



THE MERU NATIONAL
POLYTECHNIC

Technology for Innovation & Development



EASTRIP TRACER STUDY REPORT
FINDINGS AND RECOMMENDATIONS
FOR
THE MERU NATIONAL POLYTECHNIC
BUILDING AND CIVIL ENGINEERING DEPARTMENT
2021 GRADUATES

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INTRODUCTION

FINDINGS FOR BUILDING CIVIL ENGINEERING PROGRAM

The data and information extracted from the Online System has been compiled and processed to form the basis of the analysis and findings. The nature of data obtained from this study is both quantitative and qualitative. The quantitative data results, compiled from an online self-administered questionnaires, have been entered into a database and analyzed using Excel. Percentage (%), mean (μ) and standard deviation (SD) has been applied and the data cross-tabulated. Qualitative data has been coded into themes around the key variables of investigation. A code has been placed next to a word or group of words that mentioned these key variables of investigation. Output from the analysis is presented in tables, graphs and verbatim qualitative statements. This chapter, presents the findings for the Building and Civil Engineering programs graduates (see 3.1), the findings for the employers of the Building and Civil Engineering programs graduates(see 3.2) the findings for the Building and Civil Engineering programs instructor (see 3.3) and Comments and Suggestions from graduates, employers and program instructor (See 3.4).

FINDINGS

GRADUATES QUESTIONNAIRE

3.1 ANNEX 1: GRADUATES FINDINGS - BUILDING AND CIVIL ENGINEERING PROGRAM

Out of the 411 graduates Building and Civil Engineering programs graduates, a total of 107 (Female 22, Male 85) completed the online questionnaire. All the traced Building and Civil Engineering programs graduates from MNP are based in Kenya. The data obtained from the completion of the online questionnaires by Building and Civil Engineering programs graduates is presented in section 3.1.1 through to section 3.1.5

3.1.1 DEMOGRAPHIC INFORMATION

This section highlights the nature and characteristics of Building and Civil Engineering programs graduates, their “*Gender*” (see 3.1.1.1), “*Marital Status*” (see 3.1.1.2), “*Age*” (see 3.1.1.3), “*County of Residence*” (see 3.1.1.4), “*Course studied*” (see 3.1.1.5), the graduates’ situation in the “*First six months after leaving MNP*” (see 3.1.1.6), the graduates’ situation in the “*Currently after leaving MNP*” (see 3.1.1.7), the graduates’ situation comparison between “*Course pursued and Current job status after leaving MNP*” (see 3.1.1.8), the graduates’ situation comparison between “*First six months after leaving MNP and Currently after leaving MNP*” (see 3.1.1.9) and the graduates’ “*Reason for unemployment if any*” (see 3.1.1.10),

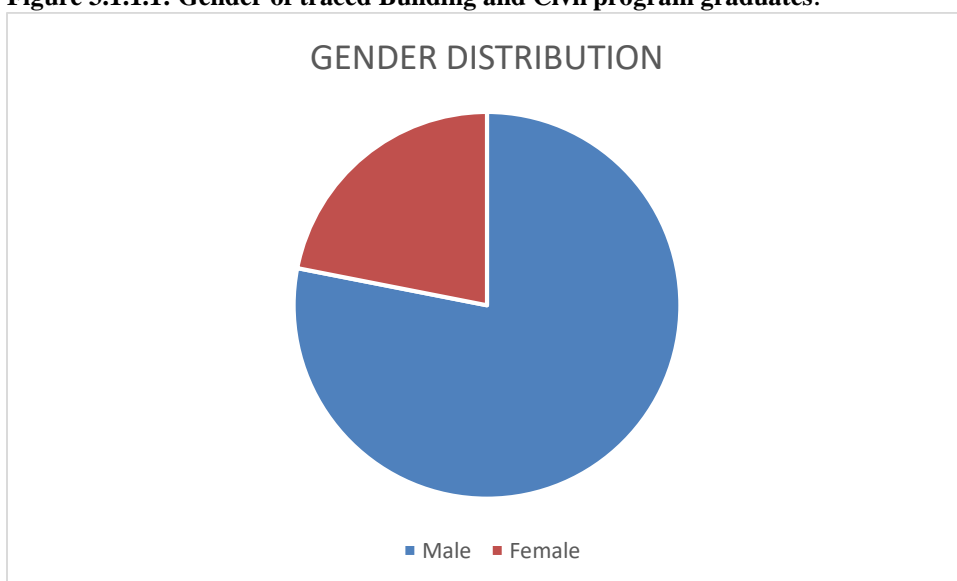
3.1.1.1 THE GENDER OF TRACED BUILDING AND CIVIL ENGINEERING PROGRAM GRADUATES

Table 3.1.1.1 summarizes the “**Gender**” distribution of the sample of “*Male*” and “*Female*” Building and Civil Engineering programs graduates

Table 3.1.1.1	Building and Civil Engineering GRADUATES BY GENDER		
	Male	Female	Total
Frequency	57	16	73
Percent	78.08%	21.92%	100%

The findings have revealed that, 57 (78.08%) of the traced Building and Civil Engineering programs graduates graduates are “*Male*” while 16 (21.92 %) are “*Female*”

Figure 3.1.1.1: Gender of traced Building and Civil program graduates.



Source: Collected from field data of MNP tracer study, 2023

3.1.1.2 THE MARITAL STATUS OF TRACED

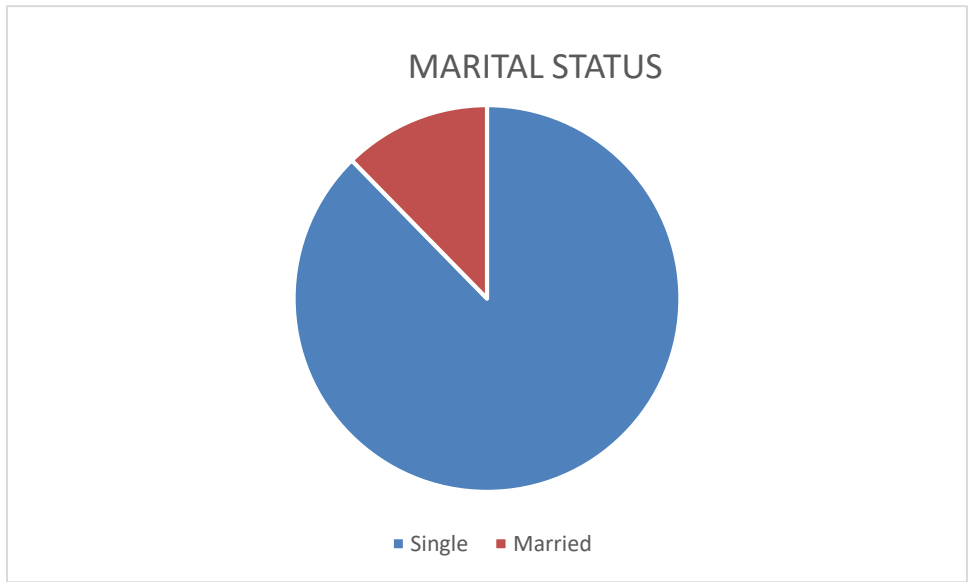
Table 3.1.1.2 summarizes the “**Marital Status**” of the traced Building and Civil Engineering program graduates. The survey has been able to trace 73 Building Civil Engineering program graduates.

Table 3.1.1.2	MARITAL STATUS OF Building and Civil Engineering GRADUATES		
	Single	Married	Total
Frequency	64	9	73
Percent	87.67%	12.33%	100%

Source: Collected from field data of MNP tracer study, 2023

The findings have revealed that, 64 (87.67 %) of the traced Building and Civil Engineering program graduates are “*Single*”, 9(12.33 %) are “*Married*”.

Figure 3.1.1.2: Marital status of traced Building and Civil Engineering graduates



Source: Collected from field data of MNP tracer study, 2023

3.1.1.3 GRADUATES AGE

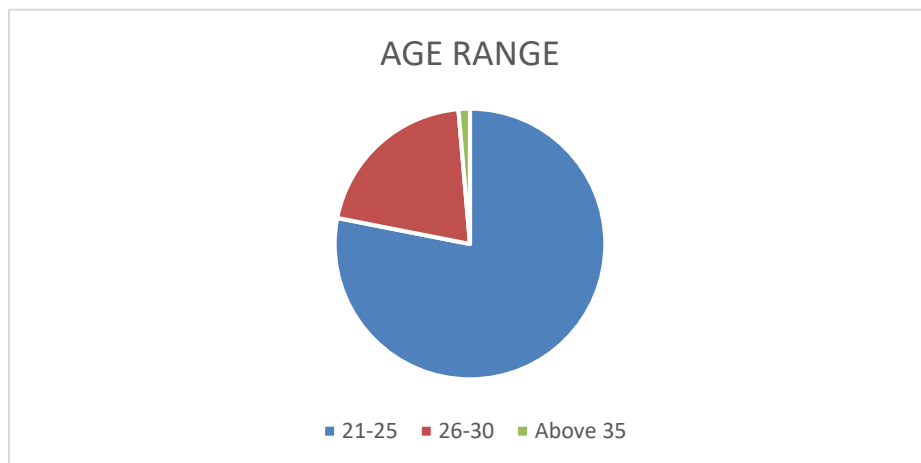
Table 3.1.1.3 summarizes the “**Age Bands**” of traced Building and Civil Engineering program graduates from MNP.

Table 3.1.1.3	GRADUATES BY AGE	
AGE GROUP	GENDER TOTAL	
	COUNT	%
21-25	57	78.08%
26-30	15	20.55%
Above 35	1	1.37%
TOTAL	73	100%

Source: Collected from field data of MNP tracer study, 2023

The findings have revealed that, 57(78.08%) are “21-25 years”.. 15(20.55 %) are “Between 26 and 30 years” 1 (1.37%) are “Above 35 years”.

Figure 3.1.1.3: Graduates Age brackets



Source: Collected from field data of MNP tracer study, 2023

3.1.1.4 COUNTY OF RESIDENCE

Table 3.1.1.4 summarizes the situation of the traced Building and Civil Engineering program graduates in the “County of Residence.”

