



THE KISUMU
NATIONAL
POLYTECHNIC

TRACER STUDY REPORT 2025/2026

"Charting the Career Paths and
Impact of Our Graduates"

Mapping the Alumni Journey & Enhancing Relevance

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FOREWORD



"education must be transformative, market-driven, and centered on the success of our trainees"

The Kisumu National Polytechnic (TKNP) remains steadfast in its mission to deliver high-quality Technical and Vocational Education and Training (TVET), fostering a robust research culture and nurturing innovation that directly addresses the evolving demands of the global labour market. Our commitment to excellence is grounded in the belief that education must be transformative, market-driven, and centered on the success of our trainees.

TKNP Tracer Study Report 2025/2026 represents a critical milestone in our institutional journey. By systematically evaluating the employment trajectories, professional growth, and job satisfaction of our graduates, we gain the empirical evidence necessary to refine our curricula and enhance our training quality. This study ensures that the technical skills we impart remain relevant and highly competitive.

The insights gathered here will serve as a primary catalyst for curriculum alignment that updates programs to meet real-time industry expectations and technological shifts, strategic partnerships that strengthen our collaborations with industry stakeholders to bridge the gap between academia and the workplace, and institutional innovation that enhances our student support systems and career services to better prepare trainees for a dynamic economy.

I wish to extend my deepest appreciation to the graduates who participated in this study; your feedback is the cornerstone of our continuous improvement. My sincere gratitude also goes to the Office of Career Services and Research, Innovations & Outreach Services (RIOS) team for their diligent work in bringing this report to fruition.

As we move forward, we remain dedicated to producing globally competitive graduates who contribute meaningfully to Kenya's socio-economic development. We invite all stakeholders to engage with this report and join us in our pursuit of excellence, ensuring that at The Kisumu National Polytechnic, "Industry Succeeds."

Catherine Kelonye

CHIEF PRINCIPAL/ COUNCIL SECRETARY



LIST OF RESEARCHERS



MBOYA S.O



NDENGA B. O



JAMES OLANDO



KNILA MUKANDA



ISAIAH ONG'ONG'A



AGNES OBWARE



MORRIS ORIA

ACKNOWLEDGEMENT



"TKNP continues to transform lives, empower communities, and shape a world-class workforce for the future."

The successful completion of TKNP Tracer Study Report 2025/2026 is a testament to the collective dedication, expertise, and shared vision of numerous individuals and departments. We extend our sincere appreciation to everyone whose contributions enriched this vital undertaking, providing the data necessary to shape the future of technical education at our institution.

We express our deepest gratitude to our Chief Principal, Madam Catherine Kelonye, for her visionary leadership and unwavering support. Her commitment to evidence-based decision-making continues to inspire excellence across The Kisumu National Polytechnic and serves as the driving force behind our efforts to strengthen research, training, and graduate success.

We also acknowledge the invaluable contributions of the Registrar's Office and Industrial Liasons Office,(ILO) during data collection, the data analysis and draft report writing team comprising of the Office of Career Services, Research, Innovations & Outreach Services (RIOS)—specifically Mr. Knilla Mukanda, Mr. Isaiah Ong'ong'a, Ms. Agnes Obware and Mr. Morris Oria for their professionalism and diligence. Your seamless coordination, technical insights, and rigorous support ensured this study was conducted with the highest levels of integrity and fidelity. Your dedication perfectly reflects the spirit of teamwork that sustains TKNP's mission.

Our heartfelt appreciation goes to our graduates, the true ambassadors of this institution who generously shared their professional journeys and reflections. Your voices are the heart of this report. Your feedback provides the foundation upon which we will continue to enhance training quality ensuring we remain aligned with global industry expectations.

Finally, we highly commend the Tracer Study Team within the Office of Career Services from the intricate stages of tool design and data collection to the final analysis, your collaborative effort exemplifies the institution's pursuit of academic and technical excellence. To all who contributed, thank you for your dedication to advancing the relevance of TVET education. Your efforts ensure that TKNP continues to transform lives, empower communities, and shape a world-class workforce for the future. We extend our sincere gratitude to the organisations and industry stakeholders who provided critical feedback on the performance and competencies of our graduates.

Mboya Sheth

COORDINATOR OFFICE OF CAREER SERVICES

EXECUTIVE SUMMARY

This Tracer Study was conducted to evaluate the effectiveness and relevance of training programs offered at The Kisumu National Polytechnic (TKNP) by examining graduate outcomes and employer perceptions. The study was designed to generate evidence on the transition of graduates into the labor market and assess the extent to which the competencies acquired during training align with industry requirements. It targeted both graduates of the institution and their respective employers, providing a comprehensive perspective on skills utilization and workplace performance.

A descriptive survey research design was adopted, utilizing both quantitative and qualitative approaches to collect and analyze data. Primary data was gathered through structured questionnaires administered to 169 graduates and 61 employers, complemented by follow-up engagements to enrich the findings. The target population comprised graduates from the departments of Fashion Design and Cosmetology, Mechanical and Automotive Engineering, and Hospitality and Tourism as well as employers drawn from relevant sectors of the economy where these graduates are engaged. Data analysis focused on key indicators such as employment status, duration taken to secure employment, relevance of skills, job satisfaction, and employer assessment of graduate competencies.

The findings indicate that a significant proportion 20.91%, 12.73% and 18.63% of graduates have transitioned into employment, self-employment, or further studies respectively. Majority (71.82%) of graduates reported that the skills acquired during training are relevant to their current occupations, demonstrating the effectiveness of the Competency-Based Education and Training (CBET) approach. Employers (64.3%), expressed satisfaction with the technical competencies of graduates but highlighted gaps in soft skills, practical exposure, and adaptability to emerging technologies. While 33.64% of graduates secured employment within a short period after completion, others experienced delays due to limited opportunities, lack of experience, and competitive labor market conditions.

The study further established that stronger industry linkages, enhanced industrial attachments, and continuous curriculum review are critical in improving graduate employability. Key recommendations include strengthening collaboration with industry, integrating emerging digital and soft skills into training programs, enhancing practical training components, and improving career guidance and job placement services. Overall, the study provides valuable insights into graduate performance and employer expectations, reinforcing the need for ongoing alignment between TVET training and labor market demands.

ACRONYMS AND ABBREVIATIONS

CBET	Competency-Based Education and Training
FGD	Focus Group Discussion
HEIs	Higher Education Institutions
ILO	Industrial Liasons Office
ILO	International Labor Organization
KII	Key Informant Interview
KNQA	Kenya National Qualifications Authority
NGO	Non-Governmental Organization
RIOS	Research, Innovations & Outreach Services
SPSS	Statistical Package for the Social Sciences
SMS	Short Message Service
TKNP	The Kisumu National Polytechnic
TVET	Technical and Vocational Education and Training
TVETA	Technical and Vocational Education and Training Authority

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1.0 INTRODUCTION

TVET institutions play a critical role in equipping trainees with practical skills and competencies required in the labor market. In Kenya, TVET has been prioritized as a key pillar for achieving national development goals, particularly under Vision 2030, which emphasizes the development of a skilled and competitive workforce. However, despite increased investment in TVET, concerns persist regarding the employability of graduates and the alignment of training programs with industry needs (Republic of Kenya, 2013).

Tracer studies have emerged as an important tool for assessing the effectiveness and relevance of training programs offered by educational institutions. A tracer study involves tracking graduates after completion of their training to determine their employment status, relevance of skills acquired, and their transition into the labor market. Such studies provide valuable feedback to institutions on curriculum relevance, quality of training, and areas that require improvement (Schomburg, 2003). For TVET institutions, tracer studies are particularly important in ensuring that training remains demand-driven and responsive to the evolving needs of the economy.

The Kisumu National Polytechnic (TKNP), as a leading TVET institution in Kenya, offers a wide range of programs aimed at equipping trainees with technical and entrepreneurial skills. Over the years, the institution has implemented Competency-Based Education and Training (CBET), which focuses on practical skills and industry relevance. Despite these efforts, there is limited systematic data on the performance of graduates in the labor market, their career progression, and the extent to which the skills acquired during training meet employer expectations.

In the context of increasing competition in the job market and rapid technological changes, it is essential for institutions like TKNP to continuously evaluate the outcomes of their training programs. Understanding whether graduates secure employment, become self-employed, or pursue further education provides critical insights into the effectiveness of training delivery. Additionally, feedback from graduates and employers can help identify gaps in skills, training methodologies, and institutional support systems (ILO, 2019).

This tracer study is therefore designed to assess the employment outcomes of graduates from The Kisumu National Polytechnic and evaluate the relevance of the training programs offered. The study seeks to examine key aspects such as employment status, duration taken to secure employment, relevance of acquired skills to current jobs, and challenges faced by graduates in the labor market. It also aims to gather feedback that can inform curriculum review, policy development, and institutional planning.

Furthermore, the study will contribute to strengthening quality assurance mechanisms within the institution by providing evidence-based insights for decision-making. The findings are expected to support continuous improvement in training delivery, enhance industry linkages, and promote the development of programs that are aligned with labor market demands. Ultimately, this will contribute to improved employability of graduates and the overall effectiveness of TVET in supporting socio-economic development.

In conclusion, tracer studies are essential for bridging the gap between training and employment by providing critical information on graduate outcomes. For TKNP, undertaking this tracer study represents a strategic step towards enhancing the quality, relevance, and impact of its training programs in line with national and global expectations.

1.1 Main objective

This study aims to determine the TKNP rating in terms of job market for its graduates in relation to the quality of skills they received after undergoing technical training.

