young people with marketable skills for self-sufficiency [9].

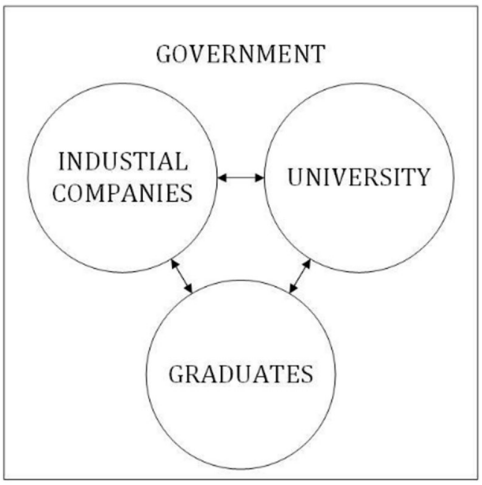

Figure 1. Triangle of stakeholders for promoting graduation among students Enhancing employability [7]

For this reason, the Bachelor of Science in Information Technology (BSIT) curriculum is essential [10] in setting up students for future success in this quickly evolving industry [11]. The study of [12] found that the curriculum they had in college was highly applicable to their first job. Most respondents (69.78%) expressed that the BSIT program curriculum was well-suited for their needs. Furthermore, participants recommended that enhancing the College's Physical Plants and facilities be given top priority [13]. However, despite the extensive coursework and hands-on training that BSIT programs offer, there is still a disconnect between graduates' skill sets and what the IT industry needs. According to [14], the anticipated impact of the fourth industrial revolution on individual careers and future experiences is significant, as it will fundamentally alter the foundations of work, employment, and business in the future. Simultaneously, the ongoing evolution and advancement of the industrial structure pose greater demands on the employability of college students, resulting in an imbalance between labor market supply and demand [15]. Universities have been churning out graduates who have continued to clog up the labor market, thereby increasing the growth rate of unemployed youths in the nation [16].

The researchers discovered the significance of tracking the graduates as a means of evaluating the curriculum's effectiveness. This is necessary for accreditation and evaluations conducted by CHED, both at the regional and national levels. It also helps monitor job placements of graduates and make improvements or revisions to the curriculum to meet industry demands. The study primarily examined the graduates from the academic year 2018 to 2022.

According to [17] in January 2019, the estimated unemployment rate in the Philippines stood at 5.2% of the total unemployed. 43.7% of the population fell within the age group of 15–24 years, with the remaining portion belonging to the age group of 25 to 34 had 30.6%. Employability should also speak to the need for work that has both personal meaning and societal worth[18]. Higher education institutions have the responsibility of producing graduates who are both high-quality and competitive, contributing to the job market and the development of the nation [19]. It is highly recommended to revise the industrial art program into job-specific programs or develop demand-driven programs to address the needs of the industry. The aim is to ensure that the program remains up-to-date and aligned with current industry standards. This will help produce graduates who possess the necessary skills and knowledge to excel in specific roles within the industrial art subsector, contributing to its long-term growth and success [20]. The study of [21] explained that the assessment of higher education institutions' performance heavily relies on the employability of their graduates. Tracer studies provide valuable insights into the requirements for graduates to thrive in their professional careers.

To secure employment and establish a rewarding professional trajectory, students must grasp the significance of essential skills and knowledge, as well as master the art of effectively communicating and substantiating their employability [22]. Entering the workforce involves various paths, each presenting its own set of opportunities and risks. Human capital development significantly improves the preparation for a successful transition from education to the job market, which universities have a responsibility to fulfill [20]. Higher education institutions must prepare their graduates for the challenges of the global workforce despite the drastic change in the labor market [23]. It is recommended that the curriculum be updated to align with the evolving educational system and meet the changing demands of the business world. To enhance graduation rates, educators must enhance and adapt their instructional approaches to effectively cater to the diverse needs and demands of their students [24]. The increasing demands of the labor industry pose a significant challenge for higher academic institutions in terms of the relevance of their educational curriculum [25].