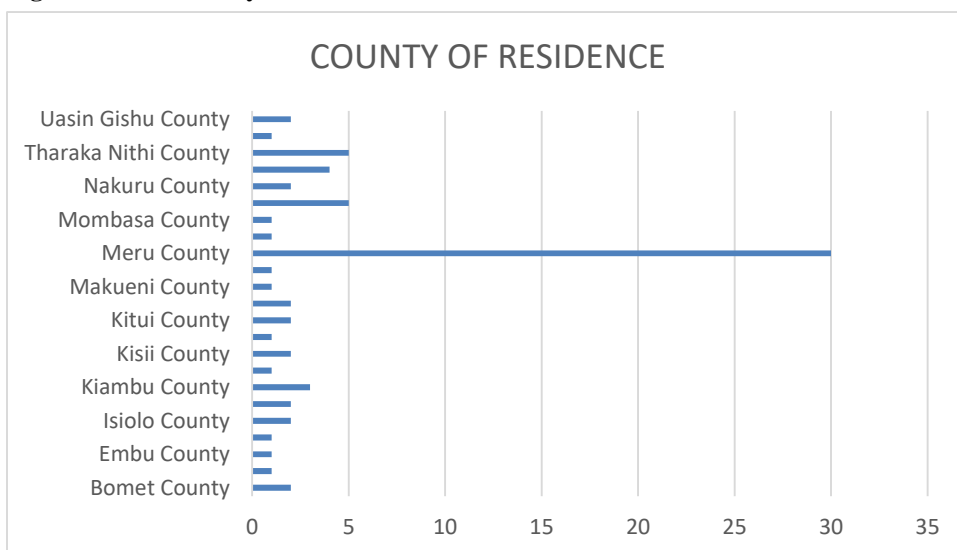
Table 3.1.1.4	COUNTY OF RESIDENCE	
	FACTORS	GENDER TOTAL
		COUNT
Bomet County	2	2.74%
Busia County	1	1.37%
Embu County	1	1.37%
Homa Bay County	1	1.37%
Isiolo County	2	2.74%
Kajiado County	2	2.74%
Kiambu County	3	4.11%
Kirinyaga County	1	1.37%
Kisii County	2	2.74%
Kisumu County	1	1.37%
Kitui County	2	2.74%
Laikipia County	2	2.74%
Makueni County	1	1.37%

Factors	COUNTY OF RESIDENCE	
	GENDER TOTAL	
	COUNT	%
Marsabit County	1	1.37%
Meru County	30	41.10%
Migori County	1	1.37%
Mombasa County	1	1.37%
Nairobi County	5	6.85%
Nakuru County	2	2.74%
Nyeri County	4	5.48%
Tharaka Nithi County	5	6.85%
Trans Nzoia County	1	1.37%
Uasin Gishu County	2	2.74%
TOTAL	107	100%

Source: Collected from field data of MNP tracer study, 2023

The county with the largest number of graduates was Meru with a total 30 graduates, followed by Tharaka Nithi and Nairobi with 5 graduates each. It indicates that Bomet County had 2(2.27%), Busia County had 1(1.37%), Embu County had 1(1.37%), Homa Bay County had 1(1.37%), Isiolo County had 2(2.27%), Kiajiado County had 2(2.27%), Kiambu County had 2(4.11%), Kirinyaga County had 1(1.37%), Kisii County had 2(2.74%), Kisumu County had 1(1.37%), Kitui County had 2(2.74%), Laikipia County had 2(2.74%), Makueni County had 1(1.37%), Marsabit County had 1(1.37%), Meru County had 30(41.10%), Migori County had 1(1.37%), Mombasa County had 1(1.37%), Nairobi County had 5(6.87%), Nakuru County had 2(2.74%), Nyeri had 4(5.48%), Tharaka Nithi had 5(6.85%), Trans Nzoia County had 1(1.37%), and Uasin Gishu County had 2(2.74%).

Figure 3.1.1.4: County of residence



Source: Collected from field data of MNP tracer study, 2023

3.1.1.5 COURSE STUDIED

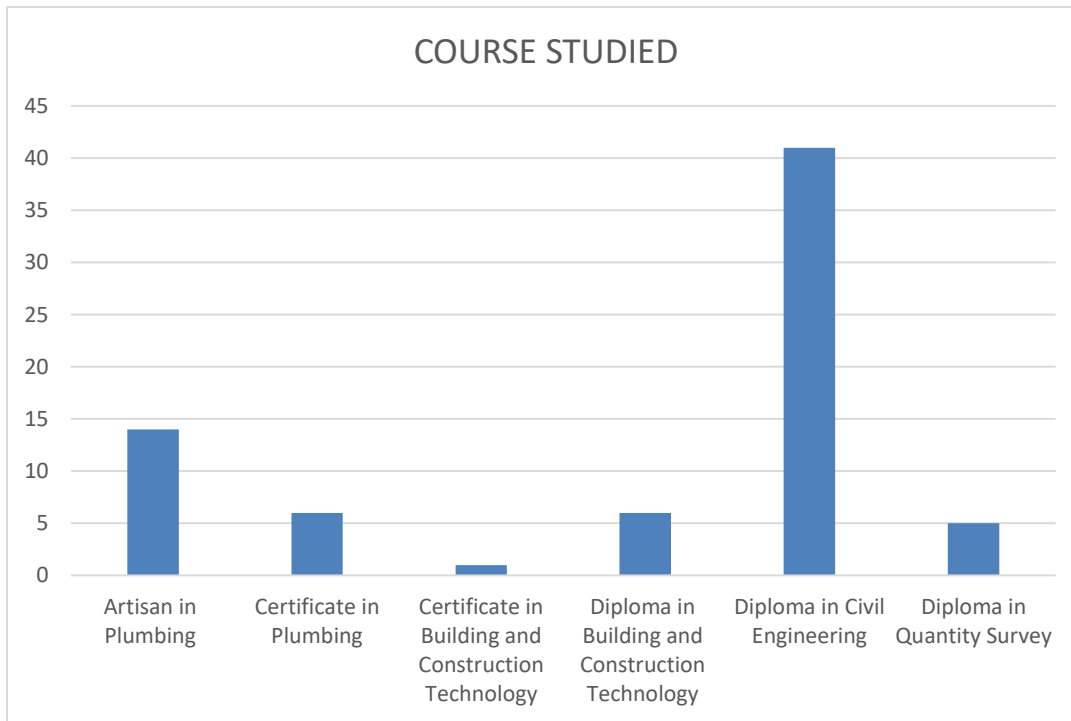
Table 3.1.1.5 summarizes the situation of the traced Building and Civil Engineering program graduates in the “Course Studied.”

Course	GENDER TOTAL	
	COUNT	%
	Artisan in Plumbing	14
Certificate in Plumbing	6	8.22%
Certificate in Building and Construction Technology	1	1.37%
Diploma in Building and Construction Technology	6	8.22%
Diploma in Civil Engineering	41	56.16%
Diploma in Quantity Survey	5	6.85%
Total	107	100%

Source: Collected from field data of MNP tracer study, 2023

The findings have revealed that, 14(19.18%) are “Artisan in Plumbing” graduates. 6(8.22%) are “Certificate in Plumbing” graduates, 1(1.37%) are “Certificate in Building and Construction Technology” graduates , 6(8.22%) are “Diploma in Building and Construction Technology” graduates and 41(56.16%) are “Diploma in Civil Engineering” graduates while “Diploma in Quantity Survey” were 5(6.85%).

Figure 3.1.1.5: Course Studied



Source: Collected from field data of MNP tracer study, 2023

3.1.1.6 FIRST SIX MONTHS AFTER LEAVING MNP

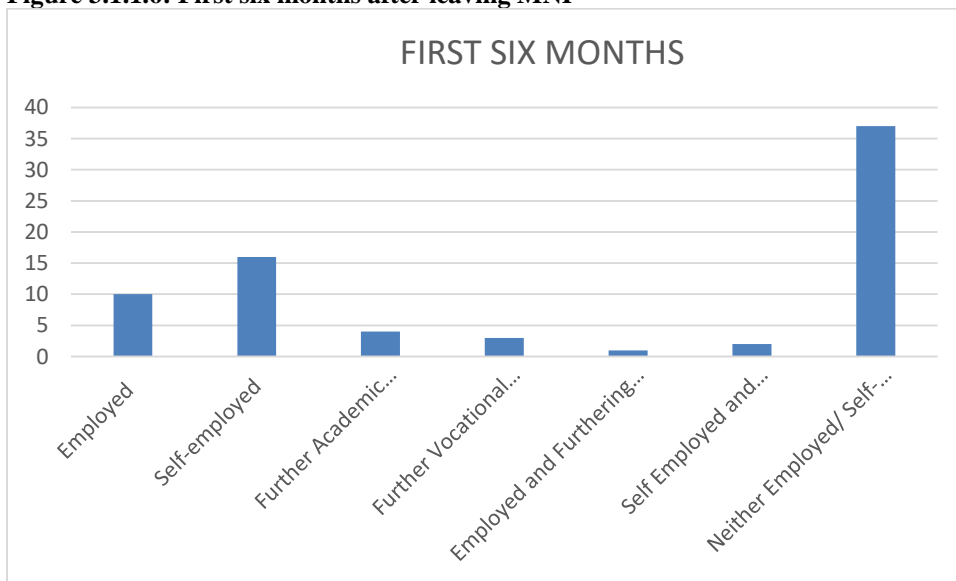
Table 3.1.1.6 summarizes the situation of the traced Building and Civil Engineering program graduates in the “**First six months after leaving MNP.**”

Table 3.1.1.6	SITUATION IN THE FIRST SIX MONTHS AFTER LEAVING MNP	
	Employment Status	GENDER
		TOTAL
	COUNT	%
Employed	10	13.70%
Self-employed	16	21.92%
Further Academic Education (higher education, for example degree)	4	5.48%
Further Vocational Education Training (such as, certificate, Craft, higher diploma)	3	4.11%
Employed and Furthering Academic Education (higher education, for example degree)	1	1.37%
Self Employed and Furthering Vocational Education Training (such as, certificate, Craft, higher diploma)	2	2.74%
Neither Employed/ Self-employed nor Studying	37	50.68%
Total	73	100%

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.1.6 shows the employment status of the MNP graduates of 2023, 6 months after graduation. It indicates that the employed were 10(13.70%), those Employed and Furthering Academic Education (higher education, for example degree) were 4(5.48%), those in Further Vocational Education Training (such as, certificate, Craft, higher diploma) were 3(4.11%), those who were Neither Employed/ Self-employed nor Studying were 37(50.68%), and those who were Employed and Furthering Vocational Education Training (such as, certificate, Craft, higher diploma) 2(2.74%) while those self-employed were 16(21.92%).

Figure 3.1.1.6: First six months after leaving MNP



Source: Collected from field data of MNP tracer study, 2023

3.1.1.6.1 FIRST SIX MONTHS AFTER LEAVING MNP

Table 3.1.1.6.1 summarizes the situation of the traced Building and Civil Engineering program graduates in the “*First six months after leaving MNP*.”

Table 3.1.1.6.1		FIRST SIX MONTHS AFTER LEAVING MNP VS COURSE DONE IN MNP							
		CURRENT SITUATION							
	Course Done	Employed	Self-employed	Employed and Furthering Studies (higher education, for example degree)	Self-employed and Furthering Studies (such as, certificate, Craft, higher diploma)	Furthering Studies (higher education, for example degree)	Furthering Studies (such as, certificate, Craft, higher diploma)	Neither Employed, self-employed nor Studying	TOTAL
Name of Course	Artisan in Plumbing	0	5	0	1	2	1	6	0
	Craft Certificate in Plumbing	0	0	0	0	0	0	1	0
	Craft Certificate in Building and Construction Technology	1	1	0	0	1	2	0	1
	Diploma in Building and Construction Technology	2	0	0	0	0	0	4	2
	Diploma in Civil Engineering	6	8	1	1	1	0	24	6
	Diploma in Quantity Survey	1	2	0	0	0	0	4	1
TOTAL		10	16	1	2	4	3	37	73

Table 3.1.1.6.1 summarizes the state of the MNP graduates 6 months after completing their course. It is clear that 10(13.7%) were employed. This was further categorized in terms of courses – Certificate in Building Technology 1(1.37%), Diploma in Building Technology 2(2.74%), Diploma in Civil Engineering 6(8.22%) and Diploma in Quantity Survey 1(1.37%).

16(21.92%) were self-employed. This was further categorized in terms of courses, Artisan in Plumbing 5(6.85%), Certificate in Building and Construction Technology 1(1.37%), Diploma in Civil Engineering 8(10.96%), while Diploma in Quantity Survey had 2(2.74%).

4(5.48%) had proceeded for higher education (e.g. degree). This was further categorized in terms of courses, Artisan in Plumbing 2(2.74%), Certificate in Building and Construction Technology 1(1.37%) while Diploma in Civil Engineering 1(1.37%)

3(4.11%) were further their training (e.g craft certificate, diploma or higher diploma). This was further categorized in terms of courses, Artisan in Plumbing 2(2.27%), Craft Certificate in Construction Technology 1(1.37%) and Diploma in Civil Engineering 1(1.37%).

