



www.ijres.net

Employment, Employability, and Competencies of the Bachelor of Secondary Education Graduates

Manuel E. Caingcoy 
Bukidnon State University, Philippines

Iris April L. Ramirez 
Bukidnon State University, Philippines

Derren N. Gaylo 
Bukidnon State University, Philippines

Ma. Isidora W. Adajar 
Bukidnon State University, Philippines

Elvie O. Lacadag 
Bukidnon State University, Philippines

Gem Aiah B. Blanco 
Bukidnon State University, Philippines

To cite this article:

Caingcoy, M. E., Ramirez, I. A. L., Gaylo, D. N., Adajar, M. I. W., Lacadag, E. O., & Blanco, G. A. B. (2021). Employment, employability, and competencies of the bachelor of secondary education graduates. *International Journal of Research in Education and Science (IJRES)*, 7(3), 872-884. <https://doi.org/10.46328/ijres.2328>

The International Journal of Research in Education and Science (IJRES) is a peer-reviewed scholarly online journal. This article may be used for research, teaching, and private study purposes. Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material. All authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations regarding the submitted work.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.



International Journal of Research in Education and Science (IJRES) is affiliated with the **International Society for Technology, Education, and Science (ISTES): www.istes.org**

Employment, Employability, and Competencies of the Bachelor of Secondary Education Graduates

Manuel E. Caingcoy, Iris April L. Ramirez, Derren N. Gaylo, Ma. Isidora W. Adajar, Elvie O. Lacdag, Gem Aiah B. Blanco

Article Info

Article History

Received:

27 February 2021

Accepted:

19 June 2021

Keywords

Employability

Employment status

Adequate competencies

Employable skills

Abstract

Tracing graduates has become an imperative for higher education institutions much more during the pandemic. This tracer determined the employment and employability status of the 2019 BSE graduates and identified the competencies they adequately acquired and deemed vital for work. It used descriptive design, and data were collected from the 103 graduates through a Google form with open and closed-ended questions administered between November and December 2020. Results revealed that most of the graduates had been employed in teaching and teaching-related jobs but mostly in contractual arrangements within the first and second six months after graduation. Many had their first jobs with meager salaries from the private sector. Communication, pedagogy, information communication technology, time management, and flexibility were the top competencies they adequately acquired and were beneficial in work. The study concluded that these graduates had acquired 21st-century skills in their respective degree programs. These results have corresponding implications for future research in confirming the most employable skills in secondary teaching. As recommended, classroom instruction might emphasize the development of these skills. Eventually, these become the competitive advantage and employability capitals of future graduates. Administering the licensure examination and the release of its results can be done within the first three months after graduation to lessen the cost of waiting.

Introduction

Tracing graduates has become an imperative among the State Universities and Colleges (SUCs) in the Philippines. It plays a significant role in the academe. It provides feedback to the organization, evaluates the curriculum, and determines if the curriculum has been responsive to the community and industry. However, tracer studies may vary in their emphasis depending on the primary motivation of the institution. There have been tracer studies on employability (Melink, & Pavlin, 2009; Aspiring Minds, 2016; Domingo, 2013; Gedye & Beaumont, 2018; Baking, 2015; Woya, 2019; Javier, 2015; Boholano, 2012; Navida, 2017; Abarro, 2017; Napallaton & Baquiller, 2017). However, there is a scarcity of research on the employment status of graduates (Infante, Junco, & Marquez, 2014). One of these was our previous tracer that covered both the employability

and employment status of the three batches of graduates (Caingcoy & Barroso, 2020). Much more, there is a need to establish an inventory of employability skills among graduates, including the adequacy of competencies acquired in college. The purpose is to constantly evaluate the curriculum and its responsiveness to job demands.

Literature shows that employability has been a serious concern among higher education institutions. It is a common knowledge that the longer each graduate waited to land a job, the more costly the lost opportunities are. International Monetary Fund (2020) reported the cost of joblessness. Accordingly, “unemployment imposes high costs on individuals, society, and country.” Its value is more than just financial. When prolonged, it may lead to one’s skepticism. Eventually, the value of education and training would lose among unemployed individuals (Simpson, 2020).

When the current administration started in power, the unemployment rate was consistently down from 7.70 percent to 6.19 percent in 2019 (Macrotrends, 2021). However, the covid19 pandemic, which began in March 2020, disrupted the whole world in almost all aspects of life and work. A lot of sectors are struggling to thrive, particularly the workforce. In April 2020, the country’s employment rate dropped from a record-high to 82.4 percent, while it bounce-backed in July and October 2020 with 90 and 91.3 percent, respectively. But still, this is far behind from previous year’s employment rate of 95.4 percent (Philippine Statistics Authority, 2020). In January 2021, the data shows a bit lower rate of 91.25 percent than the last quarter of 2020, which was 91.27 percent (Trading Economics, 2021). These statistics have motivated the Secondary Education Department to track how its 2019 graduates thrive during a pandemic, especially employment.

