



PRELIMINARY SURVEY VISIT



AREA 3.

CURRICULUM

AND

INSTRUCTION



F. ADMINISTRATIVE SUPPORT FOR EFFECTIVE INSTRUCTION

F.7.CONDUCT OF A TRACER STUDY ON THE EMPLOYABILITY OF GRADUATES

TRACER STUDY of BATCH 2022 GRADUATES of USM

1. Rationale / Significance

Rationale

Quality and relevant education has been the vision of various higher education institutions (HEI) in their mandate to produce graduates that contribute to nation building. However, it is a common problem in the country to find many graduates of higher education who are unemployed or underemployed. Moreover, high turnover, especially in the private sector due to low job satisfaction and underpaid entry level jobseekers, is prevalent because most of the graduates were not fully prepared to qualify for high-skilled jobs in the labor market upon leaving college. (Mobarak, 2019; Mavromaras, et. al., 2013)

With the advent of the Fourth Industrial Revolution or Industry 4.0, the relevance of current college graduates becomes more alienated and opportunities for work relevant to degrees are further reduced. Many jobs are rapidly replaced by technology and in the coming years, majority of jobs in the first two decades of the 21st century is already taken over by machines. Recently, many jobs have experienced the disruption brought about by artificial intelligence. (Ulla, et.al., 2025; Wilson, 2024)

In addition, with the regionalization and globalization of the labor economy such as ASEAN, APEC and many other international agreements, competition with foreign workforce becomes tighter and the demand and recognition of Filipino professionals in other countries is greatly challenged. (Caino & Castillo, 2024; Surono & Ariyato, 2024)

With such urgency, higher education institutions (HEI) are urged to keep up with current trends in the industry workforce and establish a sustainable and long-term goal for their graduates not just to become employable but also to be successful in their respective field and reduce the risk of being unemployed or underemployed due to the ever-changing landscape of the labor market.

To be kept informed of the employability and status of their graduates, it is common for HEIs to conduct tracer studies among its alumni. It provides up to date information regarding employment status as well as perception of the relevance of undergraduate preparation to their employment. In the case of the University of Southern Mindanao (USM), various case studies were already conducted by different researchers as well as academic units. It helped in informing the institution of the gaps and needs that must be addressed especially in the curriculum, facilities and faculty development.

However, not all programs have conducted their own tracer study and most of the time have low response rates. There were university-wide tracer studies conducted before but failed to fully disclose and disseminate the results. These leads to limited opportunities to enhance the programs and improve the policies that would help in improving the employability of its graduates.

Significance

A university-wide tracer study that captures all programs was carried out to consolidate efforts and come up with a comprehensive picture of the employability of the graduates of USM.

The recent tracer study for graduates of 2022 was the first study conducted for the first batch of K-12 senior high school who were able to finish their tertiary education in USM. It was an opportunity to peek into the effect of the shift to K-12 curriculum towards the employability of the graduates. The study also reflected the status of higher education in USM and what programs that remain relevant to industry needs.

Objectives

1. Determine the number of employed and unemployed graduates from 2022
2. Determine the academic units with high and low employment rates
3. Determine the programs with high and low employment rates

2. Review of Related Literature

A study by Melnik et al. (2024) analyzed the employment patterns of university graduates and found that, while university education increases the likelihood of securing employment, graduates in certain fields (such as engineering, health sciences, and business) experienced higher employment rates than those in humanities and social sciences. Additionally, the study found that the employment rate of university graduates was significantly influenced by the match between their degree and labor market demand (Pervez et al., 2024).

According to Chiuriu et al. (2024), higher education plays a critical role in labor market success. The research suggests that university graduates generally have higher employment rates compared to their non-graduate counterparts, but this success is contingent upon several factors, such as the economy, field of study, and regional employment conditions (Chiuriu et al, 2024; Aguilar & George, 2024). Another study also highlighted the growing gap in employment rates between graduates with technical or vocational degrees versus those with general bachelor's degree (Pulyaeva, 2024; Polezhaeva, 2024).

There are also regional disparities in the employment rates of graduates in the Philippines. The study found that graduates from urban areas had significantly higher employment rates than those from rural regions, due to better job opportunities and more developed industries in the cities. The study emphasizes the importance of regional development in improving graduate employment outcomes across the country (Chiuriu et al, 2024; Aguilar & George, 2024).