1(1.37%) were employed and furthering their Academic education(higher education, for example degree). This was further categorized in terms of courses Diploma in Building and Civil Engineering 1(1.37%).

2(2.47%) were self-employed and furthering their Vocational Education training. This was further categorized in terms of courses, Craft, higher diploma) 2(2.74%): who had done courses in Craft Certificate in Building Construction 1(1.37%), while Diploma in Civil Engineering had 1(1.37%).

37(50.68%) were neither employed/self-employed nor studying. This was further categorized in terms of courses, Artisan in Plumbing 6(8.22%), Certificate in Plumbing 1(1.37%), Diploma in Building and Construction Technology 4(5.48%), Diploma in Building and Civil Engineering 24(32.88%) and Diploma in Quantity Survey 2(2.74%).

The information is further illustrated by the diagram below.

3.1.1.7 CURRENT STATUS AFTER LEAVING MNP

Table 3.1.1.7 summarizes the situation of the traced Building and Civil Engineering program graduates in the “**Current status after leaving MNP.**”

Employment Status	CURRENT SITUATION AFTER LEAVING MNP	
	GENDER TOTAL	
	COUNT	%
Employed	12	16.44
Employed and Furthering Studies	3	4.11
Furthering Studies	2	2.74
Neither Employed, self-employed nor Studying	37	50.68
Self-employed with employees and Furthering Studies	3	4.11
Self-employed without employees	10	13.70
Furthering Studies (Immediately after previous course, Never exposed to Employment)	6	8.22
Total	73	100%

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.1.6 summarizes the current employment status of the MNP graduates. Those employed were 12(16.44%): Craft Certificate in Building Construction Technology 2(2.74%), Diploma in Building and Construction Technology 2(2.74%), Diploma in Civil Engineering 7(9.59%) while Diploma in Quantity Survey had 1(1.37%).

Those who are employed and furthering studies are 3(4.11%): Diploma in Civil Engineering 3(4.11%).

Those who are neither employed, self-employed nor studying were 37(50.68%): which means that Diploma in Civil Engineering had 25(34.25%), Artisan in Plumbing 5(6.85%, Certificate in Plumbing 1(1.37%), Diploma in Building and Construction Technology 4(5.48%) and Diploma in Quantity Survey 2(2.74%).

Those who are self-employed with employees and furthering studies were 3(4.11%): with courses in Diploma in Civil Engineering 2(2.74%) and Artisan in Plumbing 1(1.37%). Those who are self-employed without employees are 10(13.70%): courses of Artisan in Plumbing 5(6.85%), Diploma in Civil Engineering 3(4.11%) and Diploma in Survey 2(2.74%). Those furthering studies(immediately after previous course, never exposed to employment) were 6(8.22%): where Artisan in Plumbing had 2(2.74%), Craft Certificate in Building and Construction Technology 3(4.11%), and Diploma in Civil Engineerin 1(1.37%).

3.1.1.8 CURRENT STATUS AFTER LEAVING MNP COMPARED TO COURSE DONE

Table 3.1.1.8 summarizes the situation of the traced Building and Civil Engineering program graduates in the “**Current status after leaving MNP compared to course taken.**” .

Table 3.1.1.8		CURRENT SITUATION VS COURSE DONE IN MNP								
		CURRENT SITUATION								
Name of Course	Course Done	Employed	Self-employed with employees	Self-employed without employees	Employed and Furthering Studies	Self-employed with employees and Furthering Studies	Furthering Studies (Immediately after previous course, Never exposed to Employment)	Furthering Studies	Neither Employed, self-employed nor Studying	TOTAL
Name of Course	Artisan in Plumbing	0	0	5	0	1	0	1	5	17
	Craft Certificate in Plumbing	0	0	0	0	0	0	0	1	1
	Craft Certificate in Building and Construction Technology	2	0	0	0	0	0	1	0	3
	Diploma in Building and Construction Technology	2	0	0	0	0	0	0	4	6
	Diploma in Civil Engineering	7	0	3	3	2	0	0	25	40
	Diploma in Quantity Survey	1	0	2	0	0	0	0	2	5
TOTAL		12	0	10	3	3	0	2	37	73

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.1.8 illustrates the names of courses studied by the MNP graduates in relation to their employment status. Those who were employed are 12(16.44%): Craft Certificate in Building Construction Technology 2(2.74%), Diploma in Building and Construction Technology 2(2.74%), Diploma in Civil Engineering 7(9.59%) while Diploma in Quantity Survey had 1(1.37%).

Those who are employed and furthering studies are 3(4.11%): Diploma in Civil Engineering 3(4.11%)

Those who are neither employed, self-employed nor studying were 37(50.68%): which means that Diploma in Civil Engineering had 25(34.25%), Artisan in Plumbing 5(6.85%), Certificate in Plumbing 1(1.37%), Diploma in Building and Construction Technology 4(5.48%) and Diploma in Quantity Survey 2(2.74%).–

Those who are self-employed with employees and furthering studies were 3(4.11%): with courses in Diploma in Civil Engineering 2(2.74%) and Artisan in Plumbing 1(1.37%). Those who are self-employed without employees are 10(13.70%): courses of Artisan in Plumbing 5(6.85%), Diploma in Civil Engineering 3(4.11%) and Diploma in Survey 2(2.74%). Those furthering studies(immediately after previous course, never exposed to employment) were 6(8.22%): where Artisan in Plumbing had 2(2.74%), Craft Certificate in Building and Construction Technology 3(4.11%), and Diploma in Civil Engineerin 1(1.37%).

3.1.1.11 REASONS FOR UNEMPLOYMENT IF ANY.

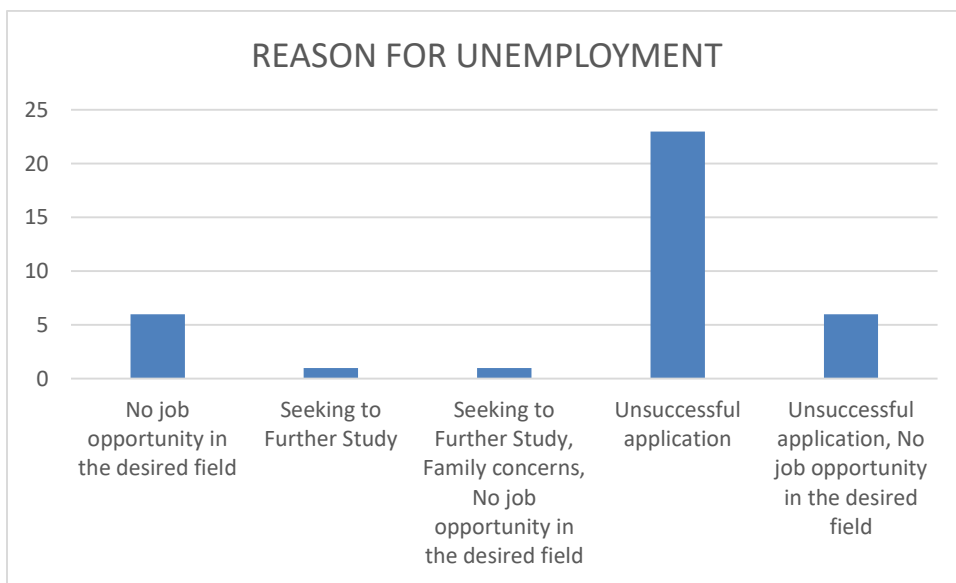
Table 3.1.1.11 summarizes the situation of the traced Building and Civil Engineering program graduates in the “Reasons for unemployment if any.”

Reasons	REASONS FOR UNEMPLOYMENT IF ANY	
	GENDER TOTAL	
	COUNT	%
No job opportunity in the desired field	6	16.22
Seeking to Further Study	1	2.70
Seeking to Further Study, Family concerns, No job opportunity in the desired field	1	2.70
Unsuccessful application	23	62.16
Unsuccessful application, No job opportunity in the desired field	6	16.22
Total	38	100.0%

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.1.11 shows the reasons for unemployment given by the MNP graduates of 2021. Those who stated that they had no opportunity in the desired field were 6(16.22%), those seeking for further studies 1(2.70%), those Seeking to Further Study, Family concerns, No job opportunity in the desired field 1(2.70%), those who had made unsuccessful application 23(62.16%) while those Unsuccessful application, No job opportunity in the desired field were 6(16.22%).

Figure 3.1.1.11: Reason for Unemployment



Source: Collected from field data of MNP tracer study, 2023

3.1.2 EMPLOYMENT INFORMATION

This section highlights the employment experience of Building and Civil Engineering programs graduates, their “*Terms of employment*” (see 3.1.2.1), “*Sector of employment*” (see 3.1.2.2), “*First job after completion*” (see 3.1.2.3), “*Duration taken to get First job after completion*” (see 3.1.2.4), the graduates’ “*Salary Range*” (see 3.1.2.5), the graduates’ situation in the “*How you found your job*” (see 3.1.2.6)) and the graduates’ situation in the “*Challenges faced in relation to internship*” (see 3.1.2.7)

3.1.2.1 THE EMPLOYMENT TERMS OF TRACED

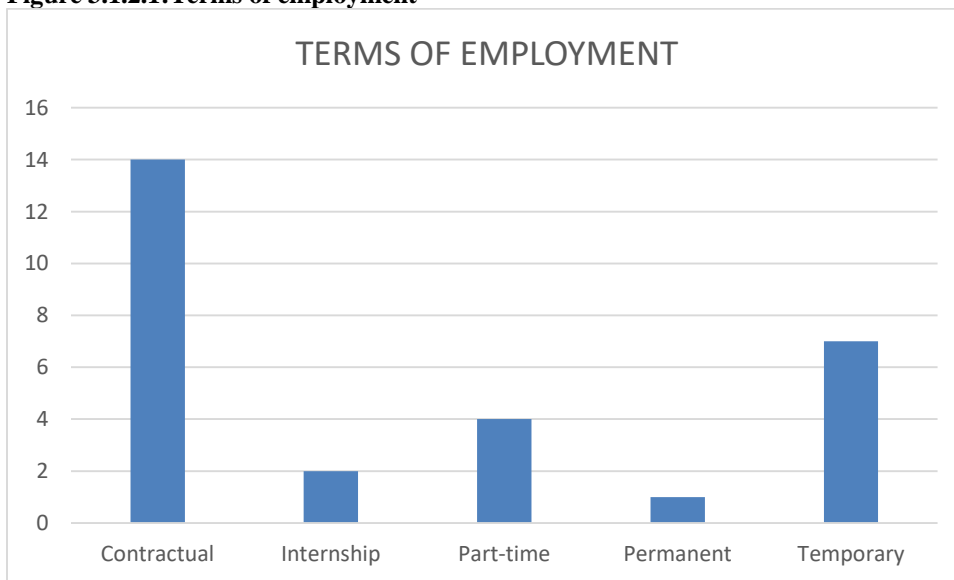
Table 3.1.2.1 summarizes the “*Terms of employment*” of Building and Civil Engineering programs graduates.

Table 3.1.2.1	TERMS OF EMPLOYEMENT	
	Reasons	GENDER
		TOTAL
	COUNT	%
Contractual	14	50
Internship	2	7.14
Part-time	4	14.29
Permanent	1	3.57
Temporary	7	25
Total	28	100%

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.1 shows the terms of employment for the MNP graduates of the year 2021. It indicates that 14(50%) were on contractual terms, 2(7.14%) on internship, 4(14.29%) on part-time, 1(3.57%) on permanent and 7(25%) were on temporary basis.