1.1.1 Specific objectives

In addition, the alumni tracer study will seek to meet the following sub-objectives:

- i. To determine the number of TKNP alumni who have secured some sort of employment, that is, whether employed in the industry, company or self employed.
- ii. To determine the level of satisfaction of

employers with the TKNP alumni in terms of service competency and skills at work.

- iii. To determine if there exist TKNP alumni who have proceeded with further education beyond the diploma or certificate or artisan they earned from the polytechnic.

1.1.2 Research Questions and Hypotheses

- i. What is the employment status of TKNP alumni in terms of being employed, self-employed, or unemployed?
- ii. What is the level of employer satisfaction with TKNP alumni in terms of service competency and skills at work?

- iii. To what extent have TKNP alumni progressed to further education beyond their initial qualification?

1.2 Hypotheses (for statistical testing)

- **H (Null Hypothesis)**
There is no significant relationship between training at TKNP and the employment status of alumni.
- **H (Alternative Hypothesis)**
There is a significant relationship between training at TKNP and the employment status of alumni.



2.0 LITERATURE REVIEW

2.1 Empirical Review

A review of existing literature indicates that tracer studies are crucial for Higher Education Institutions (HEIs) to assess how well academic training matches what the labor market requires. These studies follow graduates' career paths to identify key "skills gaps" and offer evidence-based insights for updating curricula to better prepare trainees for employment. Graduate employability, as defined by Coetzee and Schreuder (2011), is an individual's ability and readiness to be successful and remain relevant in the job market (p.77). It is now a major focus for governments and educational institutions in both developed and developing countries, including Kenya.

Earlier research has shown that employability can be understood through two categories of skills: field-specific technical skills and soft skills (Bhaerman & Spill, 1988; Finch et al., 2013). Harvey et al. (1997) found that employers often seek graduates with specialized knowledge and job-specific competencies or job-specific technical skills (Harvey et al., 1997; Rosenberg, Heimler, & Morote, 2012). These skills are considered essential for a graduate's employability (Laker & Powell, 2011; Redish & Smith, 2008). Basically, such skills signal to employers that a graduate has the necessary skills to perform well in a specific job (Bhaerman & Spill, 1988). It should be noted that job-specific functional skills are more context-dependent compared to soft skills.

The second category of employability factors refers to soft skills or transferable skills (Finch et al., 2013; Siraye, Abebe, Melese, & Wale, 2018). Finch et al. (2012) classify these as "meta-skills," which include factors such as listening, professionalism, interpersonal skills, time management, problem-solving, and teamwork which forms key component in the labour market. Research on graduate employability shows that graduates who participate in internships before entering the job market are more likely to achieve stable employment than those who do not (Divine, Linrud, Miller, & Wilson, 2007).

Some scholars also highlight that the reputation of an institution can significantly influence various outcomes that matter to employers, policymakers,

and academics. For example, studies have explored how institutional rankings, branding, and program structures—indicators of reputation—impact student retention and perceptions (Bennett & Ali-Choudhury, 2009; Judson, Aurand, Gorchels, & Gordon, 2008; Pampaloni, 2010; Sauer & O'Donnell, 2006). However, relatively few studies have investigated the link between institutional reputation and graduate employability.

Tracer studies serve as an indispensable tool for tracking the career paths, employment statuses, and long-term professional development of TVET graduates. By documenting parameters like job search duration, role relevance, and skill utilization, these surveys reveal structural mismatches between the technical skills acquired and the industry expectations. Gathering authentic feedback from active industry employers allows TVET institutions to actively uncover curriculum gaps. As emphasized by Sarsale et al. (2024), graduate tracer studies are foundational to maintaining curriculum relevance and ensuring the long-term marketability of TVET programs. This targeted data serves institutional quality assurance goals, drives continuous professional development initiatives, and guides curriculum reform policies.

According to Surabaya State University (2025), despite these clear benefits, TVET institutions face a persistent disconnect between academic curricula and evolving industry standards. Many fresh graduates enter fields with insufficient technical competencies, a lack of critical thinking capacity, or outdated digital literacy. Traditional classroom models frequently overlook essential soft skills, such as self-management and rapid problem-solving, which employers value highly. Furthermore, recent findings by Balingbing (2024) indicate that recent graduates are entering the workforce during critical life transitions where career success is highly prioritized, making timely institutional support essential. Without regular empirical feedback via alumni tracking systems, institutions risk running obsolete academic programs that exacerbate youth underemployment.

In summary, the successful transition from education to employment is likely influenced by a combination of factors, such as subject-specific knowledge, overall academic performance (cumulative grade point average), soft or transferable skills, and participation in internship programs before graduation. The institution's reputation may also play a role. Tracer studies are generally considered an essential tool for evaluating the effectiveness and relevance of education and training programs, especially within TVET institutions. Schomburg (2003) notes that tracer studies provide structured feedback on graduate employment outcomes, skill usage, and the match between training and labor market needs.

For The Kisumu National Polytechnic, such studies are vital for examining how the quality of skills trained affects graduates' performance and competitiveness in the job market. Therefore, they serve as a foundation for assessing institutional effectiveness and guiding improvements in curriculum design and delivery. In relation to the main objective of evaluating TKNP's standing in the job market based on the quality of skills gained, literature highlights the importance of aligning training programs with industry demands. Studies suggest that graduates are more likely to succeed in the labor market when their training develops both technical competencies and transferable skills such as communication, teamwork, and problem-solving (International Labour Organization, 2019). Competency-Based Education and Training (CBET), which is common in TVET systems, emphasizes practical skill development and workplace readiness, thus improving employability. However, research indicates that while technical skills are often well-developed, gaps remain in soft skills, which can significantly influence how employers view and assess graduates. This implies that institutional ratings in the job market are not solely dependent on technical training but also on the development of well-rounded competencies. Employer satisfaction is another aspect crucial for evaluating the quality of training provided by TVET institutions. Literature shows that employer perceptions are influenced by graduates' technical competence, work ethics, and ability to adapt to work environments. Existing studies reveal that employers generally rate graduates highly on technical skills and teamwork but often express concerns about communication skills, professionalism, and adaptability (Kallio et al.,

2016). Job satisfaction and service competency are closely related, as graduates who are well-prepared for their roles tend to perform better and meet employer expectations. On the other hand, when there is a mismatch between the skills graduates possess and the requirements of the job, employer satisfaction may decrease. This highlights the importance of incorporating experiential learning methods such as industrial attachments and internships to enhance workplace readiness and improve employer ratings of graduates. The transition of graduates into further education is also a significant outcome studied through tracer studies, as it reflects opportunities for academic and professional growth. Research shows that a large number of TVET graduates pursue further education, particularly at diploma and higher levels, while fewer move on to degree programs due to financial and structural limitations. This underscores the importance of creating clear pathways between TVET institutions and universities to support lifelong learning. The presence of TKNP alumni who pursue further education serves as an indicator of the quality of the foundational training they received and their aspirations for continued professional development.

2.2 Theoretical Foundations of Tracer Studies

Tracer studies are primarily based on Human Capital Theory, which views education as a strategic investment aimed at increasing an individual's productivity and market value. A common framework used in this research is derived from Mugabushaka, Schomburg, and Teichler (2007), which categorizes the graduate experience into Inputs (institutional resources), Processes (teaching styles/curriculum), and Outcomes (employment status and job satisfaction). According to University of Nairobi (2023), the first comprehensive tracer study on engineering graduates in Kenya found that while theoretical knowledge is strong, employers identified a critical lack of soft and interpersonal skills. It also highlighted a significant shortage, with Kenya having only one engineer for every 6,300 people.

3.0 METHODOLOGY

3.1 Study Design and Data Collection Techniques

The 2025/2026 Tracer Study adopted a cross-sectional descriptive qualitative and quantitative survey design, to evaluate the employment outcomes of graduates from TKNP who completed their studies between September 2023 and November 2025. The descriptive approach enabled the systematic assessment of key variables such as employment status, job relevance, and career progression, while the quantitative survey facilitated the collection of measurable data at a single point in time. The study was conducted in April 2026.

The term secondary data can be described as existing data used to enrich research and provide strong baseline of knowledge used to find the answer that is required for the research questions developed by the researcher in order to complete this research (Mohajan, 2018). Respondents filled out the questionnaires that were distributed to multiple people at once on their own time. (Heeringa et al. 2017). Self-prepared questionnaires for interview were also administered to the 169 and 61 respondents for alumni and employers respectively. The key Informant Interview (KII) and Focus Group Discussion (FGD) techniques help get data in-depth with insight into the participants' thoughts, actions, and attitudes (Kallio et al. 2016). The Secondary data were generated from previous journals, research papers and articles that have been published earlier on this particular topic or some related topic (Snyder 2019).

3.2 Target Population

The target population for this study comprised graduates from the departments of Mechanical and Automotive Engineering, Fashion Design and Cosmetology, and Hospitality and Tourism. Stratified sampling technique was used which comprised of alumni and the employer. A sample size of 169 was selected from the departments by use of purposive sampling approach which involved graduates from three levels of artisan, certificate and diploma. The sample size of 61 was taken for the employer using random sampling

technique. Kisumu, Siaya and Homabay counties were selected based on 2025/2026 plan.

3.3 Data Handling and Analysis

Data was collected by sending google form link through Short Message service (SMS), WhatsApp and email which were systematically handled to ensure accuracy and reliability in the analysis:

3.3.1 Data Cleaning and Coding:

After collection, the data were downloaded in spreadsheet format. The data were then cleaned to remove any inconsistencies, duplicates, or errors. Each response was carefully reviewed and coded to facilitate analysis.