2. Scope and Methodology

The paper utilized a descriptive design as the tracer gathered quantitative data and analyzed them using descriptive statistics. Despite the inclusion of two open-ended questions, the responses provided by participants were quantified. This study examined the employment and employability status of graduates, as well as the adequacy of the competencies they acquired in their programs. Out of the 272 graduates, 223 individuals volunteered to participate in the tracer study from 2018-2022. In the period from 2018 to 2022, the level of participation among graduates reached 81.99%. Participants were provided with information regarding the rationale and the significance of their involvement. Data collection occurred from November 2023 to May 2024. The data collection was conducted via various online platforms, including Google Forms, Messenger Chat, SMS, and Calls.

A modified instrument was used as a survey tool in Google Forms to gather data on employment and employability status, specifically focusing on the adequacy of competencies. The informed consent form was included in the online survey, allowing each graduate to express their willingness or unwillingness to take part in the study. The data were analyzed using frequency and percentages.

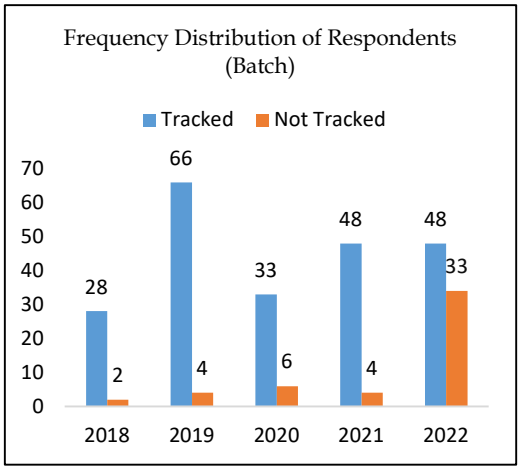

Figure 2. Frequency Distribution of Respondents

Figure 2 shows the retrieval rates of CPSU-BSIT graduates from 2018 to 2022. Notably, the 2018, 2019, 2020, and 2021 batches demonstrate consistently high retrieval rates, with most tracked respondents ranging between 84.62% to 94.29%. The 2019 batch achieved the highest number of tracked with 66 respondents or 94.27%, indicating strong alumni engagement during that period. However, the 2022 batch exhibits a significant decline, with only 48 respondents tracked or 59.26%, highlighting potential challenges in maintaining contact with recent graduates.

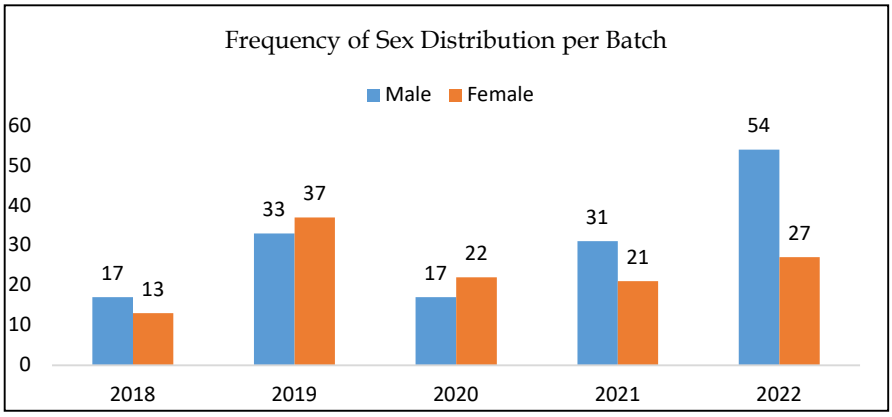

Figure 3. Frequency of Sex Distribution per Batch

The figure illustrates the sex distribution of graduates across different batches, revealing a consistent gender imbalance. From 2018 to 2022, male graduates consistently outnumbered female graduates. Specifically, in 2018, (56.67%) of the graduates were male 17 male graduates, compared to (43.33%) female 13 female graduates. In the most recent batch of 2022, the disparity increased, with (66.67%) of the graduates being 54 male graduates, while females constituted only (33.33%) 27 female graduates. This persistent imbalance reflects a greater representation of male graduates over the observed years, indicating a significant and ongoing gender disparity in graduation rates.

Sex distribution of respondents from 2018 to 2022.