Figure 3.1.2.1: Terms of employment



Source: Collected from field data of MNP tracer study, 2023

3.1.2.2 THE SECTOR OF EMPLOYMENT OF TRACED

Table 3.1.2.2 summarizes the “**Sector of employment**” of Building and Civil Engineering programs graduates

Table 3.1.1.8		EMPLOYEMENT SECTOR VS COURSE DONE IN MNP							
		CURRENT SITUATION							
	Course Done	Agriculture, forestry and fishing	Construction	Fashion and design	Manufacturing	Music	Water supply; sewerage, waste management and remediation activities	Wholesale and retail trade, repair of motor vehicles and motorcycles	TOTAL
Name of Course	Artisan in Plumbing	0	2	0	0	0	3	0	5
	Craft Certificate in Plumbing	0	0	0	0	0	0	0	0
	Craft Certificate in Building and Construction Technology	0	2	0	0	1	0	0	3
	Diploma in Building and Construction Technology	0	1	0	1	0	0	0	2
	Diploma in Civil Engineering	2	9	1	1	0	1	2	16
	Diploma in Quantity Survey	0	2	0	0	0	0	0	2
TOTAL		2	16	1	2	1	4	2	28

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.2 illustrates the type of industry sector the MNP graduates are based. Those working in Agriculture, Forestry and Mining are 2(7.14%) and have done Diploma in Civil Engineering who are 2(7.14%). Those working in the sector of Construction are 16(57.14%): with the Craft Certificate in Construction Technology being 2(7.14%), Diploma in Building Construction Technology 1(3.57%), Diploma in Civil Engineering being 9(32.14%), Diploma in Quantity Survey being 2(7.14%) while Artisan in Plumbing are 2(7.14%).

Those working in the sector of Fashion and Design are 1(3.57%) and have done Diploma in Civil Engineering 1(3.57%). Those working Manufacturing are 2(7.14%) and have done Diploma in building and Construction Technology 1(3.57%) and Diploma in Civil Engineering 1(3.57%). Those working in Music Industry are 1(2.57%) and have done Craft Certificate in Building and Construction Technology 1(3.57%).

Those in the sector of Water supply, Sewerage, Waste Management and Remediation activities are 4(14.29%), having done Artisan in Plumbing 3(10.71%) and Diploma in Civil Engineering 1(3.57%). Those in Whole and Retail Trade, Repair of Motor Vehicles and Motorcycles are 2(7.14%) having done a Diploma in civil Engineering 2(7.14%).

3.1.2.3 THE FIRST JOB SINCE COMPLETED STUDIES

Table 3.1.2.3 summarizes the “**First job after completion**” of Building and Civil Engineering programs graduates.

Table 3.1.2.3	FIRST JOB AFTER COMPLETION	
	COUNT	TOTAL %
No	8	28.57
Yes	20	71.43
Total	28	100.00

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.3 above shows the MNP graduates of 2021 and availability of first job after studies. It indicates that 8(28.57%) did not get jobs while 20(71.43%) got jobs.

3.1.2.4 THE DURATION TAKEN TO GET YOUR FIRST JOB AFTER COMPLETION

Table 3.1.2.4 summarizes the “**Duration taken to get First job after completion**” of Building and Civil Engineering programs graduates.

Table 3.1.2.4	Duration taken to get First job after completion	
	Duration	TOTAL COUNT %
0-3 months	7	29.17
10-12 months	3	12.50
4-6 months	7	29.17
7-9 months	5	20.83
more than 1 year	2	8.33
Total	24	100

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.4 above shows the duration taken by the MNP graduates before they got the first job after studies. Those who took from 0-3 months were 7(29.17%), 10-12 months were 3(12.50%), from 4-6 months were 7(29.17%), 7-9 months were 5(20.83%) while those who took more than 1 year were 2(8.33%).

3.1.2.5 THE SALARY RANGE

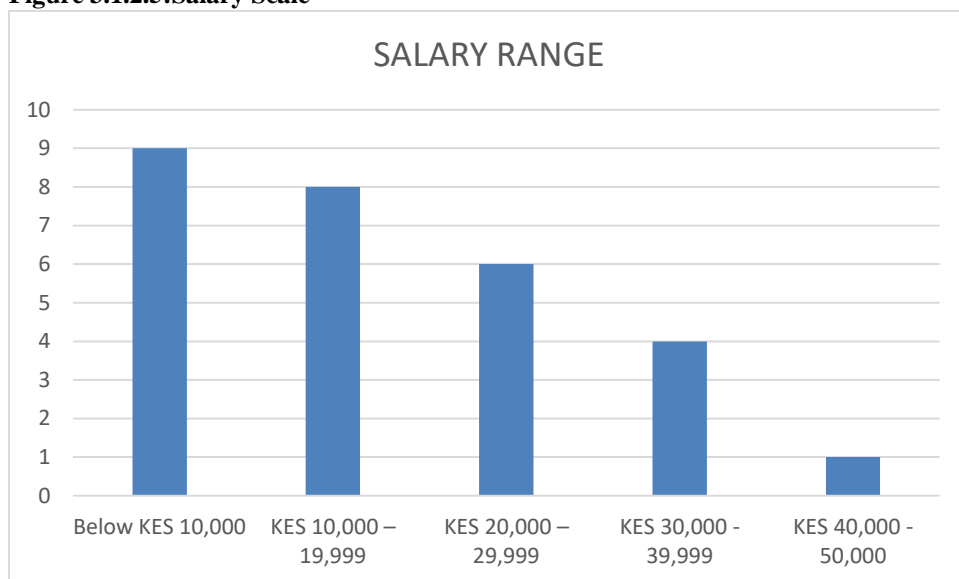
Table 3.1.2.5 summarizes the “**Salary Range**” of Building and Civil Engineering programs graduates.

Table 3.1.2.5	Salary Range	
	Range	Count Percent
Below KES 10,000	9	32.14
KES 10,000 – 19,999	8	28.57
KES 20,000 – 29,999	6	21.43
KES 30,000 - 39,999	4	14.29
KES 40,000 - 50,000	1	3.57
Total		

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.5 illustrates the salary scale for the MNP graduates of 2021. Those who earn below KES 10,000 were 9(32.14%), KES 10,000 – 19999 were 8(28.57%), and KES 20,000 – 29,999 were 6 (21.43%) KES 30,000 – 39,999 were 4(14.29%), while those with KES 40,000 – 50,000 was 1(3.57%).

Figure 3.1.2.5:Salary Scale



Source: Collected from field data of MNP tracer study, 2023

3.1.2.6 HOW YOU FOUND YOUR JOB

Table 3.1.2.6 summarizes the “**How you found your job**” of Building and Civil Engineering programs graduates.

Range	Count	Percent
Individual Job Seeking (e.g. Walk in, Letters)	12	42.86
Industry Linkages during training (e.g. apprenticeship, On the Job Training, Internship)	2	7.14
Internet (e.g. government websites, company websites)	3	10.71
Referral/School Endorsement	1	3.57
Relatives, friends or/and colleagues	9	32.14
Newspaper /Television/Radio	1	3.57
TOTAL	28	100.00

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.6 illustrates how the MNP graduates of 2021 found their jobs. Those who got through individual seeking(e.g. walk in, letters) were 12(42.86%), through industry linkages during training(e.g apprenticeship, on-job training, internship) were 2(7.14%), through internet (eg.g. government websites, company websites) were 3(10.71%), through Referral School Endorsement 1(3.57%), through relative, friends or/and colleagues were 9(32.14%) while through the newspaper/television/radio was 1(3.57%).

3.1.2.7 CHALLENGES FACED IN RELATION TO INTERNSHIP

Table 3.1.2.7 summarizes the “Challenges faced in relation to internship” of Building and Civil Engineering programs graduates.

Table 3.1.2.7 Challenges Faced in Relation to Internship		
Faced Challenges.	Count	Percentage
No	21	75
Yes, please specify	7	25
Total	28	100

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.2.7 illustrates whether the MNP graduates of 2021 got challenges during in their internship program. Those who said no were 21(75%) while those who said yes were 7(25%). The following were the challenges:-

1. Lacks of enough practical skills,
2. Lack of internship,
3. Theories taught are never put into practice
4. Lack of confidence.

3.1.3 RELEVANCE OF TRAINING

This section highlights the Training Relevance of Building and Civil Engineering programs graduates, their “*Relation between MNP training and work*” (see 3.1.3.1), “*Level of relevance of your study*” (see 3.1.3.2), “*Reasons for no Relation*” (see 3.1.3.3), “*Skills that helped graduates perform at work*” (see 3.1.1.4), “*If a graduate underwent further training*” (see 3.1.3.5), the graduates’ situation in the “*If yes for further training, what was the duration*” (see 3.1.3.6) and the graduates’ situation in the “*Interest in furthering study*” (see 3.1.3.7), the graduates’ situation comparison between “*Reasons for not furthering studies*” (see 3.1.3.8

3.1.3.1 THE MNP TRAINING AND RELATION TO WORK

Table 3.1.3.1 summarizes the “*Relation between MNP training and work*” of Building and Civil Engineering programs graduates.

Table 3.1.3.1		RELATION BETWEEN MNP TRAINING AND CURRENT WORK	
COURSE	Course training at MNP is related to Work		
	No	Total	
No	8	25	
Yes	24	75	
Total	32	100	

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.3.1 illustrates the relationship between the course studied and the work done by the MNP graduates of 2021. Those who said that the course was related to the work were 24(75%) while those who said these are not interrelated were 8(75%).

3.1.3.2 LEVEL OF RELEVANCE OF STUDY

Table 3.1.3.2 summarizes the “*Level of relevance of your study*” of Building and Civil Engineering programs graduates.