3.3.2 Data Exportation to SPSS:

Once cleaned and coded, the data were exported to Statistical Package for the Social Sciences (SPSS) software for detailed analysis. SPSS was used to perform both descriptive and inferential statistical analyses, allowing for the identification of trends, patterns, and correlations in the employment outcomes of the graduates.

3.3.3 Quantitative Analysis:

In SPSS, quantitative data were analyzed using both descriptive and inferential statistics method to determine employment rates, the nature of employment, sectoral distribution, and the relevance of jobs to the graduates' training.

3.3.4 Qualitative Analysis:

Responses to open-ended questions were analyzed using thematic analysis. This method enabled the identification of recurring themes and insights related to graduates' experiences, challenges, and satisfaction levels.

3.4 Methodological Challenges and Limitations

While every effort was made to ensure a comprehensive and accurate study, the following challenges were faced which were similar to those in the past tracer studies:

3.4.1 Response Rate:

Not all graduates responded to the online survey, SMS, or online google link form, which may have introduced non-response bias. The same case applied to the employers where only a third of contacted employers responded (21 out of 61). Efforts were made to mitigate the challenge by repeated attempts to contact non-respondents but still, a low percentage of graduates were willing to participate in the survey.

3.4.2 Self-Reported Data:

The study relied on self-reported data from graduates and employers, which may be subject to recall bias or inaccuracies in reporting.

3.4.3 Access to Graduates:

The contact details in some cases were outdated, leading to difficulties in reaching some graduates.

3.4.4 No Pre-Field Work Awareness and Sensitization:

Due to time limitations, there were no pre-field work awareness and sensitization

meetings between field research staff and relevant stakeholders. This resulted in relatively low participation rate.

3.4.5 Violation of statistical assumptions:

Chi-square assumptions were violated in multiple analyses. This was addressed by use of Fisher-Freeman Halton exact Test and Monte Carlo simulations to further confirm the results.

3.4.6 Low Study Completion and Pass Rates:

The study observed low completion and pass rates among the graduates.

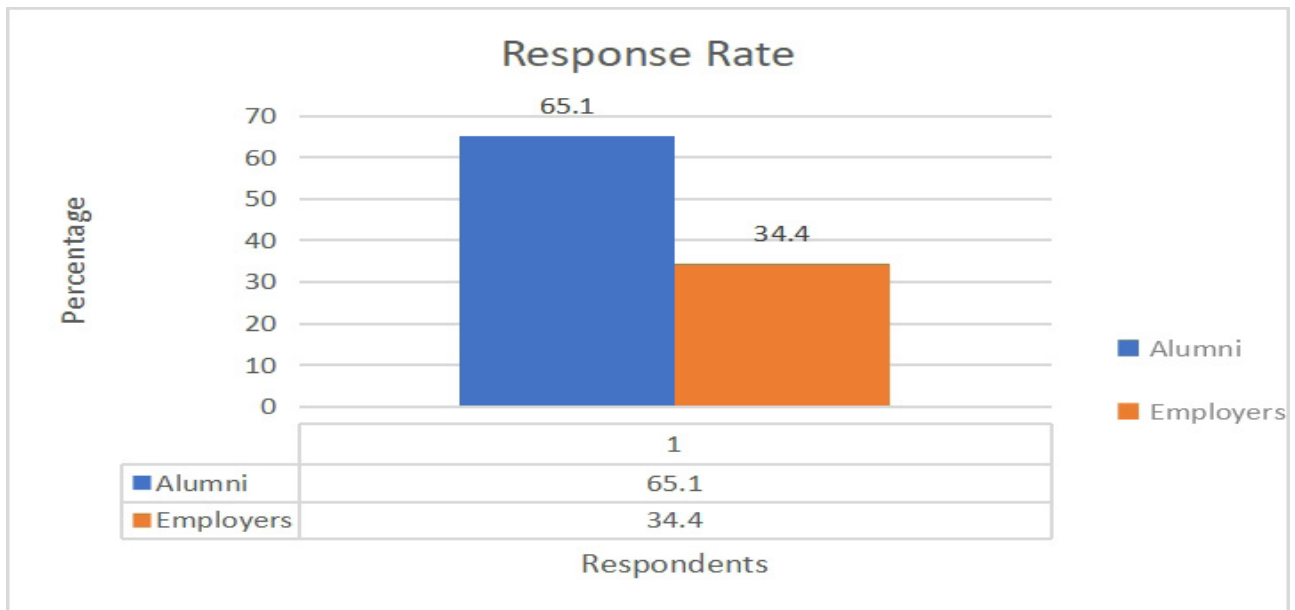
3.5 Ethical Considerations:

The study was conducted by ethical guidelines to ensure the privacy and confidentiality of all participants. Prior to data collection, written permission was obtained from TKNP management. Informed consent was secured from all participants through a consent statement at the beginning of each questionnaire, which explained the purpose of study. To protect participant identity, no names were collected on questionnaires. Graduates were also informed that their participation was entirely voluntary. All data collected were anonymized, and the results were reported in aggregate form to prevent the identification of individual respondents.

4.0 RESULTS AND FINDINGS

4.1 Response Rate

Figure 1: Response Rate



Source: Researcher's data 2026

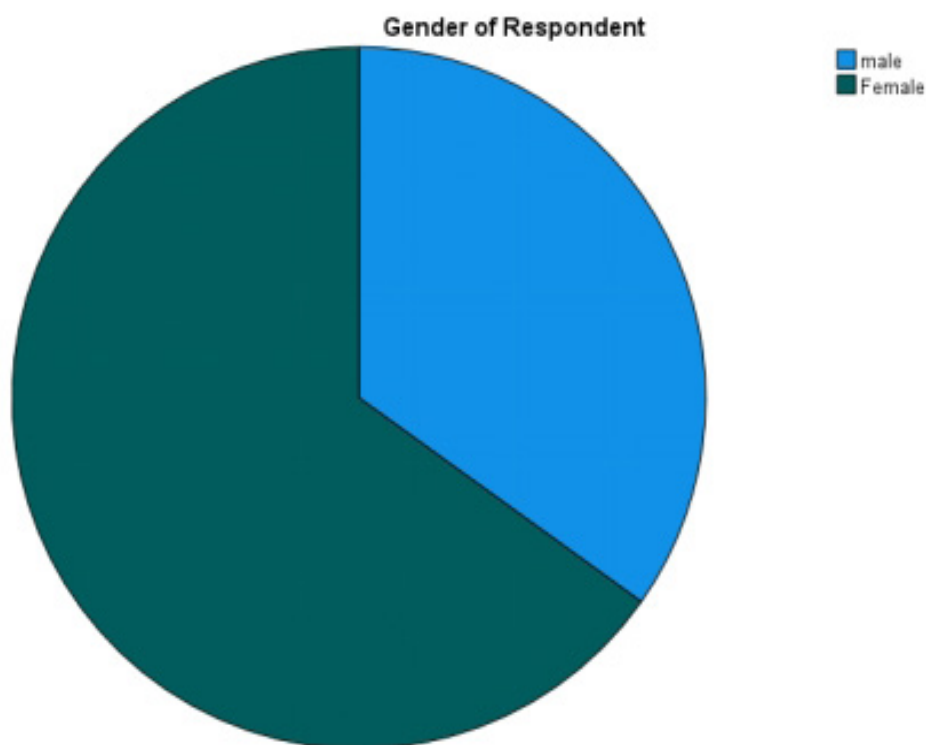
From figure 4.1, the response rate was 65.1% and 34.4% for alumni and employers respectively giving a significant representative response.

4.2 Respondents Distribution by Gender

Table 1: Gender Distribution of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	38	34.5	34.9	34.9
	Female	71	64.5	65.1	100.0
	Total	109	99.1	100.0	
Missing	System	1	.9		
Total		110	100.0		

Figure 2: Gender distribution of respondent by pie-chart



Source; Researcher's data 2026

From the table 4.1 and figure 4.2, the majority, 64.5% of the respondents were female and 35.5% were male.

4.3 Employment status by Gender

Table 2: Employment status by Gender

Gender of Respondent * Employment Status Crosstabulation					
Count					
		Employment Status			Total
		employed	Self employed	Unemployed	
Gender of Respondent	male	9	3	26	38
	Female	14	11	46	71
Total		23	14	72	109

Table 3: Relationship between employment status and gender

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.347 ^a	2	.510
Likelihood Ratio	1.436	2	.488
N of Valid Cases	109		
a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 4.88.			

From table 4.2b, there is no statistically significant association between gender and employment status,² (2, N = 109) = 1.347, p = 0.510. Therefore, gender does not significantly influence employment status among the respondents.

4.4 Employment Status by Level of Study

Table 4: Employment status by level of study

TVET level of Study * Employment Status Cross-tabulation						
		Employment Status				Total
			employed	Self employed	Unemployed	
TVET level of Study		1	0	0	0	1
	Diploma	0	19	8	37	64
	cert/craft	0	4	6	32	42
	Artisan	0	0	0	3	3
Total		1	23	14	72	110

Table 5: Test for relationship between employment status and level of study

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	117.903 ^a	9	<.001
Likelihood Ratio	20.604	9	.015
N of Valid Cases	110		
a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .01.			

A Chi-square test of independence was conducted to examine the relationship between the variables; employment status and level of study. The results showed a statistically significant association, $\chi^2 (9) = 117.903$, $p < 0.001$. We reject the null hypothesis, H_0 : There is no significant relationship between training at TKNP and the employment status of alumni. However, since more than 20% of the cells had expected counts less than 5, the assumption of the Chi-square test was violated. Therefore, the Fisher-Freeman-

Halton Exact test was considered.