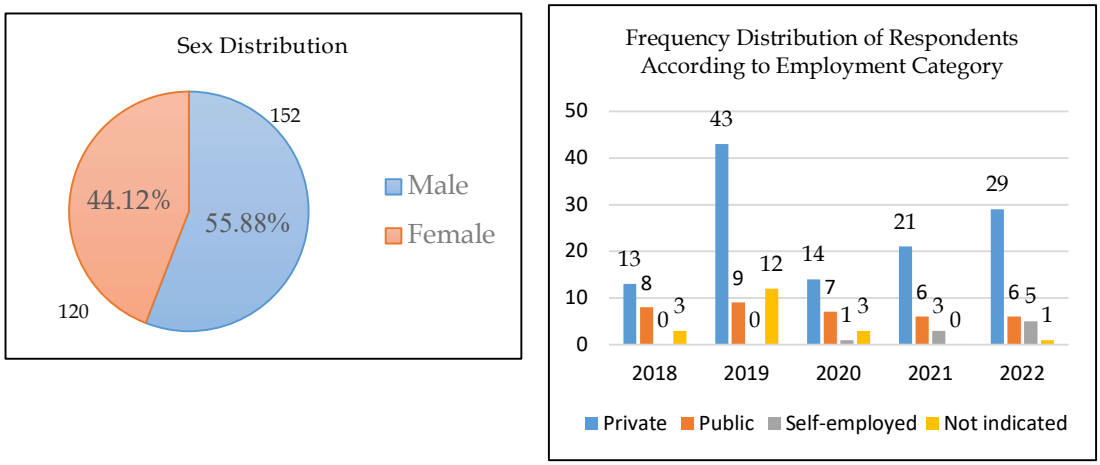

Figure 4. Frequency Distribution (Sex)

The graph depicting the distribution of employees by sex reveals a predominance of male employees within the organization. Specifically, males constitute 55.88% of the workforce, with 152 male graduates, while females represent a notably smaller portion at 44.12%, with 120 female graduates. This highlights a gender imbalance, with a greater representation of male compared to female graduates.

3. Result and Discussion

Figure 5. Frequency Distribution of Respondents According to Employment

Figure 5 presents the frequency distribution of respondents according to their employment status from 2018 to 2022, showing fluctuations in employment rates across the years. In 2019, the employment rate peaked, with 64 individuals employed, accounting for 96.97%, while only 2 individuals, or 3.03%, were unemployed. However, in 2020, there was a notable drop in employment, likely due to external factors like the pandemic, as seen with only 25 respondents having been employed and 8 never employed. In 2021 and 2022, there was a clear improvement in employment rates. By 2022, 41 respondents were employed, while only 7 had never been used. This data indicates that employment rates and economic conditions have been getting better, especially after 2021.

Figure 6. Frequency Distribution of Respondents According to Employment Category

The figure depicts the frequency distribution of respondents according to employment category (private, public, self-employed, and not indicated) from 2018 to 2022 and reveals distinct trends over these years.

In 2018, most respondents were employed, with a moderate number of employed individuals 13 in the private sector, 8 in the public offices, the other 3 chose not to indicate their job and none were self-employed. This pattern continued until 2019 and 2020, with a high employment rate and consistent interest in the private sector but with 1 self-employed during 2020. Overall, the graph illustrates that while employment rates were affected by external factors, there was a clear recovery trend in the later years, with graduates working in the private sector remaining consistent career choices throughout the period.

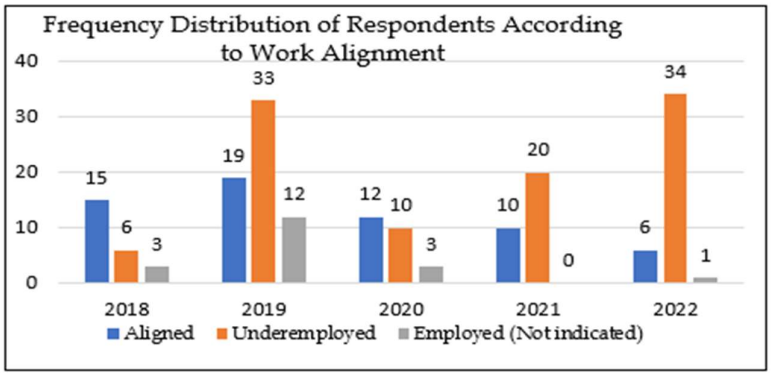

Figure 7. Frequency Distribution of Respondents According to Work Alignment

The figure shows the frequency distribution of respondents according to employment category (Employment aligned to BSIT, underemployed, and not indicated) for the employability study from 2018 to 2022 and offers an overview of the employment outcomes for CPSU - BSIT graduates over these years.