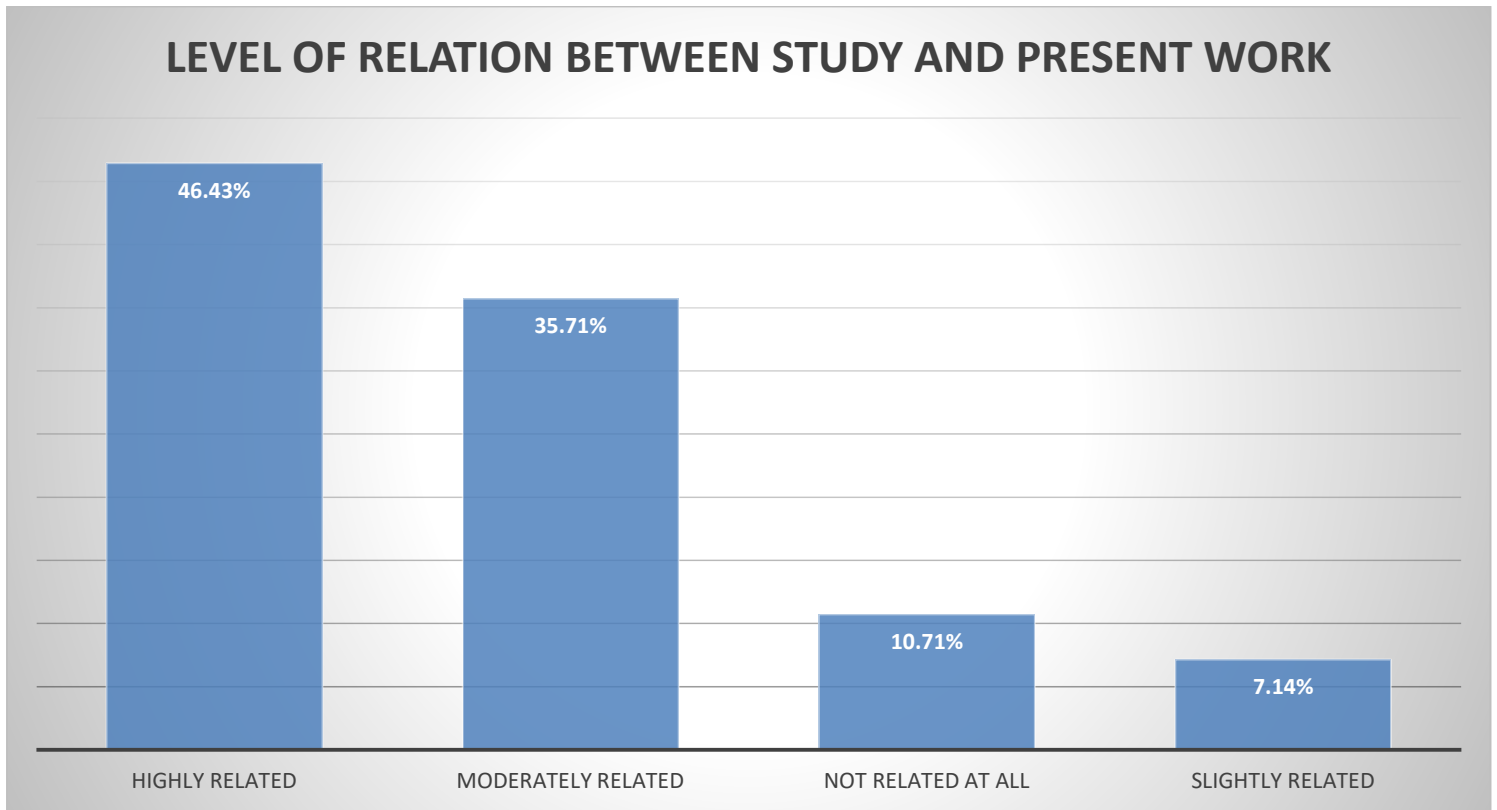
Table 3.1.3.2		Level of Relevance of your Study	
Level of Relevance	Count	Percent	
Highly Related	13	46.43%	
Moderately Related	10	35.71%	
Slightly Related	3	10.71%	
Not Related	0	0%	
Total	28	100.00%	

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.3.2 illustrate the relevant of study at the Meru National Polytechnic to the present work of the graduates.. 86.28% of the graduates felt that the present work was related to study while 10.71% felt that the study was not related to the present work at all.

This is further illustrated by the chart below.

Figure 3.1.3.2: Terms of employment



Source: Collected from field data of MNP tracer study, 2023

3.1.3.3 REASONS FOR NO RELATION BETWEEN WORK AND STUDY

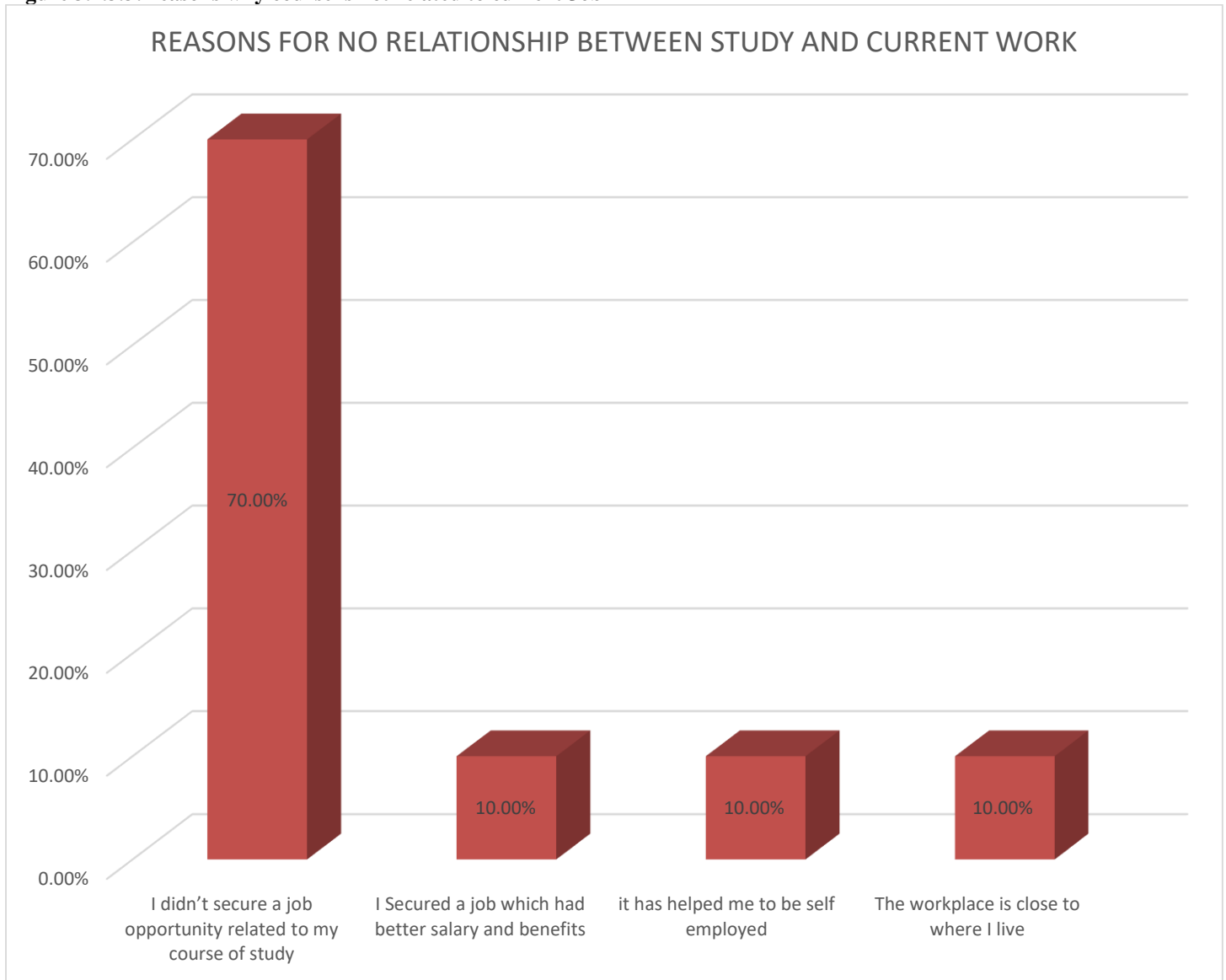
Table 3.1.3.3 summarizes the “Reasons for no Relation” of Building and Civil Engineering programs graduates.

Level of Relevance	Count	Percent
I didn't secure a job opportunity related to my course of study	7	70.00%
I Secured a job which had better salary and benefits	1	10.00%
it has helped me to be self employed	1	10.00%
The workplace is close to where I live	1	10.00%
Total	10	100.00%

Source: Collected from field data of MNP tracer study, 2023

The table 3.1.3.3 analyses the reasons as to why graduates are engaged to work that is not related to study. 70% of the graduates highlighted that they didn't get job opportunities related to their study while 10% of the respondents stated that they had secured a job with better salary, were self-employed and the remaining 10% stated that they worked close to where they lived. The bar graph below illustrates this further.

Figure 3.1.3.3: Reasons why course is not related to current Job



Source: Collected from field data of MNP tracer study, 2023

3.1.3.4 SKILLS THAT HELPED THE GRADUATES

Table 3.1.3.4 summarizes the “*Skills that helped graduates perform at work*” of Building and Civil Engineering programs graduates. Participants allowed to pick more than one option.

Table 3.1.3.4	EXTENT OF SATISFACTION WITH ACQUIRED KNOWLEDGE AND SKILLS		
	GENDER		
	FEMALE COUNT	MALE COUNT	TOTAL COUNT
Knowledge (theoretical and practical related to my specialization)	2	14	16
Practical, job-related skills (for example, use of tools, equipment and machinery)	1	12	13

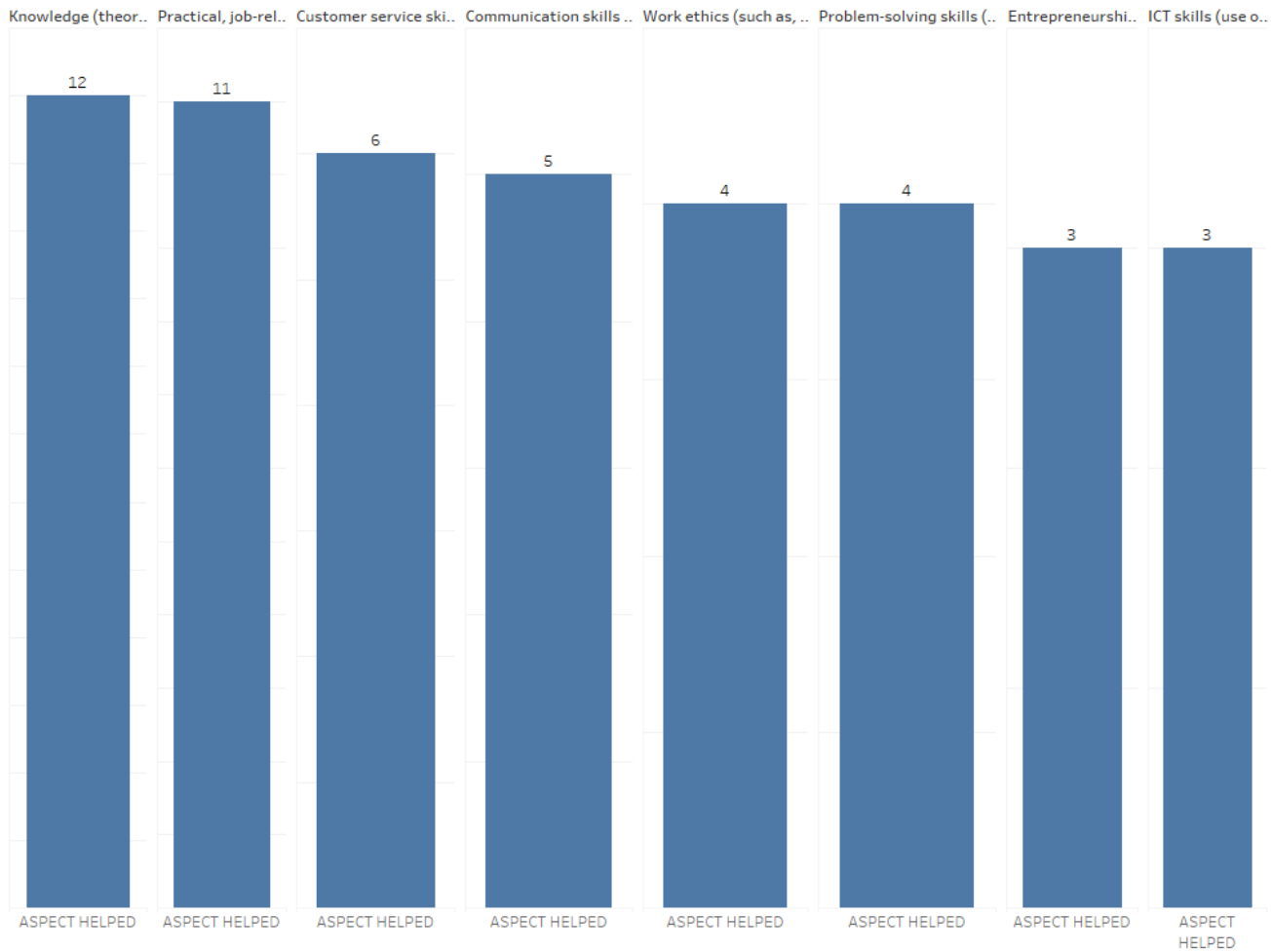
Table 3.1.3.4	EXTENT OF SATISFACTION WITH ACQUIRED KNOWLEDGE AND SKILLS		
	GENDER		
	FEMALE COUNT	MALE COUNT	TOTAL COUNT
Communication skills (spoken and written)	0	7	7
ICT skills (use of computers)	0	4	4
Problem-solving skills (being able to analyze a problem and find creative solutions)	0	4	4
Work ethics (such as, attendance at work, reliability, punctuality, team work)	0	4	4
Entrepreneurship skills (such as, market research, business planning, financial management, leading others)	0	5	5
Customer service skills (such as, personal presentation, being polite, understanding a customer's needs and being able to meet these)	0	7	7
TOTAL	3	57	60

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.3.4 illustrates the area of study that helped graduates perform in their previous/present job. In terms of the knowledge(theoretical and practical related to their specialization, there were more males than females, in connection to practical, job related skills (e.g. tolls, equipment and machinery), there were more males than females.