Higher Education Institutions (HEIs) cannot afford to happen what the scholars have postulated that Filipinos have limited economic opportunities, overwhelming underemployment, and low salaries and benefits as primary reasons for migration (Absuelo & Hancock, 2015). To respond, some academic institutions intend to develop holistic graduates who possessed relevant knowledge, skills, and values. Higher education institutions had been anxious with the development of the whole person who possessed knowledge, attributes, and skills who can be considered educated person by the time of graduation (Abas et., 2016). Other HEIs targeted the competencies necessary for future work. Scholars argued on the importance of 21st-century skills (Neal, 2017; Ross, 2017), while others underlined the significance of socioemotional skills in the workplace (Acosta et al., 2017a; Acosta et al., 2017b). However, there have been changes in the demand for student skills in the workplace brought about by globalization (Schleicher, 2012). Research suggests that the rising unemployment caused by pandemic had pressured HEIs to equip students with in-demand skills (Coursera for Campus, n.d.).

21st-century skills are broad and encompassing. The assessment and teaching of the 21st-century skills project pull together 250 scholars from the 60 organizations worldwide. These scholars have clustered these skills into four. The first cluster is the ways of thinking which include creativity, critical thinking, problem-solving, decision-making, and learning. The second group is the ways of working that cover communication and collaboration. Tools for working is the third cluster composed of information and communication technology and information literacy. Lastly, the fourth cluster is the skill for living in the world which is famously called life skills. This cluster includes citizenship, life, career, personal, and social responsibility (Schleicher, 2012).

In the Philippine context, employers reported low satisfaction on workers' interpersonal and communication skill, or work ethics (Acosta & Igarashi, 2017). Nowadays, learning to collaborate with others and connecting through technology are essential skills in a knowledge-based economy (Schleicher, 2012). A study recognized the need for proper attention to developing competence and employability skills. Doing so can help address the problems on job performance (Abas et al., 2016) and work behaviors other than unemployment and underemployment.

Previous research concluded that competencies acquired in college could predict the employability of graduates (Ballon, 2007). This argument necessitates taking the graduates' perspectives of whether the degree programs have produced individuals with competencies needed in the workplace. An inquiry, which looks into the work experiences of graduates and allows them to evaluate the adequacy or inadequacy of their acquired competencies is needed. However, there was no tracer in the past conducted by BukSU on this trajectory.

This paper described the employment and employability status of the 2019 Bachelor of Secondary Education graduates. Also, it identified the competencies that are adequately or inadequately acquired by them and are beneficial in work. The results of this tracer can be made bases for the faculty and administration of the Secondary Education Department to revisit its curriculum, delivery of instruction, and student support for academic and non-academic purposes. The study produced an inventory of employable skills, knowledge, and values that can be used on developing future teachers.

Methods

This paper employed a descriptive design since the tracer had collected quantitative data and analyzed them using descriptive statistics. Although it posed two open-ended questions, participants' responses were quantified. The present study traced the employment and employability status and the adequacy of competencies acquired by graduates in their respective programs. The tracer involved 103 (out of 224 graduates) individuals who volunteered to participate. There was 45.98% involvement based on the total number of graduates in 2019. Participants were informed about the rationale and why their involvement matters. The data collection was done between November and December 2020.

The Secondary Education Department utilized the survey tool in Google form with items on employment and employability status including adequacy of competencies. Embedded in the online survey instrument was the informed consent form where each participant can indicate their agreement or disagreement to participate in the study. Data were analyzed using frequency and percentages. Figure 1 shows that there were more females than males who gave their responses to the questions. In Figure 2, the BSE Mathematics and BSE Social Studies were represented equally, while the BSE Biological Science and Filipino have close representations. BSE English had the least number of representatives.