In 2018, 15 respondents (62.5%) were employed in roles aligned with their BSIT degree, indicating a strong correlation between their education and job placement. The underemployment rate was relatively low at 25%, suggesting that most graduates found suitable employment. However, a small percentage of respondents (12.5%) did not indicate their employment status. In 2019, a noticeable shift of around 29.69% of respondents in BSIT-aligned employment indicated a consistent pattern of graduates finding jobs in their field. The underemployment rate remained relatively at 51.56%, and the percentage of respondents not indicating their employment status was minimal. In 2020, the same pattern was observed, likely due to the impact of the COVID-19 pandemic on the job market. The percentage of respondents in roles aligned with BSIT dropped, indicating challenges in finding suitable employment. By 2022, the trend continued decreasing, with the respondents in BSIT not aligned in their employment at 82.93%.

Overall, the graph highlights the impact of external factors, such as the pandemic, on the employment outcomes for BSIT graduates. While there was a temporary decline in job alignment and an increase in underemployment during the pandemic, the data shows a minimal recovery in subsequent years.

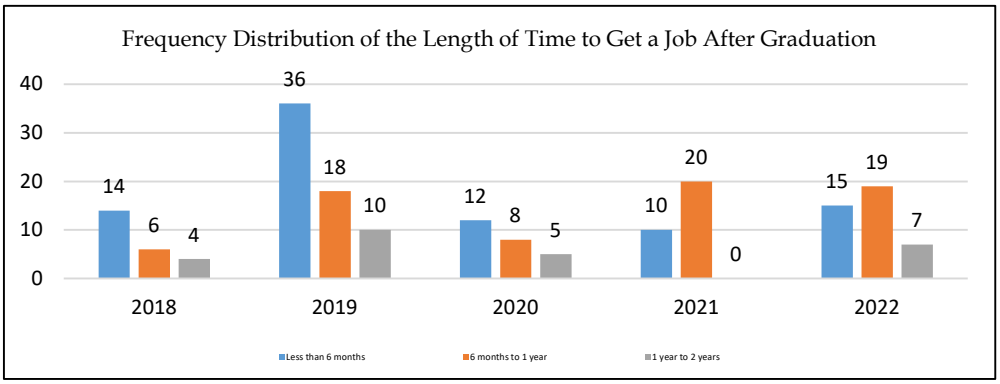

Figure 8. Frequency Distribution of the Length of Time to Get a Job After Graduation

Figure 8 presents the frequency distribution of respondents according to the length of time taken to secure a job after graduation, for the employability study from batch 2018 to 2022, and provides a detailed insight into the job search durations of BSIT graduates over these years.

In 2018, 14 respondents (58.33%) secured a job less than 6 months after graduation, indicating a relatively quick transition from graduation to employment. A significant portion (25%) took 6 months to 1 year to secure a job, while a smaller percentage (16.67%) took 1 to 2 years to find employment. 2019 showed a similar trend, with the highest percentage of respondents (56.25%) securing a job in less than 6 months after graduation. The percentage of respondents taking 6 months to 1 year remained stable at (28.12%), while the percentage under 1 to 2 years decreased slightly to (15.63%). In 2020, there was a noticeable shift in the job search durations. The percentage of respondents securing a job in less than 6 months decreased to (48%), indicating challenges in finding immediate employment, likely due to the impact of the COVID-19 pandemic on the job market. The percentage taking 6 months to 1 year increased to (32%), reflecting a longer job search process for some graduates. The percentage taking longer than 1 year also increased significantly to (20%). In 2021, there was a gradual improvement in job search durations. The percentage of respondents securing a job in less than 6 months decreased to (33.33%), indicating a problem in the job market due to the pandemic. The percentage taking 6 months to 1 year increased to (66.67%). By 2022, the trend continued positively, with a further increase in the percentage of respondents securing a job in less than 6 months (36.59%). The percentage taking 6 months to 1 year decreased to (46.34%), indicating a slow job search process for many graduates. The percentage of graduates that took about 1 to 2 years also decreased to 17.7%. The data reflects a fluctuating job search duration for graduates, with the majority securing employment less than 6 months before the COVID-19 pandemic, which caused delays in the transition to employment in subsequent years. By 2022, there was a gradual recovery, with more respondents finding jobs within 6 months, although a significant portion still faced longer job search durations.