When it comes to communication skills (spoken and written), there were more males than females, in terms of ICT skills (use of computers), there were more males than females. In the problem-solving skills (being able to analyze a problem and find creative solutions), there were more males than females. In regard to the Work ethics (such as, attendance at work, reliability, punctuality, team work), there were more males than females. In connection to the Entrepreneurship skills (such as, market research, business planning, financial management, leading others), males were more than females. With Customer service skills (such as, personal presentation, being polite, understanding a customer's needs and being able to meet these), males were more than females.

Figure 3.1.3.3: Skills that helped you perform at work



Source: Collected from field data of MNP tracer study, 2023

3.1.3.5 ANY FURTHER TRAINING AFTER GRADUATION

Table 3.1.3.5 summarizes “If a graduate underwent further training” of Building and Civil Engineering programs graduates.

Table 3.1.3.5 UNDERWENT FURTHER TRAINING		
Went for Further Training	Count	Percentage
Yes		
No		
Total		

Source: Collected from field data of MNP tracer study, 2023

6(6%) of the graduates indicated to have undergone further training since they graduated. This means that 94% of the graduates did not undergo further training after graduation.

3.1.3.6 DURATION OF FURTHER TRAINING ATTENDED

Table 3.1.3.6 summarizes “*If yes for further training, what was the duration*” of Building and Civil Engineering programs graduates.

Table 3.1.3.6	Duration of Training	
What was the duration of Training	Count	Percentage
Long Term	4	50.00%
Short Term	4	50.00%
Total	8	100.00%

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.3.6 shows that 50% of the graduates had taken long-term courses while the remaining had taken short-term.

3.1.3.7 INTEREST IN FURTHERING STUDY

Table 3.1.3.7 summarizes “*Interest in furthering study*” of Building and Civil Engineering programs graduates.

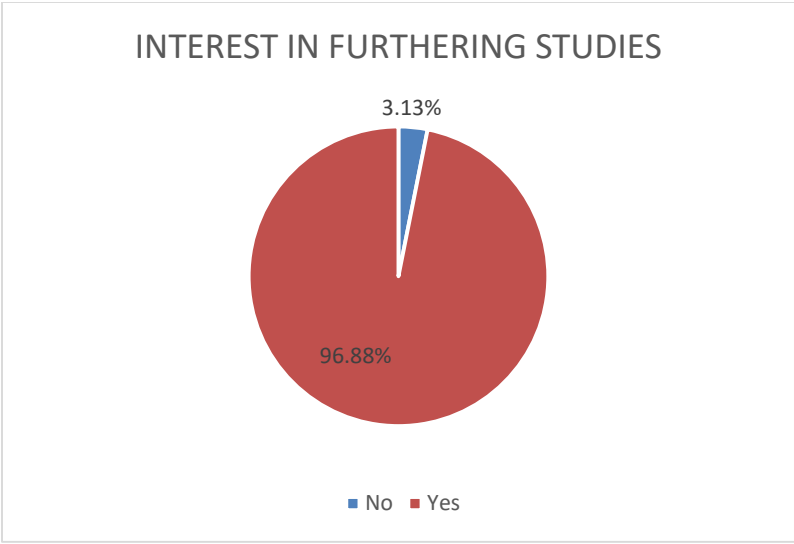
Table 3.1.3.7	INTEREST IN FURTHERING STUDIES	
Interested in furthering study	Count	Percentage
Yes	1	3.13%
No	31	96.88%
Total	32	100.00%

Source: Collected from field data of MNP tracer study, 2023

The table above shows that 96.88% were interested in furthering their studies, while 3.13% were not interested in furthering their studies.

This is further illustrated in the figure below.

Figure 3.1.3.7: Ways graduates found job



Source: Collected from field data of MNP tracer study, 2023

3.1.3.8 REASONS FOR LACK OF INTEREST IN FURTHERING STUDIES

Table 3.1.3.8 summarizes “Reasons for not furthering studies” of Building and Civil Engineering programs graduates.

Table 3.1.3.8 REASONS FOR NOT FURTHERING STUDIES		
Reasons	Count	Percentage
No money to pay for training	4	100%
Total	4	100%

Source: Collected from field data of MNP tracer study, 2023

The above table shows the reasons as to why graduated did not further their studies. All the graduates cited lack of finances as the reason for not pursuing further training.

3.1.4 JOB SATISFACTION

This section highlights the Job Satisfaction of Building and Civil Engineering programs graduates, their “Satisfied with current job” (see 3.1.4.1), “Satisfaction aspects of the job” (see 3.1.4.2),

3.1.4.1 SATISFACTION WITH THE CURRENT JOB

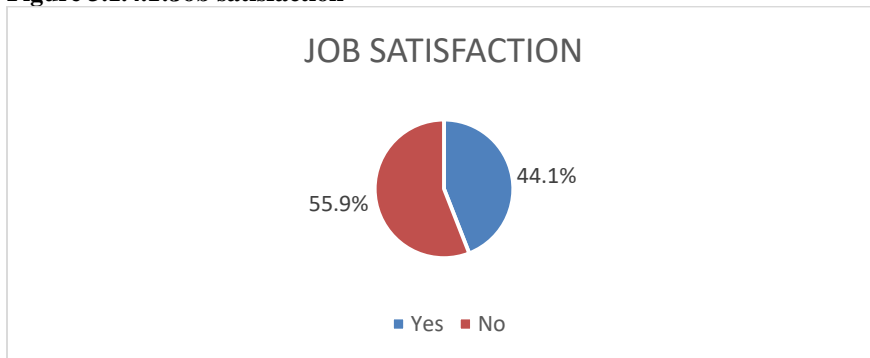
Table 3.1.4.1 summarizes the “Satisfied with current job” of Building and Civil Engineering programs graduates.

Table 3.1.4.1		SATISFIED WITH CURRENT JOB	
Satisfied with current job?	Count	Percentage	
Yes	26	44.1%	
No	33	55.9%	
Total	59	100.0%	

Source: Collected from field data of MNP tracer study, 2023

Out of the graduates that indicated to having a present job, 26(44.1%) indicated that they are satisfied with their present job while 33 (55.9%) indicated that they are not satisfied with their present job. This makes the highest percent of employed graduates not satisfied with their jobs.

Figure 3.1.4.1: Job satisfaction



Source: Collected from field data of MNP tracer study, 2023

3.1.4.2 SATISFACTION OF ASPECTS AT YOU CURRENT JOB

Using average mean score, the scale has been interpreted as shown below:

Table 3.1.4.2.1		INTERPRETATION OF THE AVERAGE MEAN SCORE				
Range	1 – 1.49	1.5 – 2.49	2.5 – 3.49	3.5 – 4.49	4.5 – 5.0	
Verbalisation	Not at all Satisfied	Somewhat not Satisfied	Neither Satisfied Nor Dissatisfied	Satisfied	Very Satisfied	
Colour Code						

Table 3.1.4.2.2 captures the Measurement (mean score, μ) of satisfaction along eleven (11)

“5.0” indicates the highest level or “Very satisfied.” “1.0” shows the lowest level or “Not at all satisfied.”

Table 3.1.4.2.2		SATISFACTION OF ASPECTS AT YOUR JOB					
ASPECTS	Degree of Satisfaction					n	Mean
	Very Unsatisfied 1	Unsatisfied 2	Neutral 3	Satisfied 4	Very Satisfied 5		
Interesting work tasks	4	5	8	12	4	33	3.21
Female	1	1	0	1	0	3	2.33
Male	3	4	8	11	4	30	3.30

Table 3.1.4.2.2	SATISFACTION OF ASPECTS AT YOUR JOB						
ASPECTS	Degree of Satisfaction						
Being able to work with some independence	4	6	8	11	4	33	3.15
Female	1	1	0	0	1	3	2.67
Male	3	5	9	10	4	30	3.33
Clear and regulated work tasks	4	5	9	10	5	33	3.21
Female	2	0	0	0	1	3	2.33
Male	2	5	9	10	4	30	3.30
Possibilities for applying what you learned when studying	3	7	7	11	5	33	3.24
Female	1	1	0	0	1	3	2.67
Male	2	6	7	11	4	30	3.30
Job Security	9	5	8	7	4	33	2.76
Female	2	0	0	1	0	3	2.00
Male	7	5	8	6	4	30	2.83
Social status and recognition	5	8	7	9	4	33	2.97
Female	1	1	0	1	0	3	2.33
Male	4	7	7	8	4	30	3.03
Possibilities to put your own ideas into practice	3	6	4	13	7	33	3.45
Female	0	2	0	0	1	3	3.00
Male	3	4	4	13	6	30	3.50
Income and benefits	5	7	8	11	2	33	2.94
Female	2	0	0	1	0	3	2.00
Male	3	7	8	10	2	30	3.03
Good social climate / work setting	6	6	8	11	2	33	2.91
Female	1	1	1	0	0	3	2.00
Male	5	5	7	11	2	30	3.00
Good career advancement prospects	4	8	8	10	3	33	3.00
Female	1	1	1	0	0	3	2.00

Table 3.1.4.2.2	SATISFACTION OF ASPECTS AT YOUR JOB						
ASPECTS	Degree of Satisfaction						
Male	3	7	7	10	3	30	3.10
Being able to coordinate/supervise work	3	8	6	11	5	33	3.21
Female	1	1	1	0	0	3	2.00
Male	2	7	5	11	5	30	3.33

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.4.2.2 shows the level of satisfaction to the MNP graduates of 2021 in relation to present/previous work vs gender.

In regard to the **interesting work tasks**, the males were more satisfied than the females. In connection to **ability to work with some independence**; males were more satisfied than females. When it comes to **clear and regulated work tasks**; males seemed to be more satisfied than the females. In connection to **possibilities for applying what you learned when studying**; males scored the highest in satisfaction than females. When it comes to **Job Security**, the males were more satisfied than females.

In relation to **Social Status and Recognition**; males were more satisfied than females. When it comes to **putting their ideas into Practice**; males were more satisfied than females. In connection to **Good Social Climate/Work setting**; males were more satisfied than females. In terms of **Good Career Advancement Prospects**; males were more satisfied than females. When it comes to **ability to co-ordinate and supervise work**; males were more satisfied than females.

3.1.5 RELATION BETWEEN STUDY AND EMPLOYMENT

This section highlights the relation between study and employment of Building and Civil Engineering programs graduates, their “*Relationship Between Study And Employment*” (see 3.1.5.1),

3.1.5.1 RELATIONSHIP BETWEEN STUDY AND EMPLOYMENT

Table 3.1.5.1 summarizes the “*Relationship Between Study And Employment*” of Building and Civil Engineering programs graduates.