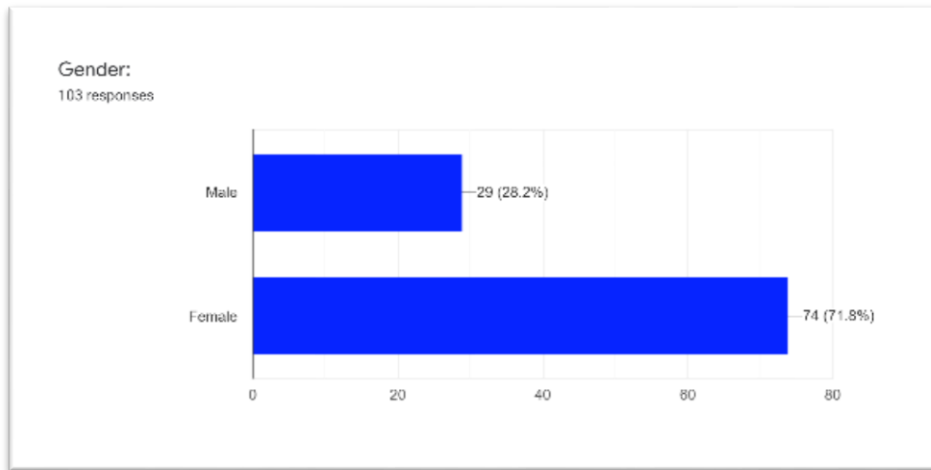


Figure 1. Gender Distribution

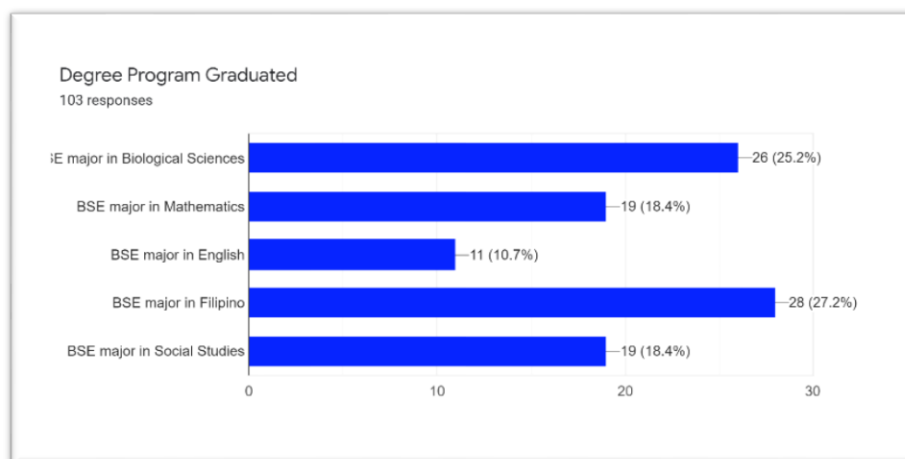


Figure 2. Degree Programs Representations

Results and Discussion

Employment Status

In this tracer, employment status has four dimensions (employment, nature of the first job, job tenure, and the sector graduates are employed). In Figure 3, graduates had four choices on employment: employed, unemployed, under-employed, or self-employed. The study shows that most (58.3%) of the graduates had been employed in teaching and teaching-related jobs (e.g., tutoring). This result is supported in Figure 4 but with reduced choices such as teaching, non-teaching, or not applicable. Noticeably, the employment to teaching-related works has decreased to 56.3 percent. These results are lower than the previous tracer conducted, wherein 89 percent of the 2018 graduates, and 81 percent of 2016 graduates had been employed to teaching-related jobs (Caingcoy et al., 2020).

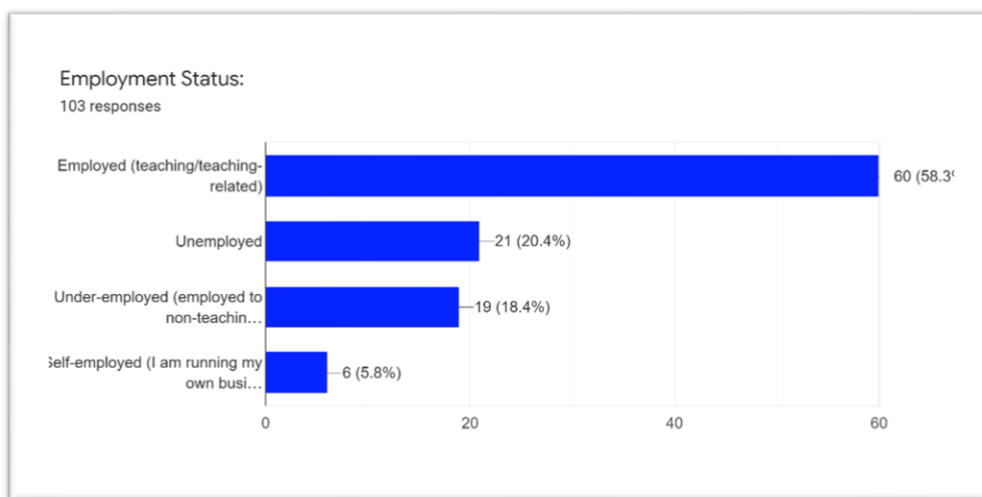


Figure 3. Employment Status of 2019 BSE Graduates

The *unemployed* and *not applicable* options in Figure 3 and 4, respectively, have almost similar responses. A portion of these graduates was under-employed. They worked or are working in non-teaching jobs. However, this work experience did not match their training and education. Still, a small percentage of the sample was self-employed. Either under-employment or self-employment was the option left for graduates who are waiting for opportunities to land a teaching job. These statistics suggest that many graduates are still trying to earn experience, and some of them are still waiting for an item from the public schools. Thus, they settled for non-teaching jobs or entrepreneurial activities to thrive during the pandemic. International Monetary Fund (2020) reported the cost of joblessness. Accordingly, “unemployment imposes huge costs on individuals, society, and country.” Such cost is more than just financial. When prolonged, it may lead to graduates’ skepticism, and the value of education and training would lose among unemployed individuals (Simpson, 2020). When combined, a total of 82.5 percent of the sampled graduates had been employed at the time this tracer was administered. However, this was too far from the employment rate at the national level, which was 91.27 percent (Trading Economics, 2021). Generally, it appeared that these individuals had ways to earn a living amid a health crisis.