Table 4.3c: Test for relationship between Employment status and level of study

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	117.903a	9	.000	.009b	.000	.027
Likelihood Ratio	20.604	9	.015	.009b	.000	.027
Fisher-Freeman-Halton Exact Test	21.221			.009b	.000	.027
N of Valid Cases	110					
a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is .01.						
b. Based on 110 sampled tables with starting seed 1314643744.						

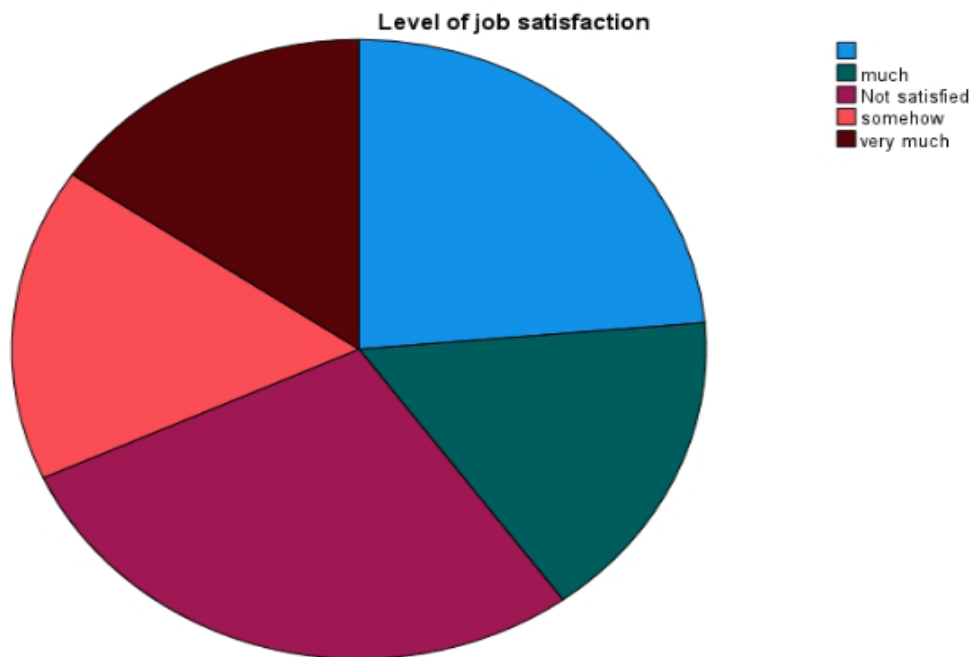
The Fisher-Freeman-Halton exact test was considered, which also indicated a significant association ($p = 0.009$). This confirms that there is a significant relationship between employment status and level of study.

4.5 Level of Job satisfaction

Table 6: Level of job satisfaction

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		26	23.6	23.6	23.6
	much	18	16.4	16.4	40.0
	Not satisfied	31	28.2	28.2	68.2
	somehow	18	16.4	16.4	84.5
	very much	17	15.5	15.5	100.0
	Total	110	100.0	100.0	

Figure 3: Level of job satisfaction by pie-chart



Source: Researcher's data 2026

Table 4.4 and figure 4.3 presents how TKNP graduates rated their level of job satisfaction:

- **Not satisfied:** 31 respondents (28.2%) the largest single group, showing a notable proportion of graduates are dissatisfied with their jobs.
- **Neutral/uncertain categories:**
Blank/unspecified (23.6%) representing respondents who gave incomplete or missing responses.
Somehow satisfied (16.4%) moderate satisfaction but not strong.
- **Satisfied categories:**
Much satisfied (16.4%) and *very much satisfied* (15.5%) resulting to about 32% of respondents who expressed clear satisfaction.

Implications:

- Overall, satisfaction levels are mixed, with nearly one-third dissatisfied and another third satisfied, while the rest fall into neutral or ambiguous categories.
- The relatively high dissatisfaction rate (28.2%) signals challenges in aligning graduate expectations with workplace realities.
- The presence of a large "unspecified" group (23.6%) suggests either survey design issues or respondents' difficulty in categorizing their satisfaction, which may need clarification in future tracer studies.

Conclusion: TKNP graduates show moderate satisfaction overall, but dissatisfaction is significant, pointing to areas where program relevance, job placement, or workplace conditions could be strengthened to improve graduate outcomes.

4.6: TKNP program of study on technical skills and level of job satisfaction

Table 7: Relationship between relevance of TKNP program of study on technical skills and level of job satisfaction

Crosstab							
Count							
		Level of job satisfaction					Total
			much	Not satisfied	somehow	very much	
Relevance of program of study on enhanced technical skills	Not relevant	0	0	3	0	1	4
	Somehow relevant	0	0	3	1	0	4
	Relevant	1	2	8	3	3	17
	Much relevant	1	13	8	7	3	32
	very much relevant	6	3	9	7	10	35
Total		8	18	31	18	17	92

Table 8: Relationship between relevance of TKNP program of study on technical skills and level of job satisfaction

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	27.873 ^a	16	.033	.018 ^b	.000	.043
Likelihood Ratio	29.345	16	.022	.009 ^b	.000	.027
Fisher-Freeman-Halton Exact Test	22.856			.027 ^b	.000	.058
N of Valid Cases	92					
a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .35.						
b. Based on 110 sampled tables with starting seed 1502173562.						

A Chi-square test was conducted to examine the relationship between the relevance of the TKNP program to technical skills and job satisfaction. Due to violation of Chi-square assumptions (64% of cells with expected counts less than 5), the Fisher-Freeman-Halton Exact Test and Monte Carlo results were considered. The results showed a statistically significant association between the variables (Monte Carlo $p = 0.018$; Fisher's Exact $p = 0.027$), indicating that the relevance of training is significantly related to job satisfaction.

Table 9: Relationship between Relevance of program of study on quality of academic knowledge and level of job satisfaction

Crosstab							
Count							
		Level of job satisfaction					Total
			much	Not satisfied	somehow	very much	
Relevance of program of study on quality of academic knowledge	Not relevant	0	0	3	0	1	4
	Somehow relevant	0	0	3	0	0	3
	Relevant	2	1	6	4	3	16
	much relevant	1	15	8	5	4	33
	Very much relevant	5	2	11	9	9	36
Total		8	18	31	18	17	92

Table 10: Relationship between Relevance of program of study on quality of academic knowledge and level of job satisfaction

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	32.615 ^a	16	.008	.009 ^b	.000	.027
Likelihood Ratio	33.764	16	.006	.009 ^b	.000	.027
Fisher-Freeman-Halton Exact Test	26.574			.009 ^b	.000	.027
N of Valid Cases	92					
a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .26.						
b. Based on 110 sampled tables with starting seed 1502173562.						

The results in Table 4.6b examined the relationship between the relevance of the program of study on the quality of academic knowledge and the level of job satisfaction among TKNP graduates.

The Pearson Chi-Square value ($\chi^2 = 32.615$, $df = 16$, $p = 0.008$) indicates a statistically significant association between the two variables. This means that graduates who perceived their program of study as more relevant to their academic knowledge tended to report higher levels of job satisfaction. The Likelihood Ratio ($\chi^2 = 33.764$, $p = 0.006$) and the Fisher-Freeman-Halton Exact Test ($p = 0.009$) confirm this significance, strengthening the conclusion that the relevance of academic training has a meaningful impact on satisfaction levels.

In practical terms, this suggests that TKNP's academic programs that effectively enhance theoretical and applied knowledge contribute positively to graduates' satisfaction in their employment. It underscores the importance of maintaining curriculum relevance, ensuring that course content aligns with industry expectations and equips trainees with applicable academic competencies.

4.7: TKNP program of study on improved management skills and level of job satisfaction

Table 11: Relevance of program of study on improved management skills and level of job satisfaction

Crosstab							
Count							
		Level of job satisfaction					Total
			much	Not satisfied	somehow	very much	
Relevance of program of study improved management skills	Not relevant	0	0	3	0	1	4
	Somehow relevant	0	0	4	0	0	4
	Relevant	1	4	7	3	3	18
	much relevant	4	14	8	9	2	37
	very much relevant	3	0	9	6	11	29
Total		8	18	31	18	17	92

Table 12: Relationship between Relevance of program of study on improved management skills and level of job satisfaction

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	36.163 ^a	16	.003	.009 ^b	.000	.027
Likelihood Ratio	42.822	16	.000	.000 ^b	.000	.027
Fisher-Freeman-Halton Exact Test	32.550			.000 ^b	.000	.027
N of Valid Cases	92					
a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .35.						
b. Based on 110 sampled tables with starting seed 1502173562.						

The output in Table 4.7b shows the statistical relationship between the relevance of the program of study on improved management skills and the level of job satisfaction among TKNP graduates.

The Pearson Chi-Square statistic ($\chi^2 = 36.163$, $df = 16$, $p = 0.003$) indicates a statistically significant association between the two variables. This means that graduates who perceived their program of study as highly relevant to improving their management skills were more likely to report higher levels of job satisfaction. The Likelihood Ratio ($\chi^2 = 42.822$, $p < 0.001$) and the Fisher-Freeman-Halton Exact Test ($p < 0.001$) confirm this finding, reinforcing the conclusion that program relevance strongly influences satisfaction.

In practical terms, this result highlights that TKNP's programs which emphasize management skill development contribute positively to graduate satisfaction in the workplace. It suggests that strengthening management-oriented content in curricula and ensuring its applicability to real work contexts can enhance both the employability and satisfaction of graduates. This is a clear signal that curriculum relevance is not just academic but directly tied to how graduates perceive their preparedness and fulfillment in employment.