A study on the employability of university graduates, focusing on the mismatch between the skills acquired in higher education and the skills required by employers. It was found that many graduates faced challenges in finding employment in their field of study due to a lack of relevant skills, such as soft skills and practical experience. The authors suggested that universities should integrate more hands-on training and internships into their curricula to improve employability (Kocsis & Pusztai, 2024; Vezi-Magigaba & Utete, 2024; Pervez et al., 2024, al Shanfari et al., 2024)

The employment rates of university graduates are influenced by a variety of factors, including the field of study, regional differences, and the match between educational outcomes and labor market demands. While university education increases the likelihood of employment, many graduates face challenges related to underemployment and skills mismatches.

3. Methodology

The study was conducted employing descriptive quantitative research design. It was made to determine the response rate and the employment rate of the graduates among academic units and programs. Frequency and percentage were utilized for statistical analysis.

A survey questionnaire was designed to gather the following information from the graduates: contact information, status of employment, nature of employment and business or company name. The questionnaire was deployed through a Google form and was disseminated among faculty members, staff, students and alumni and was also posted at the University social media page for wider reach.

Data gathering was done through various means: online survey, phone calls, text message, chat, and personal visitation. The phone calls were made for those not responding to the online survey through the contact information of the graduates retrieved from the Admission and Records Office (ARO) with the permission of the office director. Meanwhile, face-to-face visitation was done in hometowns for those non-responsive graduates and have no record of their contact information from ARO to gather data directly from them or their acquaintances. The visit was done in coordination with the barangay chairman with prior approval from the mayor of the municipality or city visited.

During the data analysis, the number of responses was consolidated by academic unit (campus or college) and by program (degrees). From the aggregate data, response rates and employment rates were computed. Those with employment rates of 90% and above are considered high employment rates while those below 70% are considered low employment rates. Two figures for employment rate was computed, the relative employment rate which utilize the number of responses as the denominator which the absolute employment rate make use of the total number of graduates as the denominator. However, the relative employment rate will be used for analyzing the result while the absolute employment rate will just serve reference for weighing the sample size.

$$\text{Relative Employment Rate (\%)} = \frac{\text{number of employed graduates}}{\text{number of responses}} \times 100\%$$

$$\text{Absolute Employment Rate (\%)} = \frac{\text{number of employed graduates}}{\text{total number of graduates}} \times 100\%$$

4. Results and Discussion

From the survey conducted from March 2024 to December 2024, out of the 3,105 graduates of USM from 2022, 2,861 have their data obtained with a response rate of 92.14%. Then from this number, 2,489 were employed, which results in an employment rate of 87.00%. Meanwhile, this figure only constitutes 80.16% of the total population since some were not reached by the survey.

Looking at the survey result among the academic units of the University, the colleges with the highest response rates are the College of Health Sciences, College of Veterinary Medicine and Institute of Sports, Physical Education and Recreation each having response rates of 100%. Meanwhile, the Institute of Middle East and Asian Studies has the lowest response rate of 68.60% (142/207).

In terms of employment rate, the colleges with high employment rates based on total number of respondents (relative employment rate) are the College of Business, Development Economics and Management (365/392 or 93.11%), College of Health Sciences (183/189 or 96.83%), College of Trades and Industries (79/85 or 92.94%), College of Veterinary Medicine (52/57 or 91.23%) and Institute of Sports, Physical Education and Recreation (48/51 or 94.12%). Meanwhile the colleges with low employment rates are the College of Science and Mathematics (32/42 or 76.19%) and the Institute of Middle East and Asian Studies (104/142 or 73.24%).

Table 1. Consolidated tracer survey result by academic units

Campus/ College	Number of 2022 Graduates	Number of Responses	Response Rate	Number of Employed	Relative Employment Rate	Absolute Employment Rate
College of Agriculture	307	286	93.16%	235	82.17%	76.55%

In the Kidapawan City Campus, those considered with high employment rates (> 90%) are BS in Electrical Engineering, BS in Industrial Engineering, BS in Mechanical Engineering, BS in Secondary Education major in English, Bachelor of Technical Vocational Teacher Education major in Food and Service Management Technology and Bachelor of Technology majors in Automotive Technology, Electrical Technology, Heating, Ventilating and Air-conditioning Technology and Mechanical Technology.

Meanwhile, programs with low employment rates (less than 70%) from the main campus are the Bachelor of Practical Agriculture at Buluan Extension Campus, BS in Criminology, BS in Food Technology, BS in Biology, Bachelor of Technical Vocational Teacher Education major in Electrical Technology, BA in Islamic Studies major in Halal Food Management and Technology and Halal Studies Track while from Kidapawan City Campus, Bachelor of Technology major in Electronics Technology has low employment rate.