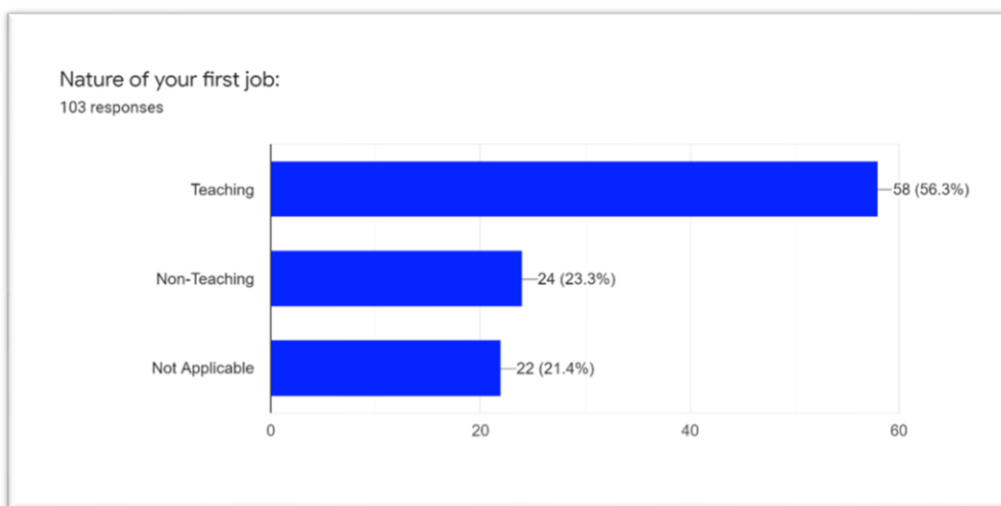


Figure 4. Nature of 2019 Graduates’ First Job

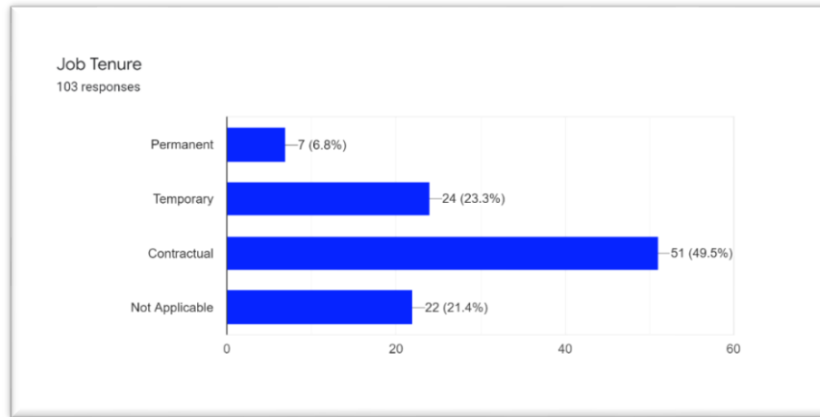


Figure 5. Job Tenure of 2019 Graduates

This tracer looked into the job tenure of 2019 graduates. As shown in Figure 5, very few (6.8%) had permanent jobs, while 49.5 percent and 23.3 percent had contractual and temporary arrangements, respectively. The “not applicable” response was answered by those who were unemployed (see Figure 3). These results corroborated the previous survey that only 9 percent of the 2018 graduates had permanent jobs a year after graduating. Time does matter in obtaining a permanent job tenure. This reality was shown also in previous batches covered in previous tracer wherein only 60 and 40 percent of the 2016 and 2017 graduates, respectively, had permanent status in their employment (Caingcoy et al., 2020). This scenario was recorded after two or three years from graduation period. This situation is much more problematic when the ranking and promotion systems in the public schools are not speedy. Graduates are waiting until such time there are vacant or created positions. Somehow, this problem could also be attributed to the over-subscription of teacher education courses and the competition for an item gets tougher.

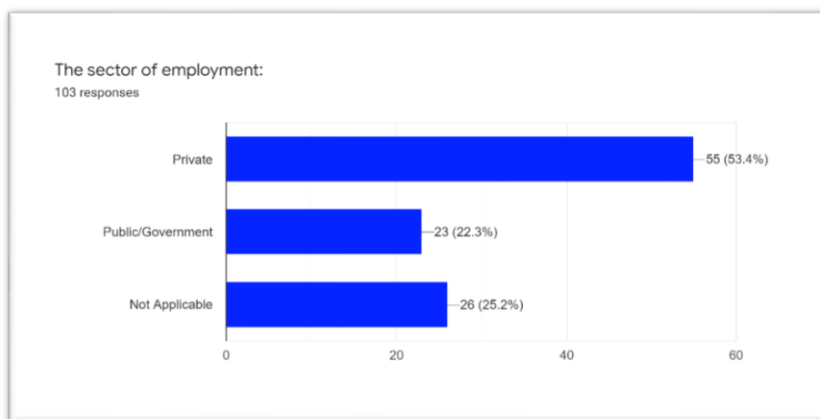


Figure 6. Sectors they are employed

It is the motivation among graduates to land a job in the government sector. However, government employment requires eligibility. They may obtain the entitlement through their professional license. It’s like they need to extend a year in preparation for the licensure examination. Usually, they are waiting for the results for three months or so. The results in Figure 6 show that few (22.3%) of the graduates have government employment a

year after graduation. Most (53.4%) of them landed a job in the private sector. Certainly, the four dimensions of employment status are interconnected. And the only requirement graduates can improve the competitive advantage is their eligibility. The private sector was the hope of these graduates. It provided them with temporary work, while waiting for opportunity for government employment.