4.8: TKNP program of study on improved problem-solving skills and level of job satisfaction

Table 13: Relevance of program of study on improved skills in problem solving and level of job satisfaction.

Crosstab							
		Level of job satisfaction					Total
			much	Not satisfied	somehow	very much	
Relevance of program of study on improved skills in problem solving	Not relevant	0	0	2	0	1	3
	somehow relevant	0	1	4	1	1	7
	Relevant	3	3	6	3	3	18
	Much relevant	3	11	9	9	3	35
	very much relevant	2	3	10	5	9	29
Total		8	18	31	18	17	92

Table 14: Relationship between relevance of program of study on improved skills in problem solving and level of job satisfaction

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Monte Carlo Sig. (2-sided)		
				Significance	95% Confidence Interval	
					Lower Bound	Upper Bound
Pearson Chi-Square	15.923 ^a	16	.458	.509 ^b	.416	.603
Likelihood Ratio	17.158	16	.375	.509 ^b	.416	.603
Fisher-Freeman-Halton Exact Test	14.322			.527 ^b	.434	.621
N of Valid Cases	92					
a. 16 cells (64.0%) have expected count less than 5. The minimum expected count is .26.						
b. Based on 110 sampled tables with starting seed 1502173562.						

The results in Table 4.8b examine the relationship between the *relevance of the program of study on improved skills in problem solving* and the level of job satisfaction among TKNP graduates.

The Pearson Chi-Square value ($\chi^2 = 15.923$, $df = 16$, $p = 0.458$) shows that there is no statistically significant association between the relevance of the program of study and job satisfaction. The Likelihood Ratio ($\chi^2 = 17.158$, $p = 0.375$) and the Fisher-Freeman-Halton Exact Test ($p = 0.527$) confirm this finding, indicating that the perceived relevance of training in problem-solving skills does not significantly influence how satisfied graduates are with their jobs.

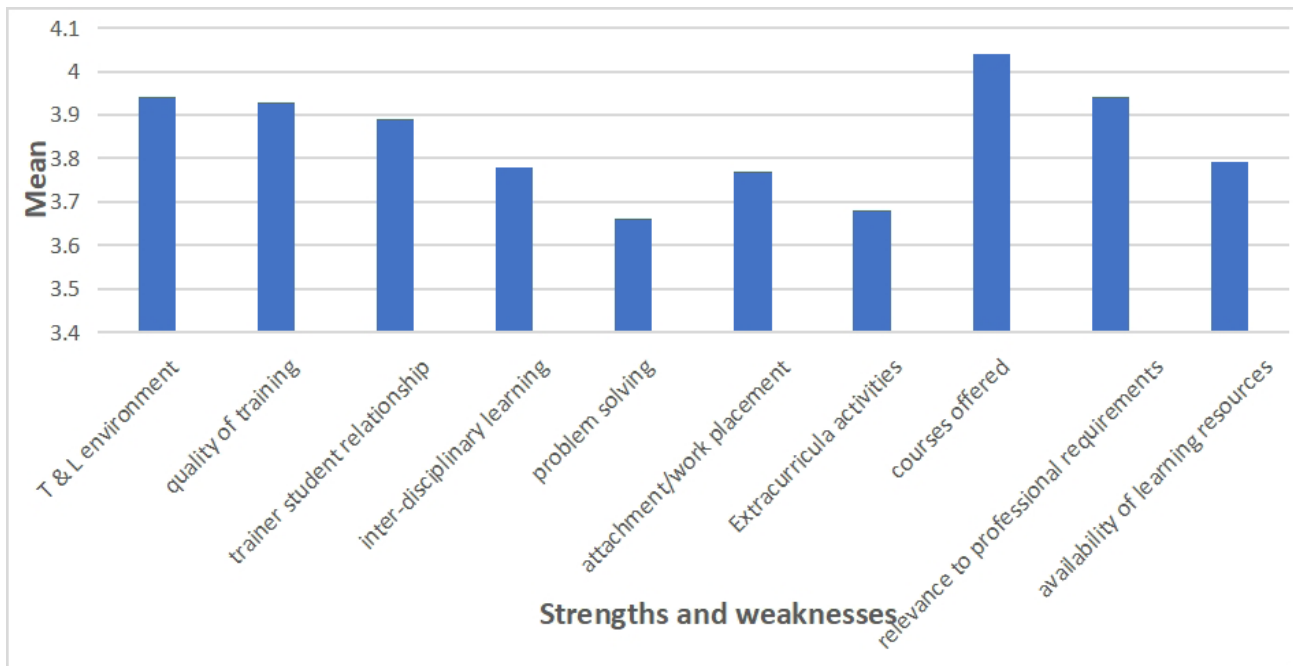
In practical terms, this suggests that while problem-solving skills are valuable, they may not be the primary factor determining job satisfaction among TKNP graduates. Other elements—such as work environment, remuneration, or opportunities for career growth—could play a more substantial role. For TKNP, this finding highlights the need to complement technical skill development with broader employability and workplace readiness components to enhance overall graduate satisfaction.

4.9: Strengths and Weaknesses of TKNP programs

Table 15: Descriptive statistics of skill competencies

Descriptive Statistics					
Strengths & weaknesses of TKNP programs on: -	N	Minimum	Maximum	Mean	Std. Deviation
Teaching and Learning environment	101	1	5	3.94	1.018
Quality of training	101	1	5	3.93	1.042
Trainer - trainee relationship	101	1	5	3.89	1.165
Inter-disciplinary learning	101	0	5	3.78	1.137
Problem solving	100	0	5	3.66	1.199
Attachment/work placement	101	0	5	3.77	1.333
Extracurricular activities	101	1	5	3.68	1.113
Range of courses offered	100	0	5	4.04	1.063
Relevance of the program to your professional requirements	100	1	5	3.94	1.052
Availability of learning resources	100	0	5	3.79	1.274
Valid N (listwise)	99				

Figure 4: Descriptive statistics of skill competencies



Source: Researchers' Data 2026

The descriptive statistics in Table 4.9 and Figure 4.4 summarize how graduates rated the strengths and weaknesses of TKNP programs across different dimensions, using a scale from 1 to 5. Most areas scored between 3.6 and 4.0, which indicates that graduates generally perceive TKNP programs positively, leaning toward “good” or “strong” rather than weak.

a.) Highest rated areas:

- *Range of courses offered* (Mean = 4.04) was the strongest aspect, suggesting graduates value the diversity and breadth of programs available.
- *Teaching and learning environment* (Mean = 3.94) and *relevance of programs to professional requirements* (Mean = 3.94) also scored highly, showing that trainees find the environment supportive and the training aligned with career needs.

b.) Moderately rated areas:

- *Quality of training* (Mean = 3.93) and *trainer–student relationship* (Mean = 3.89) were rated positively, but slightly lower, indicating room for improvement in instructional delivery and interpersonal engagement.
- *Availability of learning resources* (Mean = 3.79) and *interdisciplinary learning* (Mean = 3.78) suggest that while resources and cross-disciplinary exposure are adequate, they are not consistently strong.

c.) Lowest rated areas:

- *Problem solving* (Mean = 3.66), *extracurricular activities* (Mean = 3.68), and *attachment/work placement* (Mean = 3.77) were the weakest areas. These scores highlight gaps in practical problem-solving emphasis, co-curricular enrichment, and structured industry placements.

Graduates perceive TKNP programs as broadly relevant and diverse, with strong teaching environments and course offerings. However, there are notable weaknesses in problem-solving training, extracurricular opportunities, and work placement arrangements, which are critical for employability. Addressing these areas could significantly enhance graduate satisfaction and employer confidence.

Table 16: Interpretation summary of strengths and weaknesses of TKNP programs as per the output in table 15