ASPECTS	Degree of Relation					n	Mean
	Very Unsatisfied 1	Unsatisfied 2	Neutral 3	Satisfied 4	Very Satisfied 5		
Theoretical training related to the occupation	3	5	7	12	6	33	3.39
Female	1	1	1	0	0	3	2.00
Male	2	4	6	12	6	30	3.53
Proper use of computers	7	4	5	14	3	33	3.06
Female	2	0	0	1	0	3	2.00
Male	5	4	5	13	3	30	3.17
Practical use of working tools	5	5	7	9	7	33	3.24
Female	2	0	0	0	1	3	2.33
Male	3	5	7	9	6	30	3.33
Practical use of equipment	5	8	7	10	3	33	2.94
Female	2	1	0	0	0	3	1.33
Male	3	7	7	10	3	30	3.10
Practical use of materials	6	3	6	13	5	33	3.24
Female	2	1	0	0	0	3	1.33
Male	3	7	7	10	3	30	3.10
Theory and practice of equipment maintenance	3	5	7	8	10	33	3.52
Female	1	1	0	0	1	3	2.67
Male	2	4	7	8	9	30	3.60

Table 3.1.5.1		RELATIONSHIP BETWEEN STUDY AND EMPLOYMENT					
ASPECTS	Degree of Relation					n	Mean
	Very Unsatisfied 1	Unsatisfied 2	Neutral 3	Satisfied 4	Very Satisfied 5		
Time allocated for practical sessions with equipment	4	5	6	12	6	33	3.33
Female	1	1	0	1	0	3	2.33
Male	3	4	6	11	6	30	3.43
Doing measurements at work	5	5	7	9	7	33	3.24
Female	2	0	0	0	1	3	2.33
Male	3	5	7	9	6	30	3.33
Use of written instructions and working guides	5	5	5	14	4	33	3.21
Female	1	1	1	0	0	3	2.00
Male	4	4	4	14	4	30	3.33
Communication	3	5	3	15	7	33	3.55
Female	1	1	0	1	0	3	2.33
Male	2	4	3	14	7	30	3.67
Working with other people (Teamwork)	4	4	3	13	9	33	3.58
Female	1	1	0	1	0	3	2.33
Male	3	3	3	12	9	30	3.70
Knowledge of national laws (related to your trade area)	4	4	6	13	6	33	3.39
Female	1	1	1	0	0	3	2.00
Male	3	3	5	13	6	30	3.53
How to work in a safe way	3	6	2	13	9	33	3.58
Female	1	1	0	1	0	3	2.33
Male	2	5	2	12	9	30	3.70
How to do quality work	4	4	4	14	7	33	3.48

Table 3.1.5.1		RELATIONSHIP BETWEEN STUDY AND EMPLOYMENT						
ASPECTS	Degree of Relation					n	Mean	
	Very Unsatisfied 1	Unsatisfied 2	Neutral 3	Satisfied 4	Very Satisfied 5			
Female	2	0	0	1	0	3	2.00	
Male	2	4	4	13	7	30	3.63	
Discipline and accuracy at work	2	6	3	12	10	33	3.67	
Female	1	1	0	0	1	3	2.67	
Male	1	5	3	12	9	30	3.77	
How to start a business (Entrepreneurship)	5	4	7	11	6	33	3.27	
Female	1	1	0	1	0	3	2.33	
Male	4	3	7	10	6	30	3.37	
General education subjects/Life skills	3	5	3	16	6	33	3.52	
Female	1	1	0	1	0	3	2.33	
Male	2	4	3	15	6	30	3.63	
Standard of workshops	5	8	5	8	7	33	3.12	
Female	2	0	0	0	1	3	2.33	
Male	3	8	5	8	6	30	3.20	
Adequate workshop practical sessions	6	6	5	9	7	33	3.15	
Female	2	0	0	0	1	3	2.33	
Male	4	6	5	9	6	30	3.23	
Did workshop sessions meet your learning expectations	6	5	6	9	7	33	3.18	
Female	2	0	0	0	1	3	2.33	
Male	4	5	6	9	6	30	3.27	
Recreational activities	9	5	5	11	3	33	2.82	
Female	1	1	1	0	0	3	2.00	

Table 3.1.5.1		RELATIONSHIP BETWEEN STUDY AND EMPLOYMENT					
ASPECTS	Degree of Relation					n	Mean
	Very Unsatisfied 1	Unsatisfied 2	Neutral 3	Satisfied 4	Very Satisfied 5		
Male	8	4	4	11	3	30	2.90
Support from teachers	4	5	5	11	8	33	3.42
Female	2	0	0	1	0	3	2.00
Male	2	5	5	10	8	30	3.57
Career's advice	7	4	5	13	4	33	3.09
Female	1	1	0	1	0	3	2.33
Male	6	3	5	12	4	30	3.17
Providing internship/industry-based training	4	9	5	10	5	33	3.09
Female	1	1	0	1	0	3	2.33
Male	3	8	5	9	5	30	3.17
Help in finding a job	10	6	4	11	2	33	2.67
Female	1	1	1	0	0	3	2.00
Male	9	5	3	11	2	30	2.73
In general, to what extent were you satisfied with your studies?	3	5	8	13	4	33	3.30
Female	1	1	0	1	0	3	2.33
Male	2	4	8	12	4	30	3.40

Source: Collected from field data of MNP tracer study, 2023

Table 3.1.5.1 above indicates the level of satisfaction of different aspects of 2021 graduates' experiences at MNP in relation to the present/previous places of work vs gender.

In terms of **theoretical training related to the occupation**, males were more satisfied. In connection to the **use of working tools (i.e. cutlery)**, the females were more satisfied than females. In **doing measurements at work (i.e. weighing)**, males were more satisfied than females. With **practical use of materials (i.e. ingredients)**, males were more satisfied than females. In terms of **working with other people (teamwork)**, males were more satisfied than females. In connection to **working in a safe way**, males were more satisfied than females. In regard to **how to start a business (entrepreneurship)**, males were more satisfied than females. When it comes to **adequate workshop practical sessions plus the standards of the workshops**, males were more satisfied

than females. With the **knowledge of national laws (related to their trade area)**, males were more satisfied than females. In **general education subjects/life skills**, males were more satisfied than females. When it comes to **doing quality work plus discipline and accuracy at work**, males were more satisfied than females. In connection **recreational activities**, males were more satisfied than males. In terms of **provision of internship/industry based training**, males were more satisfied than females. In connection to **help in finding a job**, males were more satisfied, in terms of **support from the trainers**, males were more satisfied. In connection to **career's advice**, males were more satisfied and in terms of the **workshop sessions meeting the learning expectations**, as well as **studies meeting their expectations**, males were more satisfied than females.

EMPLOYERS QUESTIONNAIRE

3.2 ANNEX 2: EMPLOYERS FINDINGS - BUILDING AND CIVIL ENGINEERING PROGRAM

This section provides the findings from the assessments made by 12 employers of the MNP Building and Civil Engineering program graduates. The section includes a review of the effectiveness and relevance of training of Building and Civil Engineering program graduates from the employers' perspectives. It also covers the outcome of employers' assessment of the Building and Civil Engineering program in meeting the needs of the job market. All the traced employers of the Building and Civil Engineering programs graduates from MNP are based in Kenya. The data obtained from the completion of the online questionnaires by the employers of Building and Civil Engineering programs graduates is presented in section 3.2.1 through to section 3.2.3

3.2.1 IDENTIFICATION OF THE COMPANY/ORGANIZATION

This section highlights the working environment of employers of Building and Civil Engineering programs graduates, their “*Sector of industry*” (see 3.2.1.1).

3.2.1.1. SECTOR OF INDUSTRY

Table 3.2.1.1 summarizes the “*Sector of industry*” from which the employer of Building and Civil Engineering programs graduates works in.

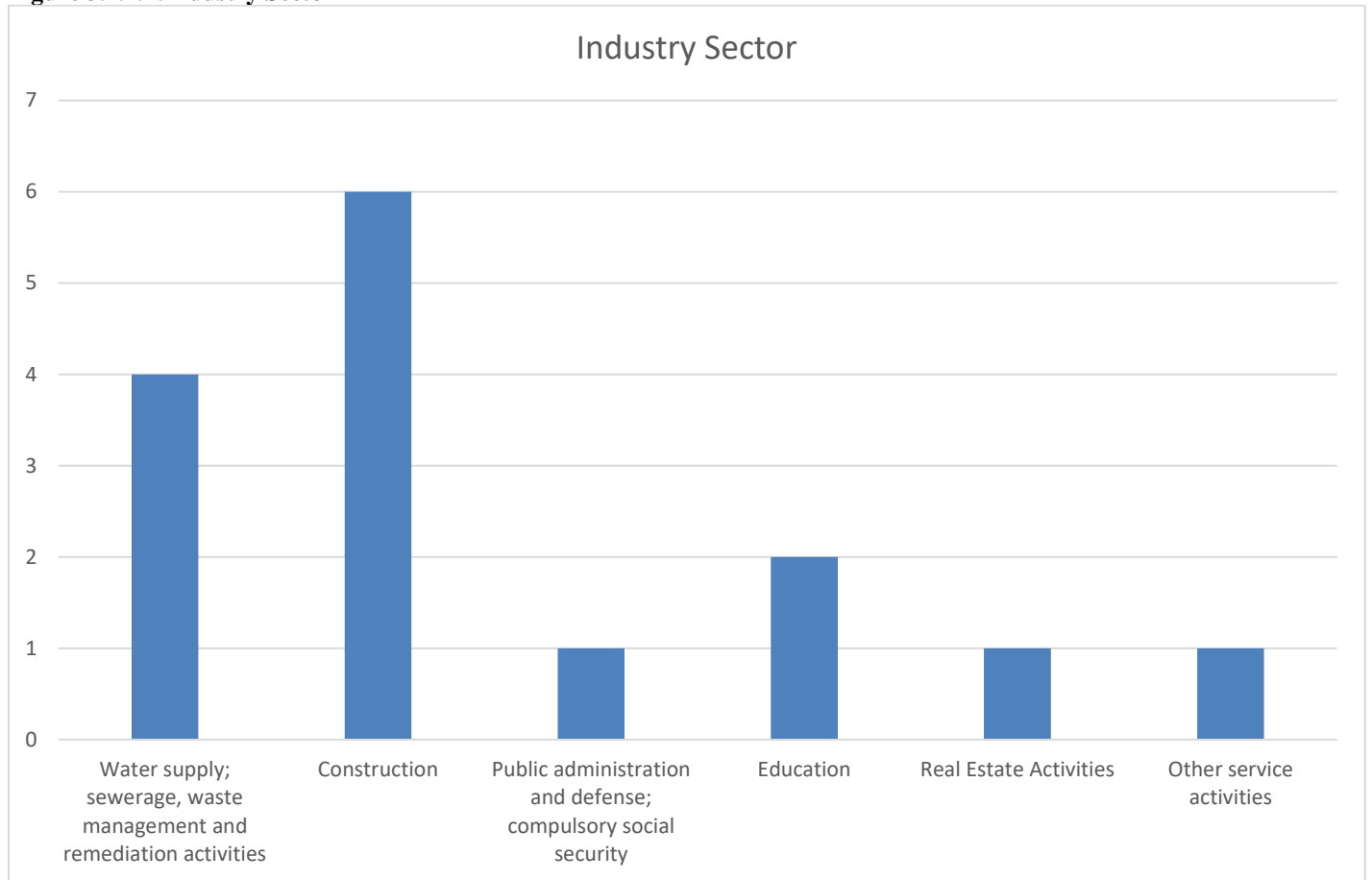
Sector	GENDER	
	TOTAL	
	COUNT	%
Water supply; sewerage, waste management and remediation activities	4	26.7
Construction	6	40.0
Public administration and defense; compulsory social security	1	6.7
Education	2	13.3
Real Estate Activities	1	6.7
Other service activities	1	6.7
Total	15	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.1.1 illustrates the industry sector where the employers are based. It shows that 26.7% are based in Water Supply, Sewerage, Waste Management and Remediation activities, 40% are in construction, 6.7 % in Public Administration and Defense, compulsory social security, 13.3 % in Education, 6.7% in Real Estate and 6.7% in other activities.