Employability Status

Employability status has three essential dimensions such as the employability, frequency of employment, and the salary received. Results in Figure 7 show that many of the 2019 graduates were employable within 7-12 months after graduation. At that time, they could have obtained their professional license. The top result was followed by their employability within 1-6 months (first six months). This result was corroborated by those who chose *employed since the first six months after graduation*. If these two choices are combined, it turned out that most (41.7%) of the 2019 graduates were employable within the first six months and second six months after they graduated from college. These results imply that despite the barrier of no eligibility at that time, they looked for ways they would be employed. Figure 8 shows the frequency these graduates employed after graduation. More than 50 percent were employed *once only*, while less than 20 percent and close to 4 percent were employed *twice* and *thrice*, respectively. Sadly, more than a quarter were unemployed since they graduated from their respective degree programs.

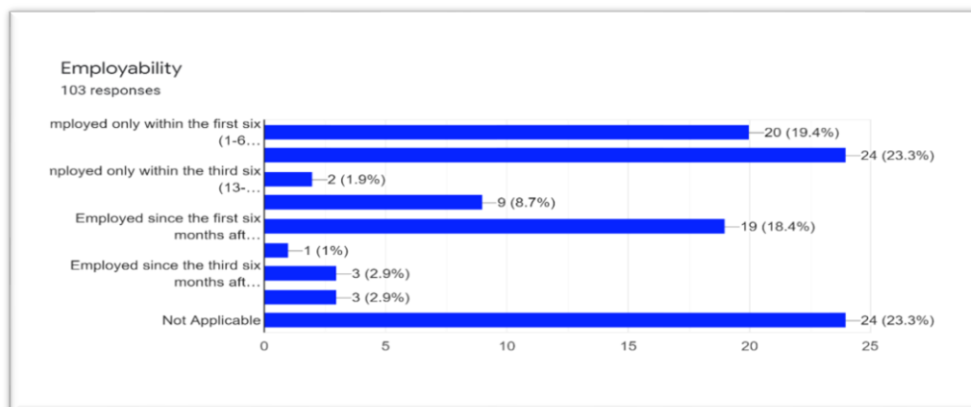


Figure 7. Employability of 2019 Graduates

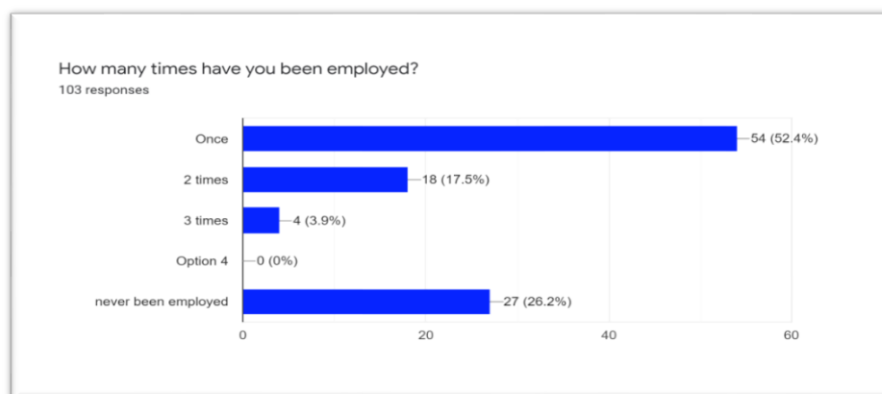


Figure 8. Employment Frequency among the 2019 Graduates

Moreover, most of them received a salary below five thousand. This salary was even lower than the minimum wage (PHP 331-365/day) in region 10 for 2021 (National Wages and Productivity Commission, 2021). Less than 30 percent had a salary between five and nine thousand per month. Very few had received between ten and twenty-five thousand a month. Somehow, the previous report was confirmed that Filipinos are confronted with limited economic opportunities, overwhelming underemployment, and low pay and benefits (Absuelo & Hancock, 2015).