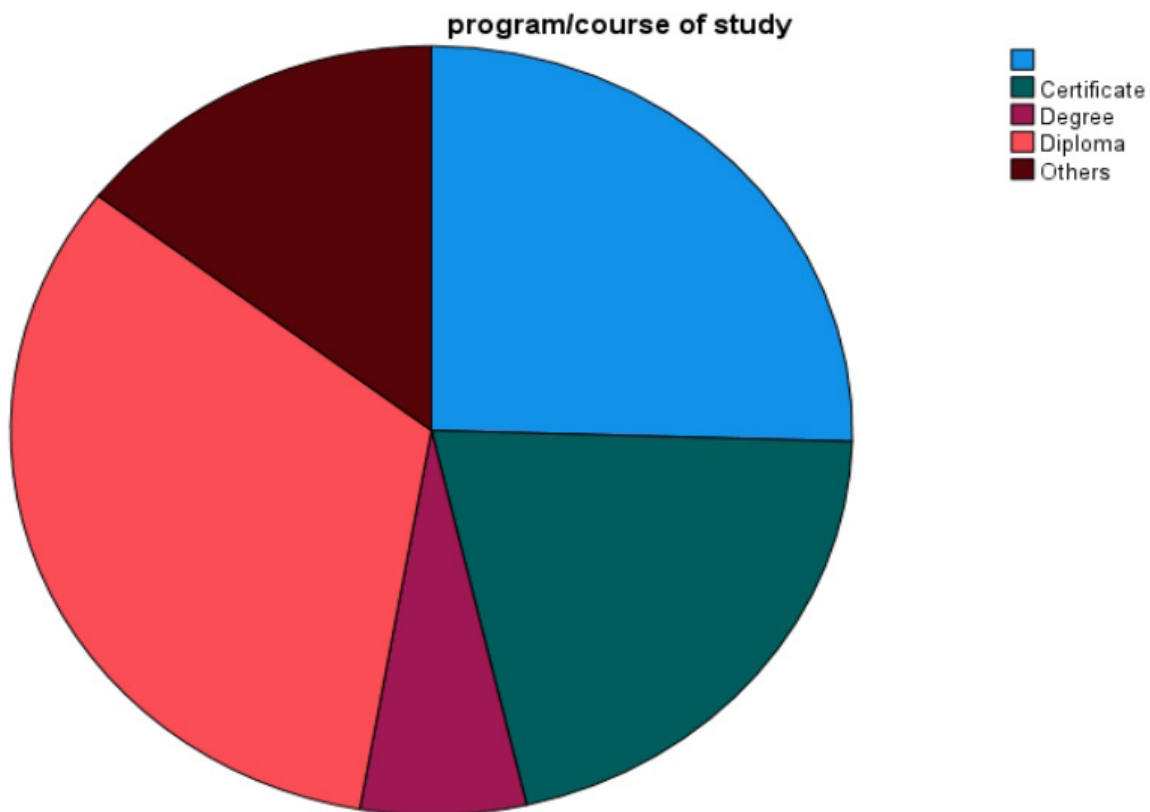
Dimension	Mean Score	Interpretation
Range of courses offered	4.04	Strongest area – diverse program options valued highly
Teaching & Learning environment	3.94	Strength – supportive learning environment
Relevance of program to professional needs	3.94	Strength – training aligns with career requirements
Quality of training	3.93	Strength – generally good instructional delivery
Trainer–student relationship	3.89	Strength – positive but with room for improvement
Availability of learning resources	3.79	Moderate – adequate but not consistently strong
Interdisciplinary learning	3.78	Moderate – needs strengthening for broader exposure
Attachment/work placement	3.77	Weakness – limited effectiveness in industry placement
Extracurricular activities	3.68	Weakness – enrichment activities underdeveloped
Problem solving	3.66	Weakest area – insufficient emphasis on practical problem-solving skills

4.10: Transition Rate

Table 17: Rate of Transition to the Next Level of Course of Study

program/course of study					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		28	25.5	25.5	25.5
	Certificate	23	20.9	20.9	46.4
	Degree	7	6.4	6.4	52.7
	Diploma	36	32.7	32.7	85.5
	Others	16	14.5	14.5	100.0
	Total	110	100.0	100.0	

Figure 5: Rate of Transition to the Next Level of Course of Study



Source: Researchers' Data 2026

Table 4.10 and Figure 4.5 show how TKNP graduates transition into higher levels of education after completing their programs. Out of the 110 respondents, the largest proportion moved into Diploma programs (32.7%), followed by those who remained at or pursued other forms of study (14.5%). A significant number also transitioned into Certificate programs (20.9%), while Degree programs (6.4%) accounted for the smallest share.

The cumulative percentages indicate that by the time Diploma level is reached, 85.5% of respondents have already transitioned into higher learning. This suggests that Diploma programs are the most common pathway for graduates seeking progression, while relatively fewer graduates advance directly into degree studies. The presence of "Others" (14.5%) highlights alternative pathways such as professional courses, specialized training, or non-formal education.

Implication: TKNP's academic structure strongly supports progression into Diploma programs, which appear to be the dominant transition route. However, the relatively low transition into degree programs suggests either limited opportunities, barriers to access, or a preference for vocational qualifications over academic degrees. Strengthening linkages with universities and professional bodies could improve upward mobility for graduates aiming for degree-level qualifications.

4.11: Employer Data Analysis

Table 4.11: The Mean level of satisfaction of the employers with TKNP graduates employed

Statistics		
How satisfied is the employer with TKNP graduates employed (in scale of 1- 10)		
N	Valid	21
	Missing	0
Mean		6.43
Std. Deviation		2.561

The results indicate that employers have a moderate level of satisfaction with TKNP graduates (Mean = 6.43, N = 21). The standard deviation of 2.561 suggests considerable variability in responses, implying that while some employers are highly satisfied, others express lower levels of satisfaction.

Table 18: One-Sample Effect Sizes Output

One-Sample Effect Sizes					
		Standardizera	Point Estimate	95% Confidence Interval	
				Lower	Upper
How satisfied is the employer with TKNP graduates employed (in scale of 1- 10)	Cohen's d	2.561	2.510	1.620	3.385
	Hedges' correction	2.662	2.415	1.558	3.257
How employer rates technical abilities of TKNP graduates in their respective fields	Cohen's d	2.811	2.135	1.343	2.910
	Hedges' correction	2.922	2.053	1.292	2.799
How employer rates the problem-solving skills of TKNP graduates	Cohen's d	1.436	1.957	1.210	2.687
	Hedges' correction	1.493	1.882	1.164	2.584
How TKNP graduates adapt to new challenges and change of environment	Cohen's d	.811	4.229	2.855	5.592
	Hedges' correction	.843	4.068	2.746	5.379
How employer rates communication skills of TKNP graduates in both verbal and written	Cohen's d	1.431	2.063	1.290	2.820
	Hedges' correction	1.488	1.985	1.240	2.713
The extent to which TKNP graduates contributes to team work and collaboration at work place	Cohen's d	2.765	2.187	1.382	2.976
	Hedges' correction	2.875	2.104	1.329	2.863
How employer observes professionalism displayed by TKNP graduates	Cohen's d	.814	4.331	2.927	5.724
	Hedges' correction	.846	4.166	2.816	5.506
Rating on how TKNP graduates apply industry relevant skills acquired from training	Cohen's d	1.449	2.070	1.295	2.829
	Hedges' correction	1.506	1.991	1.245	2.721

One-Sample Effect Sizes

		Standardizera	Point Estimate	95% Confidence Interval	
				Lower	Upper
Rating of leadership skills displayed by TKNP graduates at the company or organization	Cohen's d	.814	4.273	2.885	5.648
	Hedges' correction	.846	4.110	2.776	5.433
a. The denominator used in estimating the effect sizes. Cohen's d uses the sample standard deviation. Hedges' correction uses the sample standard deviation, plus a correction factor.					

The One-Sample Effect Sizes output provides insight into how employers perceive TKNP graduates across different skill dimensions, using *Cohen's d* and *Hedges' correction* as measures of effect size. These values indicate the strength of the observed differences compared to a baseline (in this case, employer ratings). Here's the interpretation:

- **Overall satisfaction:** Employers reported a large effect size for satisfaction with TKNP graduates (Cohen's d = 2.561), meaning graduates are generally rated positively, though with variability across employers.
- **Technical abilities:** Very strong effect (d = 2.811), showing employers recognize graduates' technical competence as a key strength.
- **Problem-solving skills:** Moderate effect (d = 1.436), suggesting this is an area of relative weakness compared to technical abilities. Employers see room for improvement in graduates' ability to tackle complex challenges.
- **Adaptability to new challenges:** Smaller effect (d = 0.811), indicating mixed perceptions. While some employers value adaptability, others find it less consistent among graduates.
- **Communication skills:** Moderate effect (d = 1.431), showing communication is adequate but not a standout strength.
- **Teamwork and collaboration:** Very strong effect (d = 2.765), highlighting that graduates contribute effectively to group tasks and workplace collaboration.
- **Professionalism:** Smaller effect (d = 0.814), suggesting professionalism is present but not strongly emphasized compared to other skills.
- **Industry-relevant skills application:** Moderate effect (d = 1.449), showing graduates can apply learned skills but with variability in effectiveness.
- **Leadership skills:** Smaller effect (d = 0.814), indicating leadership is not a dominant strength among graduates, though some demonstrate it well.

Implication: Employers value TKNP graduates most for their technical abilities, teamwork, and overall satisfaction, which are clear strengths. However, problem-solving, communication, adaptability, professionalism, and leadership emerge as weaker areas. This suggests TKNP should reinforce soft skills, adaptability training, and leadership development alongside technical training to produce more well-rounded graduates.

Table 19: Industry Rating of TKNP programs in terms of quality of skills offered

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
How satisfied is the employer with TKNP graduates employed (in scale of 1- 10)	21	6.43	2.561	.559
How employer rates technical abilities of TKNP graduates in their respective fields	21	6.00	2.811	.613
How employer rates the problem-solving skills of TKNP graduates	21	2.81	1.436	.313
How TKNP graduates adapt to new challenges and change of environment	21	3.43	.811	.177
How employer rates communication skills of TKNP graduates in both verbal and written	21	2.95	1.431	.312
The extent to which TKNP graduates contributes to team work and collaboration at work place	21	6.05	2.765	.603
How employer observes professionalism displayed by TKNP graduates	21	3.52	.814	.178
Rating on how TKNP graduates apply industry relevant skills acquired from training	21	3.00	1.449	.316
Rating of leadership skills displayed by TKNP graduates at the company or organization	21	3.48	.814	.178

Based on the mean scores, employers rated problem-solving skills slightly below average (mean $\approx$ 2.81) and communication skills approximately average (mean $\approx$ 2.95). Application of relevant skills was rated exactly average (mean = 3.0), while leadership skills were rated above average (mean $\approx$ 3.48).