Table 2. Consolidated tracer survey result by academic programs

College/Program/Major	No. of Graduates	No. of Responses	Response Rate	No. of Employed	Relative Employment Rate	Absolute Employment Rate
College of Agriculture	307	286	93.16%	235	82.17%	76.55%
Bachelor of Practical Agriculture	131	115	87.79%	97	84.35%	74.05%
Bachelor of Practical Agriculture – Buluan Extension Campus	22	20	90.91%	13	65.00%	59.09%
Bachelor of Science in Agriculture	79	79	100.00%	65	82.28%	82.28%
<i>Major in Agronomy</i>	11	11	100.00%	8	72.73%	72.73%
<i>Major in Animal Science</i>	21	21	100.00%	18	85.71%	85.71%
<i>Major in Entomology</i>	8	8	100.00%	6	75.00%	75.00%
<i>Major in Horticulture</i>	9	9	100.00%	7	77.78%	77.78%
<i>Major in Plant Pathology</i>	19	19	100.00%	17	89.47%	89.47%
<i>Major in Soil Science</i>	11	11	100.00%	9	81.82%	81.82%
Bachelor of Science in Fisheries	75	72	96.00%	60	83.33%	80.00%
College of Arts and Social Sciences	191	182	95.29%	149	81.87%	78.01%
Bachelor of Arts in English Language	37	35	94.59%	33	94.29%	89.19%
Bachelor of Arts in Psychology	42	41	97.62%	38	92.68%	90.48%
Bachelor of Science in Criminology	52	50	96.15%	31	62.00%	59.62%
Bachelor of Science in Development Communication	60	56	93.33%	47	83.93%	78.33%
College of Business, Development Economics and Management	413	392	94.92%	365	93.11%	88.38%
Bachelor of Science in Accountancy	27	26	96.30%	24	92.31%	88.89%
Bachelor of Science in Agribusiness	75	75	100.00%	66	88.00%	88.00%
Bachelor of Science in Agricultural Economics	68	62	91.18%	56	90.32%	82.35%

College/ Program/ Major	No. of Graduates	No. of Responses	Response Rate	No. of Employed	Relative Employment Rate	Absolute Employment Rate
Bachelor of Science in Business Administration	103	96	93.20%	92	95.83%	89.32%
Bachelor of Science in Development Management	71	68	95.77%	64	94.12%	90.14%
Bachelor of Science in Management Accounting	69	65	94.20%	63	96.92%	91.30%
College of Education	248	233	93.95%	199	85.41%	80.24%
Bachelor of Elementary Education	97	90	92.78%	67	74.44%	69.07%
Bachelor of Secondary Education	151	143	94.70%	132	92.31%	87.42%
<i>Major in English</i>	27	27	100.00%	27	100.00%	100.00%
<i>Major in Filipino</i>	41	36	87.80%	33	91.67%	80.49%
<i>Major in Mathematics</i>	17	16	94.12%	13	81.25%	76.47%
<i>Major in Music, Arts and Physical Education</i>	1	1	100.00%	1	100.00%	100.00%
<i>Major in Science</i>	25	25	100.00%	24	96.00%	96.00%
<i>Major in Social Studies</i>	40	38	95.00%	34	89.47%	85.00%
College of Engineering and Information Technology	111	110	99.10%	93	84.55%	83.78%
Bachelor of Library and Information Science	15	15	100.00%	14	93.33%	93.33%
Bachelor of Science in Agricultural and Biosystems Engineering	10	10	100.00%	9	90.00%	90.00%
Bachelor of Science in Civil Engineering	34	34	100.00%	26	76.47%	76.47%
Bachelor of Science in Computer Engineering	10	10	100.00%	8	80.00%	80.00%
Bachelor of Science in Computer Science	4	4	100.00%	4	100.00%	100.00%
Bachelor of Science in Electronics Engineering	9	9	100.00%	8	88.89%	88.89%
Bachelor of Science in Information Systems	29	28	96.55%	24	85.71%	82.76%
College of Health Sciences	189	189	100.00%	183	96.83%	96.83%
Bachelor of Science in Nursing	189	189	100.00%	183	96.83%	96.83%
College of Human Ecology and Food Sciences	312	279	89.42%	234	83.87%	75.00%
Bachelor of Science in Food Technology	48	48	100.00%	31	64.58%	64.58%
Bachelor of Science in Hospitality Management	156	139	89.10%	118	84.89%	75.64%
Bachelor of Science in Hotel and Restaurant Management	1	1	100.00%	1	100.00%	100.00%