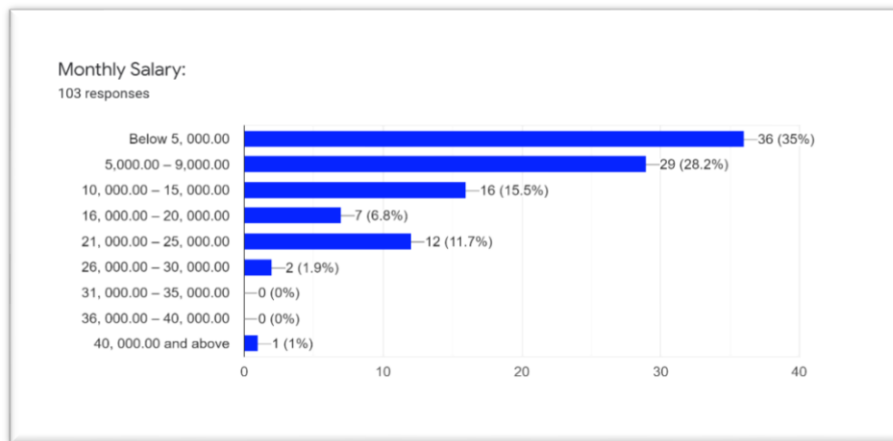


Figure 9. Monthly Salary of 2019 Graduates

Competencies

On Adequate and Useful Competencies

The study asked the participants on what knowledge and skills they adequately acquired from their degree programs, which they deemed useful in previous, current, and future work. With this question, the work experience was considered because they could hardly tell the value of their competencies without being able to use them in practice. Table 1 shows these competencies. However, competencies that were mentioned at least five times are considered. Both attitudes and values were not mentioned in the question; yet, they came out in the responses. Almost 40 percent believed they had adequately acquired the communication skills after years of studies. These individuals may have enhanced their speaking, listening, and writing facilities. Communication and collaboration are ways of working among the new generation workforce (Schleicher, 2012). On the contrary, employers reported low satisfaction on workers' interpersonal and communication skills (Acosta & Igarashi, 2017).

More than a quarter reported they adequately acquired the pedagogical skills. This result indicates they had developed the skills on utilizing teaching approaches, strategies, and techniques. This result was followed by ICT skills in which 25 percent had sufficiently acquired them. This evidence simply implies that these graduates can use ICT for professional or personal purposes. Thus, they can integrate ICT into the teaching and learning processes. Information and communication technology and information literacy are known as tools for working (Schleicher, 2012).

Table 1. Competencies Adequately Acquired by the 2019 BSE Graduates

Dimensions	Adequately Acquired Competencies	Frequency (n=103)	Percentage (%)
Skills	Communication Skills	41	39.80
	Pedagogical skills	27	26.21
	Information Communication and Technology (ICT) skills	25	24.27
	Time Management skills	14	13.59
	Flexibility	13	12.62
	Leadership skills	10	9.70
	Classroom Management skills	10	9.70
	Teamwork and Collaboration skills	7	6.79
	Creativity	6	5.82
	Lesson Planning	5	4.85
	Critical Thinking skills	5	4.85
	Problem-Solving skills	5	4.85
	Interpersonal Skills	5	4.85
Knowledge	Content Knowledge	9	8.73
Attitudes and	Professionalism	9	8.73
Values	Work Ethics	7	6.79
	Patience	7	6.79
	Determination and persistence	6	5.82
	Goal-orientation	5	4.85

Close to 15 percent acknowledged they adequately acquired time management skills and flexibility. As revealed, the competence in personal adaptability and learning continuously are contributory across all elements of contextual performance (Abas & Imam, 2016). The results suggest that some of them can manage time efficiently and effectively. So timely during this pandemic that they recognized the importance of flexibility, especially in teaching practice. The competencies above constitute the top five, that were acquired by the 2019 graduates, and are useful in work. However, none of these five was under the knowledge and attitudinal domains. Thus, these graduates find these skills as the most important competencies for teaching. However, their leanings toward skills might put them at risk. World Bank scholars cautioned, "...employees are hired because of their technical skills, but fired due to their behaviors or attitudes..." (Acosta & Igarashi, 2017, para. 1). On the other hand, scholars gave this remark "... it is well known that employers look beyond the traditional cognitive and technical skills when hiring, and socioemotional skills are core competencies for higher labor productivity" (Acosta et al., 2017, para. 11).

The rest of the competencies that graduates deemed adequately acquired cannot be ignored by the university. These competencies include leadership, classroom management, content knowledge, professionalism, work ethics, patience, teamwork and collaboration, creativity, determination and persistence, lesson planning, critical thinking, problem-solving, interpersonal skills, and goal orientation. These competencies require another study

to confirm their adequacy and usefulness since only very few had reported them. Previous research revealed that being more competent in thinking and problem-solving skills can give employees more benefits in performing contextual behavior. Further, personal management skills had a moderate relationship with employees' contextual behavior. Also, teamwork skills or working with others were moderately correlated with employees' contextual performance (Abas & Imam, 2016).

Inadequate but Useful Competencies

Table 2 has similar top responses to Table 1. These are on communication skills in which more than 15 percent reported they inadequately acquired these competencies. These individuals are not among those who claimed earlier that the aforementioned skills were sufficiently acquired by them. These graduates indicate they lacked the communication skills for current, previous, and future work. The result suggests that these few individuals need further enhancement for their writing, speaking, and listening skills. If this need cannot be addressed, it would negatively impact teaching performance and ways of working (Schleicher, 2012).