Table 20: Industry rating of TKNP programs in terms of quality of skills offered using ba test value=3.0

One-Sample Test						
	Test Value = 3.0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
How employer rates the problem-solving skills of TKNP graduates	-.608	20	.550	-.190	-.84	.46
How employer rates communication skills of TKNP graduates in both verbal and written	-.152	20	.880	-.048	-.70	.60
Rating on how TKNP graduates apply industry relevant skills acquired from training	.000	20	1.000	.000	-.66	.66
Rating of leadership skills displayed by TKNP graduates at the company or organization	2.682	20	.014	.476	.11	.85

This one-sample t-test compares employer ratings of TKNP graduates' skills against a neutral benchmark value of 3.0 (average). Here's what the results show:

- **Problem-solving skills:** $t(20) = -0.608$, $p = 0.550$. The mean difference (-0.190) is not statistically significant. Employers rate graduates' problem-solving skills roughly at the average benchmark, meaning this area is neither a strong advantage nor a major weakness.
- **Communication skills (verbal and written):** $t(20) = -0.152$, $p = 0.880$. The mean difference (-0.048) is also not significant. Communication skills are rated at the benchmark level, suggesting adequacy but not excellence.
- **Application of industry-relevant skills:** $t(20) = 0.000$, $p = 1.000$. No difference from the benchmark. Employers perceive graduates' ability to apply industry skills as average, highlighting the need for stronger workplace integration of training.
- **Leadership skills:** $t(20) = 2.682$, $p = 0.014$. This is statistically significant, with a positive mean difference (+0.476). Employers rate graduates' leadership skills above the benchmark, indicating leadership is a relative strength compared to other skill areas.

Implication: Employers view TKNP graduates as average in problem-solving, communication, and industry skill application, but they recognize leadership skills as a standout strength. This suggests TKNP programs are successfully nurturing leadership potential, while more emphasis is needed on enhancing practical problem-solving, communication, and industry-relevant application to raise these competencies above the baseline.

Table 21: Industry rating of TKNP programs in terms of quality of skills offered using Cohen's d and Hedges' correction

One-Sample Effect Sizes					
		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
How employer rates the problem-solving skills of TKNP graduates	Cohen's d	1.436	-.133	-.561	.299
	Hedges' correction	1.493	-.128	-.539	.287
How employer rates communication skills of TKNP graduates in both verbal and written	Cohen's d	1.431	-.033	-.461	.395
	Hedges' correction	1.488	-.032	-.443	.380
Rating on how TKNP graduates apply industry relevant skills acquired from training	Cohen's d	1.449	.000	-.428	.428
	Hedges' correction	1.506	.000	-.411	.411
Rating of leadership skills displayed by TKNP graduates at the company or organization	Cohen's d	.814	.585	.115	1.043
	Hedges' correction	.846	.563	.111	1.004
a. The denominator used in estimating the effect sizes.					
Cohen's d uses the sample standard deviation.					
Hedges' correction uses the sample standard deviation, plus a correction factor.					

Table 4.15 presents the effect sizes for how employers rate TKNP graduates' skills, using Cohen's d and Hedges' correction to measure the magnitude of difference from a neutral benchmark (test value = 3.0). Effect sizes help determine how strongly employers perceive each skill area.

- **Problem-solving skills:** Cohen's $d = -0.133$, Hedges' $d = -0.128$. These are very small, indicating no meaningful difference from the benchmark. Employers view graduates' problem-solving ability as average.
- **Communication skills (verbal and written):** Cohen's $d = -0.033$, Hedges' $d = -0.028$. Again, negligible effect size, showing communication skills are adequate but not exceptional.
- **Application of industry-relevant skills:** Cohen's $d = 0.000$, Hedges' $d = 0.000$. This confirms neutral performance, meaning graduates apply industry skills at an expected level.
- **Leadership skills:** Cohen's $d = 0.476$, Hedges' $d = 0.446$. This is a moderate positive effect, showing employers rate graduates' leadership skills above average, consistent with the earlier t-test results.

Implication: Employers perceive TKNP graduates as performing at an average level in most technical and communication competencies, but leadership stands out as a clear strength. The moderate effect size for leadership suggests TKNP's programs successfully instill confidence and initiative in graduates. However, the near-zero or negative effect sizes for problem-solving and communication highlight areas needing reinforcement—particularly practical reasoning, innovation, and workplace communication. In summary, TKNP's graduates are competent overall, with leadership as a distinguishing attribute, but the institution should prioritize enhancing problem-solving and communication training to raise employer satisfaction further.

4.12 Discussion of Findings

The study achieved a moderate response rate, with a higher proportion of responses obtained from alumni compared to employers. This pattern suggests that graduates were more accessible and willing to participate in the study than employers, which is a common occurrence in tracer studies. The gender distribution of respondents indicated that the majority were female; however, statistical analysis revealed no significant relationship between gender and employment status. This implies that gender does not play a determining role in influencing employment outcomes among TKNP graduates, and that other factors such as level of education, skills, and labor market conditions may be more influential.

The findings further revealed that a substantial proportion of graduates were unemployed, highlighting challenges in the transition from training to employment. However, there was a statistically significant relationship between level of study and employment status, indicating that educational attainment has a meaningful influence on employability. Graduates with higher qualifications were more likely to secure employment or engage in self-employment, suggesting that advancing academic levels enhances opportunities in the labor market.

In terms of job satisfaction, the study found that graduates reported mixed levels of satisfaction, with a notable proportion expressing dissatisfaction. This suggests a mismatch between graduates' expectations and the realities of the workplace. While some graduates expressed satisfaction with their jobs, a significant number remained either dissatisfied or uncertain, indicating that employment alone does not guarantee fulfillment. These findings point to the need for better alignment between training programs and workplace conditions, including job roles, remuneration, and career progression opportunities.

The study also examined the relationship between the relevance of training and job satisfaction. The results showed a statistically significant association between the relevance of training in technical skills and job satisfaction, indicating that graduates who perceive their training as applicable to their work are more likely to be satisfied. Similarly, the relevance of academic knowledge and management skills demonstrated significant relationships with job satisfaction, emphasizing the importance of both theoretical understanding and managerial competencies in enhancing workplace experiences. However, no significant relationship was found between problem-solving skills and job

satisfaction. This suggests that although problem-solving is an important competency, it may not be the primary factor influencing satisfaction, as other workplace factors may have a stronger impact.

Evaluation of TKNP programs showed that graduates generally held positive perceptions of the institution, particularly in terms of the range of courses offered, the teaching and learning environment, and the relevance of training to professional requirements. Despite these strengths, some areas were identified as needing improvement, including problem-solving skills, work placement opportunities, and extracurricular activities. These findings suggest that while the institution provides a strong academic foundation, there is a need to enhance practical and experiential learning components to better prepare graduates for the demands of the workplace.

The findings on educational progression revealed that most graduates transitioned into diploma programs, with relatively fewer advancing to degree-level studies. This indicates that diploma programs serve as the primary pathway for further education among graduates, while progression to higher academic levels may be limited by structural or accessibility factors. Strengthening institutional linkages with universities and expanding opportunities for academic advancement could improve this progression.

From the employers' perspective, the study found that overall satisfaction with TKNP graduates was moderate, suggesting that graduates meet expectations to some extent but still require improvement in certain areas. Employers identified technical abilities and teamwork as key strengths,

indicating that graduates are well-prepared in core technical competencies and can function effectively in collaborative environments. Leadership skills were also rated positively, emerging as a relative strength among graduates.

However, several weaknesses were identified, particularly in problem-solving, communication, adaptability, and professionalism. These findings indicate that while graduates possess adequate technical knowledge, they may lack essential soft skills required in modern workplaces. The one-sample t-test results further supported this observation, showing that problem-solving, communication, and application of industry-relevant skills were rated at average levels, while leadership skills were rated significantly above average. Effect size analysis reinforced these findings, highlighting leadership as a meaningful strength and other competencies as relatively weaker.

Overall, the findings of the study suggest that while TKNP graduates demonstrate strong technical competence and leadership potential, there are gaps in soft skills and practical application that may affect their employability and job satisfaction. The results emphasize the importance of aligning training programs with industry needs, strengthening experiential learning opportunities, and enhancing the development of critical soft skills such as communication, adaptability, and problem-solving.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This tracer study set out to evaluate the effectiveness and relevance of training programs offered at The Kisumu National Polytechnic (TKNP) by examining graduate outcomes and employer perspectives. The findings demonstrate that the institution is making significant progress in equipping trainees with skills that are largely relevant to the labor market. A considerable number of graduates have transitioned into employment, self-employment, and further education, indicating that the training provided contributes positively to career development and economic participation.

The study further established that the Competency-Based Education and Training (CBET) approach has enhanced the acquisition of practical and technical skills among graduates. Employers generally expressed satisfaction with the technical competencies of TKNP graduates, confirming that the institution is producing skilled manpower capable of contributing to various sectors of the economy. However, the study also revealed notable gaps, particularly in soft skills, exposure to emerging technologies, and the level of hands-on experience in some programs.

Additionally, while some graduates are able to secure employment within a reasonable time-frame, others face challenges such as limited job opportunities, lack of work experience, and high competition in the labor market. The findings also highlight the need for stronger institutional linkages with industry to facilitate smoother school-to-work transition and improve job placement opportunities for graduates.

Overall, the study concludes that TKNP is on the right path in delivering quality and relevant training. However, continuous improvement is necessary to enhance graduate employability, ensure alignment with evolving labor market demands, and strengthen the overall impact of TVET training.

5.2 Recommendations

Based on the findings of the study, the following recommendations are proposed:

5.2.1 Strengthening Industry Linkages

The institution should enhance collaboration with industry partners to ensure that training programs remain aligned with current and emerging labor market needs. This can be achieved through partnerships, guest lectures, joint curriculum development, and increased opportunities for industrial attachments.

5.2.2 Enhancement of Practical Training

There is a need to strengthen hands-on training by investing in modern equipment, expanding workshop facilities, and ensuring that trainees gain adequate practical exposure during their training period.