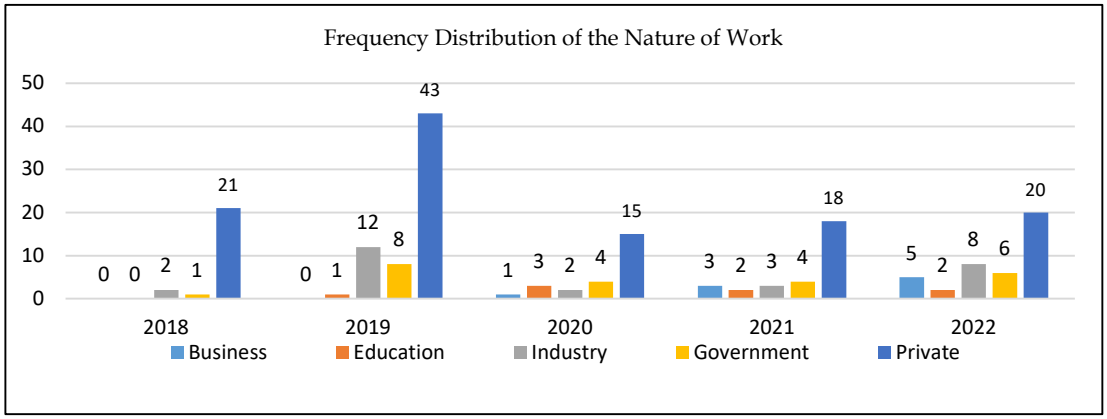

Figure 9. Frequency Distribution of the Nature of Work

Figure 9 presents the frequency distribution of respondents based on their work nature from 2018 to 2022. The majority, 117 respondents (63.59%), worked in the private sector, while only a small number pursued careers in business with 9 respondents, (4.89%) and education with 8 respondents (4.35%). Furthermore, 27 respondents (14.67%) found jobs in industries related to their field of study, and 23 respondents (12.5%) were employed in government agencies or institutions. This distribution highlights a clear preference for private sector roles, with fewer individuals choosing careers in business, education, or government sectors.

Table 1. Reasons/Suggestions from the Graduates for the Improvement of the BSIT Program

Recommendations/Suggestions	Frequency	%	No Rating	%
Limit the class size to a minimum	159	71.30%	64	28.70%
Provide additional major subjects	167	74.89%	56	25.11%
Revisit and enhance the curriculum	203	91.03%	20	8.97%
Upgrade the laboratory facilities	223	100.00%	0	0
Provide a faculty development program	150	67.26%	73	32.74%
Provide a job placement program	223	100.00%	0	0

Table 1 presents the result of the respondent's recommendations or suggestions to the College of Computer Studies Bachelor of Science in Information Technology (BSIT) program where 28.70% of the respondents wanted to limit the class size per section to meet the requirements for a 1:1 ratio for laboratory activities. 25.11% suggested providing additional major subjects aligned to the latest trend in the industry, such as (Data Analytics, Multimedia subjects, and Artificial Intelligence). 8.97% suggested revisiting the curriculum for possible enhancement or review on which subjects should be retained. All the respondents wanted to improve the college laboratories' facilities and the lecture rooms. The College may purchase or request additional desktop computers for specialized laboratories. It is also recommended that strategic planning for the faculty development and enhancement program be conducted. This would equip the faculty with industry skills. A job placement program is also recommended to help graduates land a job.

4. Conclusions

The data indicates that from 2018 to 2022, BSIT graduates experienced fluctuating employment trends, heavily impacted by external factors like the COVID-19 pandemic. The majority of respondents found employment in the private sector, and there was a decline in jobs directly aligned with their degree. The job search duration also fluctuated, with a longer time to secure employment during the pandemic but showing improvement in 2022 as more respondents found jobs within 6 months. Overall, the data reflects both the challenges and gradual recovery of employment outcomes, with a strong emphasis on the private sector and the need for continuous improvements in the program to meet industry demands.