Table 2. Competencies Inadequately Acquired by the 2019 BSE Graduates

Dimension	Inadequately Acquired Competencies	Frequency n=103	Percentage %
Skills	Communication skills	16	15.53
	Information Communication and Technology (ICT) skills	12	11.65
	Pedagogical skills	8	7.76
	Leadership skills	8	7.76
Knowledge	Content Knowledge	9	8.73
Attitudes and Values	Flexibility	8	7.76
Practice	Internship	5	4.85

More than 10 percent deemed the ICT skills lacking. These individuals may find difficult to integrate ICT in teaching or in initiating computer-assisted teaching and learning processes in the classroom. With less than 10 percent individuals deemed leadership and pedagogical skills, content knowledge, flexibility, and internship insufficient but are beneficial in previous, current, and future work. Close to 9 percent claimed they lacked the content knowledge of their respective degree programs.

Conclusion

Most of the 2019 graduates had been employed in teaching and teaching-related jobs but in contractual arrangements within the first and second six months after graduation. Many had their first jobs but received a meager salary, mostly from the private sector. Communication, pedagogy, information communication technology, time management, and flexibility were the top competencies they adequately acquired and deemed beneficial in previous, current and future work. The competencies that most of them had adequately or acquired

were mostly from skills domain. The study concluded that the Bachelor of Secondary Education programs allowed graduates to acquire 21st-century skills.

The common factor that limits their employment and employability status was their eligibility. If the licensure examination can be held within the first three months after graduation, graduates can obtain a job after that period. Though graduates were found employable, yet they cannot earn a much bigger salary, obtain a permanent job, and land in government employment nor look for a greener pasture since they were limited by their eligibility at that time, especially that it was pandemic. The results of the study have corresponding implications for future researches in determining the most employable skills in secondary teaching. The university, especially the Secondary Education Department, may consider revisiting the curriculum to ensure the integration and development of the skills for 21st-century employment.

Classroom instruction can emphasize the development of employable skills. Eventually, these become the competitive advantage and employability capitals of future graduates. The employers of graduates, who acquired inadequately the competencies, may offer professional development activities that further enhance their skills, knowledge, attitudes, and values, especially those aligned with 21st-century skills. The results imply changing the schedule of administering the licensure examination favorably within the first three months including the release of results. This recommendation can surely lessen the cost of waiting among graduates. This recommendation implies for the university to prepare graduates to ensure they could obtain the license at the time.

Acknowledgements

We sincerely thank the Bachelor of Secondary Education alumni across specializations for their constant support and cooperation to our annual tracer. We thank also the faculty of the Secondary Education Department for their assistance in gathering the data.

References

- Abarro, J. O. (2017). Employability of BSE and BEE Graduate of University of Rizal System, Antipolo City. *International Journal of Advanced Research*, 5(12),1499-1504.
- Abas, M. C., & Imam, O. A. (2016). Graduates' Competence on Employability Skills and Job Performance. *International Journal of Evaluation and Research in Education*, 5(2), 119-125.
- Absuelo, R., & Hancock, P. (2015). Social networks and the employability of Filipinos in the United States. *Asian Studies: Journal of Critical Perspectives on Asia*, 51(2), 31-71
- Absuelo, R. (2014). *Employability of Philippine college and university graduates in the United States*. <https://ro.ecu.edu.au/theses/868>
- Acosta, P., Igarashi, T., Olfindo, R., & Rutkowski, J. (2017a). *Developing Socioemotional Skills for the Philippines' Labor Market*. World Bank Group. <https://bit.ly/2O2x0e8>
- Acosta, P. & Igarashi, K. (2017b). *Philippines: Keeping in step with what employers want*. World Bank.