College/ Program/ Major	No. of Graduates	No. of Responses	Response Rate	No. of Employed	Relative Employment Rate	Absolute Employment Rate
Bachelor of Science in Nutrition and Dietetics	26	26	100.00%	21	80.77%	80.77%
Bachelor of Science in Tourism Management	75	60	80.00%	59	98.33%	78.67%
Bachelor of Science in Travel Management	6	5	83.33%	4	80.00%	66.67%
College of Science and Mathematics	43	42	97.67%	32	76.19%	74.42%
Bachelor of Science in Chemistry	17	17	100.00%	17	100.00%	100.00%
Bachelor of Science in Biology	26	25	96.15%	15	60.00%	57.69%
<i>Major in Ecology</i>	11	11	100.00%	6	54.55%	54.55%
<i>Major in Microbiology</i>	15	14	93.33%	9	64.29%	60.00%
College of Trades and Industries	100	85	85.00%	79	92.94%	79.00%
Bachelor of Technical-Vocational Teacher Education	63	54	85.71%	48	88.89%	76.19%
<i>Major in Automotive Technology</i>	19	18	94.74%	15	83.33%	78.95%
<i>Major in Drafting Technology</i>	22	21	95.45%	21	100.00%	95.45%
<i>Major in Electrical Technology</i>	15	9	60.00%	6	66.67%	40.00%
<i>Major in Electronics Technology</i>	7	6	85.71%	6	100.00%	85.71%
Bachelor of Science in Industrial Technology	37	31	83.78%	31	100.00%	83.78%
<i>Major in Architectural Drafting Technology</i>	13	11	84.62%	11	100.00%	84.62%
<i>Major in Automotive Technology</i>	12	9	75.00%	9	100.00%	75.00%
<i>Major in Electrical Technology</i>	10	9	90.00%	9	100.00%	90.00%
<i>Major in Electronics Technology</i>	2	2	100.00%	2	100.00%	100.00%
College of Veterinary Medicine	57	57	100.00%	52	91.23%	91.23%
Doctor of Veterinary Medicine	18	18	100.00%	15	83.33%	83.33%
Bachelor of Science in Veterinary Technology	39	39	100.00%	37	94.87%	94.87%
Institute of Middle East and Asian Studies	207	142	68.60%	104	73.24%	50.24%
Bachelor of Science in International Relations	53	38	71.70%	31	81.58%	58.49%
Bachelor of Arts in Islamic Studies	154	104	67.53%	73	70.19%	47.40%

College/ Program/ Major	No. of Graduates	No. of Responses	Response Rate	No. of Employed	Relative Employment Rate	Absolute Employment Rate
<i>Major in Halal Food Management and Technology</i>	10	5	50.00%	3	60.00%	30.00%
<i>Major in Islamic Values Education</i>	5	4	80.00%	4	100.00%	80.00%
<i>Major in Shari'ah Law</i>	1	1	100.00%	1	100.00%	100.00%
<i>Specialization: Elementary Education</i>	1	0	0.00%	0	-	0.00%
<i>Track: Arabic Language</i>	16	12	75.00%	11	91.67%	68.75%
<i>Track: Halal Studies</i>	76	51	67.11%	29	56.86%	38.16%
<i>Track: Islamic Law and Jurisprudence</i>	45	31	68.89%	25	80.65%	55.56%
Institute of Sports, Physical Education and Recreation	51	51	100.00%	48	94.12%	94.12%
Bachelor of Physical Education	5	5	100.00%	5	100.00%	100.00%
Major in Sports and Wellness Management						
Bachelor of Physical Education	46	46	100.00%	43	93.48%	93.48%
USM-Kidapawan City Campus	876	813	92.81%	716	88.07%	81.74%
Bachelor of Industrial Technology	159	148	93.08%	124	83.78%	77.99%
Bachelor of Science in Electrical Engineering	28	27	96.43%	27	100.00%	96.43%
Bachelor of Science in Industrial Engineering	5	4	80.00%	4	100.00%	80.00%
Bachelor of Science in Mechanical Engineering	14	14	100.00%	13	89.22%	89.22%
Bachelor of Secondary Education	204	204	100.00%	182	87.22%	79.45%
<i>Major in English</i>	49	49	100.00%	47	95.92%	95.92%
<i>Major in Filipino</i>	53	53	100.00%	45	84.91%	84.91%
<i>Major in Mathematics</i>	49	49	100.00%	44	89.80%	89.80%
<i>Major in Social Studies</i>	53	53	100.00%	46	86.79%	86.79%
Bachelor of Technical-Vocational Teacher Education	146	133	91.10%	116	88.34%	78.13%
<i>Major in Automotive Technology</i>	39	34	87.18%	30	88.24%	76.92%
<i>Major in Electronics Technology</i>	30	30	100.00%	26	86.67%	86.67%
<i>Major in Food and Service Management Technology</i>	41	41	100.00%	39	95.12%	95.12%
<i>Major in Garments and Fashion Design Technology</i>	36	28	77.78%	21	75.00%	58.33%