The respondent recommendation of the Central Philippines State University – College of Computer Studies Main Campus for incoming first-year students from the program's affordability, positioning it as a highly accessible option. Beyond its cost-effectiveness, graduates hold the College in high regard for delivering exceptional academic quality, particularly in fostering proficiency in programming and networking. These attributes underscore the institution's commitment to preparing students for the evolving demands of the tech industry.

The suggestions that follow are based on the preceding finding. Firstly, a comprehensive review of the current curriculum is essential to assess which courses should be retained and which should be phased out. This evaluation should ensure that the curriculum remains aligned with evolving industry demands and that it fosters the development of IT competencies integral to meeting employer expectations. Secondly, the enhancement of the College's infrastructure is necessary, specifically the acquisition of additional computer units equipped with licensed software essential for programming, multimedia, teaching, and productivity. Such upgrades will significantly augment the functionality of the computer laboratories. Furthermore, faculty members must elevate their pedagogical expertise, ensuring they are equipped to impart the requisite knowledge, skills, and values that facilitate students' successful transition into the workforce. Finally, it is important to expand both regional and international partnerships, fostering opportunities for benchmarking that will elevate the College's standards and global competitiveness.

5. Recommendations

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References

[1] C. L. Vidania, M. G. Quijano, M. S. Zilabbo, M. K. T. Maramag, J. L. Ricardo, and H. T. Asio, "Tracking Down the Employability of the Teacher Education Graduates," *International Journal of Multidisciplinary Research and Analysis*, vol. 06, no. 05, May 2023, doi: 10.47191/ijmra/v6-i5-11.

[2] D. S. Duane Biscante, K. E. Clemencio, and K. E. Lynn Negado, "Tracer Study of the Teacher Education Graduates," 2019. [Online]. Available: http://journal.aloha.academy/index.php/aijeahttp://www.cedefop.europa.eu/files/2218_en.pdf

[3] "EMPLOYABILITY OF BS IN INFORMATION TECHNOLOGY GRADUATES: A TRACER STUDY", doi: 10.13140/RG.2.2.20362.00968.

[4] L. Thi Tran, N. Thi Hang Ngo Hoa Thi Mai Nguyen, and T. Thi Thanh Le, "Employability in Context Labour Market Needs, Skills Gaps and Graduate Employability Development in Regional Vietnam."

[5] F. A. Yusuf, A. E. Okanlawon, and V. D. Metu, "Lecturers' perspectives on enhancing university graduates' employability in Nigeria," 2018. [Online]. Available: www.cjes.eu

[6] M. Nikunen, "Labour Market Demands, Employability and Authenticity," *Journal of Applied Youth Studies*, vol. 4, no. 3, pp. 205–220, Jul. 2021, doi: 10.1007/s43151-021-00049-1.

[7] D. Yordanova, "University-industry cooperation for encouragement of graduating employability – methodology for evaluation," *Proceedings of the International Conference on Business Excellence*, vol. 12, no. 1, pp. 1048–1058, May 2018, doi: 10.2478/picbe-2018-0094.

[8] S. O. Odede, A. T. Adeyemi, I. O. Kolawole, S. R. Oladimeji, and A. O. Adeniyi, "Tracer Study of Technical Education Graduates of Osun State College of Education, 2011-2015," *International Journal of Research Publications*, vol. 78, no. 1, May 2021, doi: 10.47119/ijrp100781620211973.

[9] V. O. Uwaifo and P. S. O. Uddin, "Transition from the 6-3-3-4 to the 9-3-4 System of Education in Nigeria: An Assessment of Its Implementation on Technology Subjects," *Studies on Home and Community Science*, vol. 3, no. 2, pp. 81–86, Dec. 2009, doi: 10.1080/09737189.2009.11885280.

[10] N. L. Daminar, R. A. Monzon, E. D. Tandog, J. M. Madlos, N. L. Daminar, and F. M. Griño, "GRADUATE'S EMPLOYABILITY: A TRACER STUDY OF THE CARAGA STATE UNIVERSITY CABADBARAN CITY ON BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY (BSIT) GRADUATES FOR THE ACADEMIC YEARS 2015-2018," 2022. [Online]. Available: https://www.researchgate.net/publication/361362675

[11] E. J. G. . Reyes and R. F. Salas, "The dynamic and ever-evolving sector of information technology (IT) is fueled by the demand for digital solutions across businesses and ongoing technological breakthroughs.," *International Journal of Advanced Engineering, Management and Science*, vol. 7, no. 1, 2021.