- <https://bit.ly/3ctT1f7>
- Aspiring Minds. (2016). *National Employability Report- Engineers: Annual Report 2016*. Aspiring Minds. <http://bit.ly/30yD66t>
- Baking, E. G. (2015). Employability and productivity of graduates: An exploratory analysis of program strengths and weaknesses. *Journal of Economic Research*, 1(1),1-10. <http://bit.ly/30cZwtP>
- Ballon, A. E. (2007). Predictors of Employability of the Graduates of Technological Institute of the Philippines Quezon City. *TIP Research Journal Quezon City*, 4(1). <http://ejournals.ph/form/cite.php?id=9171>
- Boholano, H. B. (2012). Employability of Teacher Education Graduates of an Asian Public University. *JPAIR Multidisciplinary Research Journal*, 9(1), 106-122. <https://bit.ly/3bWi1ZB>
- Caingcoy, M. E., & Barroso, D. A. (2020). Cross-Sectional Inquiry on Employability and Employment Status of Bachelor of Secondary Education Graduates (2016-2018): A Tracer Study. *East African Scholars Multidisciplinary Bulletin*, 3(10), 306-313. DOI:10.36349/easjmb.2020.v03i10.002 <https://bit.ly/3cECXGm>
- Coursera for Campus. (n.d.). *The Unbound University: Unlocking Opportunity through Online Learning*. Coursera for Campus.
- Department of Education. (2017). *DepEd Order No. 42, s. 2017: Adoption and Implementation of Philippine Professional Standards for Teachers*. DepEd. <https://bit.ly/32Ymg3w>
- Domingo, D. D. (2013). MMSU Graduates' Employability Status and Potentials. *MMSU Science and Technology Journal*, 3(2), 34-54. <http://bit.ly/2L2x4aF>
- Finch, D. J., Peacock, M., Levallet, N., & Foster, W. (2016). A dynamic capabilities view of employability. *Education & Training*, 58(1), 61-81. <http://bit.ly/2S0Hvfx> DOI:10.1108/ET-02-2015-0013
- Gedye, S., & Beaumont, E. (2018). The ability to get a job: student understandings and definitions of employability. *Education & Training*, 10(5), 406-420. <http://bit.ly/2XrzzrFH>
- Infante, J. G., Junco, E. P., & Marquez, M. C. (2014). Employment Status of the Graduates of Guimaras State College, Philippines. *IAMURE International Journal of Multidisciplinary Research*, 11. <https://bit.ly/32ZFXb6>
- International Monetary Fund. (2020). *Unemployment: The Curse of Joblessness*. <http://www.imf.org/external/pubs/ft/fandd/basics/unemployment.htm>
- Javier, B. S. (2015). Determinants of Employability of the Information Technology Graduates in Cagayan State University, Philippines. *The Countryside Development Research Journal*, 3(1), 43-52. <https://bit.ly/2xSmmy2>
- Kalaw, M. T. B. (2019). Tracer study of Bachelor of Science in Mathematics. *International Journal of Evaluation and Research in Education*, 8(3), 537-548. DOI: 10.11591/ijere.v8i3.17343
- Macrotrends (2021). *Philippines Youth Unemployment Rate 1991-2021*. Macrotrends. <https://bit.ly/3vXaPH8>
- National Wages and Productivity Commission. (2021). *Daily Minimum Wages Rate*. NWPC. <https://nwpc.dole.gov.ph/>
- Neal, B. (2017). *Why 21st Century Skills are so Important to your Student's Future*. Frontier Charter Academy. <https://bit.ly/3tW7ias>
- Philippine Statistics Authority. (2020). *Employment Situation in October 2020*. PSA. <https://psa.gov.ph/content/employment-situation-october-2020>

Ross, D. (2017). *Empowering Our Students with 21st-Century Skills for Today*. Getting Smart. <https://bit.ly/3m0ir7h>

Schleicher, A. (Ed.). (2012). *Preparing Teachers and Developing School Leaders for the 21st Century: Lesson from Around the World*. OECD.


Simpson, S. D. (2020). *The Cost of Unemployment to the Economy*. Investopedia. <https://bit.ly/3f8V1Lv>

Trading Economics. (2021). *Employment Rate in Philippines decreased to 91.25 percent in the first quarter of 2021 from 91.27 percent in the fourth quarter of 2020*. Trading Economics. <https://tradingeconomics.com/philippines/employment-rate>

Woya, A. A. (2019). Employability among Statistics Graduates: Graduates' Attributes, Competence, and Quality of Education. *Education Research International*, 1-7. <https://bit.ly/2XhGCnD>

Author Information

Manuel E. Caingcoy

 <https://orcid.org/0000-0002-3862-1561>

Bukidnon State University

Faculty, Educational Administration graduate programs, and Chair, Secondary Education Department, College of Education, Malaybalay City Philippines

Contact e-mail: manuelcaingcoy@buku.edu.ph


Iris April L. Ramirez

 <https://orcid.org/0000-0002-8616-4510>

Bukidnon State University

Faculty and Focal Person for BSE Science, Secondary Education Department, College of Education, and Assistant Director of Botanical Gardens and Herbarium, Malaybalay City Philippines

Derren N. Gaylo

 <https://orcid.org/0000-0003-1168-3241>

Bukidnon State University

Head, Research Center for Education and Advocacy Faculty and Focal Person for BSE-Mathematics, Secondary Education Department, College of Education, Malaybalay City Philippines

Ma. Isidora W. Adajar

 <https://orcid.org/0000-0002-3057-8765>

Bukidnon State University

Faculty and Focal Person for BSE-Filipino, Secondary Education Department, College of Education, and Coordinator, University Student Internship Office, Malaybalay City Philippines


Elvie O. Lacdag

 <https://orcid.org/0000-0003-3950-3572>

Bukidnon State University

Faculty and Focal Person for BSE English, Secondary Education Department, College of Education, Malaybalay City Philippines

Gem Aiah B. Blanco

 <https://orcid.org/0000-0003-0240-1038>

Bukidnon State University

Faculty, Secondary Education Department, College of Education, and Coordinator, Institutional Sustainability Assessment, Quality Assurance Unit, Malaybalay City Philippines