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College of Education	248	233	93.95%	199	85.41%	80.24%
College of Engineering and Information Technology	111	110	99.10%	93	84.55%	83.78%
College of Health Sciences	189	189	100.00%	183	96.83%	96.83%
College of Human Ecology and Food Sciences	312	279	89.42%	234	83.87%	75.00%
College of Science and Mathematics	43	42	97.67%	32	76.19%	74.42%
College of Trades and Industries	100	85	85.00%	79	92.94%	79.00%
College of Veterinary Medicine	57	57	100.00%	52	91.23%	91.23%
Institute of Middle East and Asian Studies	207	142	68.60%	104	73.24%	50.24%
Institute of Sports, Physical Education and Recreation	51	51	100.00%	48	94.12%	94.12%
USM - Kidapawan City Campus	876	813	92.81%	716	88.07%	81.74%
TOTAL	3,105	2,861	92.14%	2,489	87.00%	80.16%

In terms of academic programs in the main campus, BS in Agriculture, BS in Agribusiness, Bachelor of Library and Information Science, BS in Agricultural and Biosystems Engineering, BS in Civil Engineering, BS in Computer Engineering, BS in Computer Science, BS in Electronics Engineering, BS in Nursing, BS in Food Technology, BS in Hotel and Restaurant Management, BS in Nutrition and Dietetics, BS in Chemistry, Doctor of Veterinary Medicine, BS in Veterinary Technology, BS in Physical Education Major in Sports and Wellness Management have 100% response rates while in Kidapawan City Campus, BS in Mechanical Engineering and BS in Secondary Education have 100% response rates.

Looking at the employment rates of graduates in the main campus, those that are considered high (90% or higher) are that of the BA in English Language, AB in Psychology, BS in Accountancy, BS in Agricultural Economics, BS in Business Administration, BS in Development Management, BS in Management Accounting, Bachelor of Secondary Education majors in English, Filipino, MAPEH and Science, Bachelor of Library and Information Science, BS in Agricultural and Biosystems Engineering, BS in Computer Science, BS in Nursing, BS in Hotel and Restaurant Management, BS in Tourism Management, BS in Chemistry, Bachelor of Technical Vocational Teacher Education majors in Drafting Technology and Electronics Technology, BS in Industrial Technology majors in Architectural Drafting Technology, Automotive Technology, Electrical Technology and Electronics Technology, BS in Veterinary Technology, BA in Islamic Studies majors in Islamic Values and Education, Shari'ah Law and Arabic Language Track and Bachelor of Physical Education.

College/ Program/ Major	No. of Graduates	No. of Responses	Response Rate	No. of Employed	Relative Employment Rate	Absolute Employment Rate
Bachelor of Technology	320	283	88.44%	250	88.34%	78.13%
Major in Automotive Technology	48	41	85.42%	37	90.24%	77.08%
Major in Civil Technology	40	33	82.50%	26	78.79%	65.00%
Major in Electrical Technology	72	66	91.67%	63	95.45%	87.50%
Major in Electronics Technology	27	26	96.30%	17	65.38%	62.96%
Major in Heating, Ventilating and Air-Conditioning Technology	24	22	91.67%	22	100.00%	91.67%
Major in Mechanical Technology	59	54	91.53%	49	90.74%	83.05%
Major in Welding and Fabrication Technology	50	41	82.00%	36	87.80%	72.00%
TOTAL	3105	2861	92.14%	2489	87.00%	80.16%

5. Conclusion and Recommendation

From the results obtained, it shows that majority of the programs in the University have high employment rate (90% or higher) which implies employability of its 2022 graduates. It can also be observed that those graduates from fields of business and management, health sciences, technical vocation, veterinary medicine and physical education have high employment rate while those from the fields of criminology, food technology, biology and Islamic studies have low employment rate supporting the findings of Melnik et al. (2024).

It is interesting how the labor demand of these fields in their respective industries fare about affecting the outcome of the survey. This could pave way for initiatives on reviewing the roadmap of program offerings in USM and pivotal for offering of more marketable programs that would ensure graduates will land a job after graduation.

6. References

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