[12] A. C. Albina and L. P. Sumagaysay, "Employability tracer study of Information Technology Education graduates from a state university in the Philippines," *Social Sciences & Humanities Open*, vol. 2, no. 1, p. 100055, 2020, doi: 10.1016/j.ssaho.2020.100055.

[13] C. L. Cofino, R. B. Escorial, D. Lou, B. Enquilino, and B. G. Alijado, "Employability and Psychological Study of the BSIT Graduates of CPSU-Main Campus: Basis for Curriculum Enhancement," 2023. [Online]. Available: https://jrtdd.com

[14] A. Maria Pauceanu, N. Rabie, A. Moustafa, and A. Maria, "Employability Under The Fourth Industrial Revolution Employability Under The Fourth Industrial Revolution Recommended Citation Recommended Citation", doi: 10.14254/2071.

[15] Y. C. Zhang, Y. Zhang, X. L. Xiong, J. B. Liu, and R. B. Zhai, "An Empirical Study on the Improvement of College Students' Employability Based on University Factors," *Front Psychol*, vol. 13, Mar. 2022, doi: 10.3389/fpsyg.2022.793492.

[16] N. Jonathan C., "Entrepreneurship Education and the Challenges of Graduate Employability in Nigeria," *International Journal of Innovation, Management and Technology*, pp. 189–193, 2018, doi: 10.18178/ijimt.2018.9.5.812.

[17] A. C. Albina and L. P. Sumagaysay, "Employability tracer study of Information Technology Education graduates from a state university in the Philippines," *Social Sciences & Humanities Open*, vol. 2, no. 1, p. 100055, 2020, doi: 10.1016/j.ssaho.2020.100055.

[18] D. Bennett, "Graduate employability and higher education: Past, present and future," 2018. [Online]. Available: www.herdsa.org.au/herdsa-review-higher-education-vol-5/31-61

[19] M. E. Caingcoy and D. A. Barroso, "Cross-Sectional Inquiry on Employability and Employment Status of Bachelor of Secondary Education Graduates (2016-2018): A Tracer Study." [Online]. Available: https://ssrn.com/abstract=3632058

[20] E. K. HOWARD, B. K. ASINYO, C. ADALA, E. O. AGYEI, B. O. ATENCAH, and B. EGHAN, "A Tracer study of Bachelor of Art Industrial Art Graduates of KNUST: Employability and Performance Appraisal within five years," *Ghana Journal of Science, Technology and Development*, vol. 7, no. 2, Jan. 2021, doi: 10.47881/262.967x.

[21] J. L. Dela Cruz and T. L. Dela Cruz, "Employment and Employability Skills of Graduate School Graduates in Tagudin Campus," *International Journal of Multidisciplinary: Applied Business and Education Research*, vol. 4, no. 4, pp. 1129–1136, Apr. 2023, doi: 10.11594/ijmaber.04.04.10.

[22] J. de St Jorre, T. Jorre de St Jorre, J. Elliott, E. D. Johnson, and S. Bisset, "Science students' conceptions of factors that will differentiate them in the graduate employment market," *Journal of Teaching and Learning for Graduate Employability*, vol. 10, no. 1, pp. 27–41, doi: 10.3316/informit.580478658423291.

[23] M. R. B. Bacani, C. F. Decena, M. R. Malong, K. E. Pajela, B. Estigoy, and N. J. Borja, "Employability of Biology Graduates of a State University - A Tracer Study," *American Journal of Multidisciplinary Research and Innovation*, vol. 2, no. 6, pp. 57–67, Nov. 2023, doi: 10.54536/ajmri.v2i6.2237.

[24] A. S. Patay, "Factors Affecting Graduates' Employability of Business-Related Programs: A Tracer Study," *Sprin Journal of Arts, Humanities and Social Sciences*, vol. 2, no. 05, pp. 01–11, May 2023, doi: 10.55559/sjahss.v2i05.100.

[25] G. I. Arbis, R. Clark, S. Oposa, L. L. Teves, and N. T. Ederio, "International Journal of Current Science Research and Review Graduate Tracer Study of Bachelor of Secondary Education (BSEd) of St. Paul University Surigao College of Teacher Education 2013-2017", doi: 10.47191/ijcsrr/V6-i1-20.