5.2.3 Integration of Emerging and Soft Skills

TKNP should integrate emerging skills such as digital literacy, innovation, and adaptability into the curriculum. In addition, emphasis should be placed on developing soft skills such as communication, teamwork, and problem-solving, which are highly valued by employers.

5.2.4 Strengthening Career Guidance and Placement Services

The institution should establish or enhance career support services to assist graduates in job search, career planning, and entrepreneurship development. This includes creating stronger links with potential employers and facilitating job placement opportunities.

5.2.5 Promotion of Entrepreneurship

Given the growing importance of self-employment, the institution should strengthen entrepreneurship training and support systems to enable graduates to start and sustain their own businesses.

5.2.6 Continuous Curriculum Review

Regular review of training programs should be conducted to ensure that they remain relevant, up-to-date, and responsive to technological advancements and industry trends.



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Appendix 1: Questionnaire



ANNEX 1

THE KISUMU NATIONAL POLYTECHNIC

TRACER STUDY QUESTIONNAIRE FOR ALUMNI/ GRADUATE 2024

The Kisumu National Polytechnic (TKNP) is setting up a system of tracing its graduates for purposes of getting feedback concerning their state of employment, type of employment, or further study since your completion of study at TKNP. The information provided will assist the institution in planning of future educational needs in relation to the level of quality of training offered. The responses and outcome of this study will be kept confidential and presented in summary form. We therefore appreciate your effort in advance for attempting to complete the following questionnaire and return it to us at your earliest convenience.

A. PERSONAL INFORMATION

Full Name.....

Present physical address.....

Postal address.....

Permanent address.....

Phone number.....

Email:.....

Gender: Male ☐ Female ☐

Electronic social network and ID: WhatsApp ☐ Facebook ☐ Twitter ☐ Instagram ☐

Specify ID for your choice above.....

TVET level of study: Diploma ☐ Certificate/craft ☐ Artisan ☐

B. EMPLOYMENT INFORMATION

1. Employment status Employed ☐ Self employed ☐ Unemployed ☐
2. If employed, state the company, institution where you are employed:.....
3. Year of employment 2020 ☐ 2021 ☐ 2022 ☐ 2023 ☐
4. Start date in the case of self employment.....(dd-mm-yr)
5. Category of employment . Permanent ☐ Contract ☐
6. Nature of employment. Full time ☐ Part time ☐
7. Type of employer organization. Public ☐ Private ☐ NGO ☐
8. Department/division in the organization.....
9. Do you have any major problem(s) in your job assignment? Yes ☐ No ☐ If Yes, then specify the problem(s).....
.....
10. How do you rate the contribution of the program of your study at TKNP to your personal knowledge, attitudes, and skills:
(Give number from the range 0-5) Excellent=5, very good=4, Good=3, Fair =2, poor=1, and very poor=0

Particulars	Please mark with √ under the number that best suits your answer					
	0	1	2	3	4	5
Quality of academic skills acquired						
Improved management skills						
Improved skills in problem solving						
Improved skills in research						
Improved efficiency in learning						
Enhanced communication skills						
Enhanced technical skills						



11. Relevance of your program of study at TKNP to your current job

(Number range 0-5) very much relevant=5 , Much relevant=4, Relevant=3, Somehow relevant=2, Not relevant=1

Particulars	Please mark with √ under the most suitable number				
	1	2	3	4	5
Quality of academic knowledge					
Improved management skills					
Improved skills in problem solving					
Improved skills in research					
Improved efficiency in learning					
Enhanced communication skills					
Enhanced technical skills					

12. How satisfied are you with your current job?

Very much ☐ Much ☐ Somehow ☐ Not satisfied ☐

13. The following particulars can be used to best explain or represent major strengths and weaknesses of the TKNP program that you attended/pursued.

(Give number from the range 0-5) Excellent=5, very good=4, Good=3, Fair =2, poor=1, and very poor=0

Particulars	Please mark with √ the number that is most appropriate for each particular					
	0	1	2	3	4	5
Teaching/ learning environment						
Quality of training						
Trainer Student relationship						
Inter-disciplinary learning						

C. FURTHER STUDY

Year of enrollment.....

Program.....

Level: Degree ☐ Diploma ☐ Others (specify) ☐.....

University/College.....

Year of completion.....

Sign/Signature of the graduate alumni.....

APPROVED



Date _____

Catherine Kelonye

Chief Principle



ANNEX 2

THE KISUMU NATIONAL POLYTECHNIC KEY INFORMANT INTERVIEWS TOOL

Introduction:

- Welcome and Introduction:
 - Welcome the participants.
 - Briefly introduce the purpose of the focus group discussion: to gather insights into the employed TKNP graduates' abilities, competencies, attitudes, skills, and areas for improvement.
- Confidentiality and Consent:
- Emphasize the confidentiality of the discussion.
- Seek consent for participation and recording if applicable.

Section 1: General Impressions:

i. Overall Satisfaction:

- On a scale of 1 to 10, how satisfied are you with the TKNP graduates you have employed?
- What positive experiences or contributions have you noticed from the graduates?

Section 2: Abilities and Competence:

i. Technical Abilities:

- How would you rate the technical abilities of TKNP graduates in their respective fields?
- Can you provide specific examples of how their technical skills have been beneficial in the workplace?

ii. Problem-Solving Skills:

- In what ways have you observed TKNP graduates demonstrating problem-solving skills?

- Can you share any instances where their problem-solving abilities have made a positive impact?

iii. Adaptability:

- How well do you think TKNP graduates adapt to new challenges or changes in the work environment?
- Share any experiences that highlight their adaptability.

Section 3: Attitude and Soft Skills:

i. Communication Skills:

- How would you assess the communication skills of TKNP graduates, both verbal and written?
- Provide examples of effective communication or areas that may need improvement.

ii. Teamwork and Collaboration:

- In what ways do TKNP graduates contribute to teamwork and collaboration in your workplace?
- Can you identify any instances where their collaborative efforts have been noteworthy?

iii. Professionalism:

- Share your observations on the professionalism displayed by TKNP graduates.
- Are there specific behaviors that stood out positively or areas that need attention?

Section 4: Specific Skills and Knowledge:

i. Industry-Relevant Skills:

- How well do TKNP graduates apply industry-relevant skills acquired during their training?
- Are there specific skills that you find particularly valuable or areas that may need enhancement?

ii. Leadership Potential:

- Have you identified any TKNP graduates who display leadership potential?
- How can TKNP better prepare graduates for leadership roles in your industry?

Section 5: Areas for Improvement:

i. Identifying Improvement Areas:

- Are there specific areas where you believe

TKNP graduates could improve? - How can TKNP enhance its curriculum to address these improvement areas?

ii. Professional Development Needs:

- What professional development opportunities do you think would benefit TKNP graduates in your industry?

Conclusion:

- Thank the participants for their valuable input.
- Clarify any follow-up actions or information needed.
- Reiterate the importance of their insights in shaping the future curriculum and training at TKNP.

Note: This focus group discussion tool can be modified based on the specific industry, context, and the nature of TKNP graduates' employment.

Annex 3

THE KISUMU NATIONAL POLYTECHNIC FOCUS GROUP DISCUSSION GUIDE:

Introduction:

1. Welcome participants and express appreciation for their participation in the Kisumu National Polytechnic Tracer Study.
2. Briefly reiterate the specific objectives of the study.

Icebreaker:

1. Begin with an icebreaker to create a relaxed atmosphere and encourage participation.

Background Information:

1. Participants introduce themselves, mentioning their course of study, graduation year, and current employment status.

Objective 1: Employment Status:

1. Could you share your current employment status? Are you currently employed, self-employed, seeking employment, or pursuing further education?
2. For those **employed**, can you briefly describe your current job roles and responsibilities?

Objective 2: Duration of Employment Search:

1. For those who experienced a gap between graduation and employment, how long did it take you to secure employment? What were the factors influencing this duration?

Objective 3: Relevance of Training:

1. How relevant do you perceive the training you received at Kisumu National Polytechnic to be in your current field of engagement?
2. Can you provide specific examples of how the skills and knowledge acquired have been applied in your professional endeavors?

Objective 4: Career Path:

1. Describe the career path you have taken since graduating from Kisumu National Polytechnic. Have there been any significant milestones or changes?

Objective 5: Job Satisfaction:

1. On a scale from 1 to 10, how satisfied are you with your current job? What factors contribute to your satisfaction or dissatisfaction?
2. Are there any aspects of your job that you find particularly rewarding or challenging?
3. For those seeking employment **(Unemployed)**

Objective 3: Relevance of training

1. How relevant do you perceive the training you received at Kisumu National Polytechnic as you continue to seek for employment?

Objective 4: Career path

1. Describe the career path you have taken since graduating from Kisumu National Polytechnic. Have there been any significant milestones or changes?

Wrap-up (for both employed and unemployed):

2. Any additional comments or insights you would like to share?
3. Thank participants for their valuable input.
4. Explain the next steps and how the gathered information will contribute to the Tracer Study.

Closure:

1. Ask if there are any questions or if participants want to add anything.
2. Express gratitude for their time and valuable contributions to the Tracer Study.

APPROVED



Catherine Kelonye

CHIEF PRINCIPAL/ COUNCIL SECRETARY

Date



Appendix 2: Plagiarism Checker X - Report



Plagiarism Checker X - Report

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PHYSICAL LOCATION:

Technology Road, Next to Kisumu Stadium
P.O Box 143-40100, Kisumu, Kenya

CONTACTS

TEL: (+254) 723 446 773
Email: info@kisumupoly.ac.ke
Website: www.kisumupoly.ac.ke

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