It is therefore evident that a large number of our graduates are absorbed by the construction sector, followed by the Water supply, sewerage, waste management and remediation activities, while as a smaller number is taken up by the Real Estate and other activities. This is further illustrated by the diagram below.

Figure 3.2.1.1: Industry Sector



Source: Collected from field data of MNP tracer study, 2023

3.2.2 RECRUITMENT PROCEDURES AND RECRUITMENT CRITERIA

This section highlights the working environment of employers of Building and Civil Engineering programs graduates, their “*Recruitment Procedures*” (see 3.2.2.1), , their “*Aspects of Recruitment Procedures*” (see 3.2.2.2) , their “*Satisfaction with quality of Training*” (see 3.2.2.3) , their “*Is there need for extra training Satisfaction*” (see 3.2.2.4), , their “*of level of competence*” (see 3.2.2.5), , their “*Uptake of additional responsibilities*” (see 3.2.2.6) , their “*Graduates undergoing internship*” (see 3.2.2.7), their “*Gender Distribution for internship graduates*” (see 3.2.2.8).

3.2.2.1. RECRUITMENT PROCEDURES

Table 3.2.2.1 summarizes the “*Recruitment Procedures*” of the employer of Building and Civil Engineering programs graduates.

Recruitment Procedures	Count	Percent
Advertisements of vacancies in newspapers	4	33.3
Advertisements on the Internet	2	16.7
Direct application by graduates	1	8.3
Internal advertisements of vacancies	3	25.0
Personal contacts to graduates	1	8.3
Private employment agencies	1	8.3
Total	30	100

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.1 illustrates the recruitment procedures and the recruitment criteria for the MNP graduates adopted by the employers. The findings from the study do indicate that the most preferred means of advertisements was newspaper advertisements and internal adverts. The internet ranked third in preference at 16.7%. The use of private employment agencies, personal contacts of graduates and direct application by graduates were the least preferred means of getting staff.

3.2.2.2. ASPECTS OF RECRUITMENT PROCEDURES

The tracer study sought to find out what the employers considered as critical qualifications for consideration when employing staff. This was important for the study since understanding the preferences will help the institution devise strategies to increase employability of its trainees where necessary. The employers were there asked to rank what they considered most important based on a scale of 1 to 5 where 5 was most important while 1 was least important.

Table 3.2.2.2 summarizes the “Aspects of Recruitment Procedures” of the employer of Building and Civil Engineering programs graduates.

ASPECTS	ASPECTS OF RECRUITMENT PROCEDURES		
	Mean	Standard error	SD
Personality and behavior	4.50	.230	.798
Personal presentation	4.33	.225	.778
Recommendations/references from third persons	4.25	.250	.866
Results of recruitments tests	4.00	.246	.853
Candidate's own world view	3.83	.322	1.115
Practical experience acquired during course of study	3.83	.366	1.267
Grades of examinations at TVET institution/s	3.75	.250	.866
Reputation of TVET institution/s	3.67	.376	1.303
field of study	3.67	.355	1.231
Communication skills	3.50	.314	1.087
Main Focus of study / Specialization	3.33	.310	1.073

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.2 above illustrates the aspects of recruitment of the MNP graduates by the employers. There were four characteristics that stood out above the rest when employers were looking staff. These included recommendations or referees from other third persons, the personality and behavior of the candidates, personal presentation as well as the result of recruitment tests. Among four most important characteristics the performance at the interview ranked least implying that it was not enough to score high in the recruitment test. It seems that employers are not comfortable with performance alone as a criteria for employment.

The most important characteristic for employment besides other attributes was personality and behavioral attributes of a candidate (m=4.5, SD=0.80), which implies that all other attributes though important were not as significant.

What was evident was that recommendations override grades obtained in the certificate over personal recommendation. It can therefore be stated that employers are more keen on previous work performance as opposed to other considerations such as personal communication, field of specialization as well as the reputation of the college. At (m=3.33, SD=1.07), the employers ranked the field of specialization as neutral. This is in line with current trends where employers are keen on what candidates can produce as output compared to what they specialized in especially in areas of building construction and technology.

Communication skills was ranked among the least important ($m=3.50$, $SD=1.09$) implying that employers were not as keen on communication skills as on other characteristics. The reputation of the college was rated at $m=3.67$, $SD=1.30$ which was ranked the same as the field of study ($m=3.67$, $SD= 1.23$), with standard errors of 376 and 355 for reputation and field of study respectively. The reputation of the college was considered comparatively as more important than the college that the student studied. This implies that training institutions have not developed distinctive and outstanding capabilities that will make employers have preference of one over another.

Practical experience was considered as more important ($m=3.88$, $SD=1.27$) compared to ($m=3.75$, $SD=0.86$) for grades obtained at the college respectively. In summary it can be said that employers were more likely to be influenced by personal behavioral characteristics when recruiting their staff. This is likely because personal characteristics influence work characteristics such as commitment, persistence, patience, endurance and honesty.

3.2.2.3. SATISFACTION WITH QUALITY OF TRAINING

To evaluate the level of perception on the quality of training, the employers were requested to gauge the level of competency of the graduates. The level of satisfaction was based on a scale of 1 to 5 where 5 was most satisfied while 1 was least satisfied.

Table 3.2.2.3 summarizes the “*Satisfaction with quality of Training*” of the employer of Building and Civil Engineering programs graduates.

Table 3.2.2.3	Satisfaction with Quality of Training						
	Degree of Satisfaction of quality Training					n	Mean
	Least Satisfied 1	Neutral 2	Satisfied 3	Most Satisfied 4			
Frequency	1	1	7	3	12	3	
Percentage	8.3	8.3	58.3	25	100		

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.3 illustrates the satisfaction rate on the quality of training offered to the MNP graduates. The findings indicate that 83.3% of the employers were satisfied with the quality of training offered to graduates from the polytechnic. One quarter of the respondents (employers) were very satisfied whereas 58.3% were satisfied. The proportion of employers who were neutral was 8.3% while a similar number (8.3%) was unsatisfied.

3.2.2.4. IS THERE NEED FOR EXTRA TRAINING

The tracer study survey sought to find out from the employers if in their opinion the graduates from Meru national polytechnic needed any additional training to enhance their competencies at work. The employers were asked to explain upon recruitment into their organizations if there was need to retrain the graduates for them to take up duties at the new places of work.

This was necessary because the institution is keen to know if there were gaps in training and industry requirements.

Table 3.2.2.4 summarizes the “*Is there need for extra training*” of the employer of Building and Civil Engineering programs graduates.

Recruitment Procedures	Count	Percent
They need completely new training	6	50.0
They need serious skills upgrading to start working	5	41.7
They need to learn some additional skills	1	8.3
They need completely new training	6	50.0
Total	12	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.4 summarizes the need for additional training to the MNP graduates in the industry. Based on the findings half (50%) of the employers observed that the graduates had to be completely retrained to take their jobs. There were (41.7%) of the employers who reported that that there was need for serious skills upgrading for the graduates that were need before the graduates would pick their new roles at the places of work. It was also observed that (8.3%) of the graduates had to learn additional skills in addition to what they covered in college to be able to take their jobs.

3.2.2.5. SATISFACTION OF LEVEL OF COMPETENCE

The tracer study survey sought to find out from the employers if the graduates displayed distinctive competencies at the work place upon joining their organizations. The purpose was to evaluate the link between theory and practice as evidenced in the work place. The employers were to rate the graduates on a scale of one to five, where 5 was very satisfied while one was least satisfied.

Table 3.2.2.5 summarizes the “*Satisfaction of level of competence*” of the employer of Building and Civil Engineering programs graduates.

AREAS	n	MEAN	SD
Knowledge of the industry	12	4.25	0.866
Theoretical training related to the occupation	12	4.17	0.718
The quality of the Meru National Polytechnic graduates in general	12	4.00	0.853
Practical use of working tools	12	3.92	1.165
Doing measurements at work	12	3.83	1.267
Theory and practice of equipment maintenance	12	3.75	0.866
Use of written instructions and working guides	12	3.67	1.303
Practical use of machines and equipment	12	3.67	1.231
Practical use of materials and parts	12	3.33	1.073

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.5 above illustrates the level of satisfaction in regard to various aspects of the graduates' learning environment. The findings from the tracer study survey indicated that the Meru national polytechnic graduates were rated very highly on knowledge of the industry (m= 4.25, SD=0.90) which was the highest average score. The ability to link theoretical training with industry is a critical determinant of quality training. The employers were asked to evaluate the work performance and comment if there was a relationship between training and occupation. The responses indicate that the link between theory and practice was strong (m= 4.17, SD=0.72), and indication that the training of graduates resulted in acquisition of skills that can closely relate to the industry.

The employers rated the gradated as above average (m=4.0, SD=0.85), while the ability to work with tools was equally noted to be above average (m=3.92, SD=1.17). The employers were asked to comment on both the ability to carry out measurements and maintain equipment. Measurement of works was (m=3.83, SD, 1.27) while maintenance of machines and equipment was (m=3.75, SD=0.90). The employers were also required to indicate what they observed from the graduates on their ability to use written instructions and practical use of equipment and machinery. The findings put the evaluation at (m=3.67, SD=1.30) and (m=3.67, SD=1.23) for use of written instructions and working guides as well as the practical use of machinery respectively. The item ranked least (m=3.33, SD=1.12) was the use of materials and parts.

3.2.2.5. SATISFACTION OF DEMONSTRATED ASPECT

Table 3.2.2.5 summarizes the “*Satisfaction of Demonstrated Aspects*” of the employer of Building and Civil Engineering programs graduates.

AREAS	Degree of Relation	
	n	Mean
Working with other people	4.50	0.798
Discipline	4.42	0.669
Communication	4.33	0.778
Leadership	4.25	0.866
Creativity and Innovation	4.17	0.937
Ability to work independently/with Minimal supervision	4.17	0.718
How to do high quality work	4.00	0.853
Sales and Marketing	3.92	0.900
How to work in a safe way	3.83	1.115
Emotional Intelligence	3.58	1.240
Practical use of computers	3.50	1.087
Multilingualism (knowledge of different languages)	3.33	1.155

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.5 shows the satisfaction rate of the MNP employers in various aspects. The tracer study survey findings reveal that the ability of Meru national polytechnic graduates to work with other people was very high ($m=4.5$, $SD=0.80$). When asked to indicate the level of discipline in relation to work performance and ethics, it emerged that employers in general ($m=4.42$, $SD=0.7$) were satisfied with discipline of the graduates were satisfied. The employers further indicated that they were satisfied ($m=4.42$, $SD=0.70$) with the communication skills exhibited by the graduates from Meru National polytechnic.

Leadership skills were also considered important in the tracer study survey. The employers when asked about the leadership capabilities ranked it as ($m=4.25$, $SD=0.90$) and indication that they were satisfied. This was an indication that the training at the college had alongside technical skills contributed to the development of soft skills. Creativity and innovativeness is integral to success of any enterprise and therefore the evaluation of innovativeness was essential in the study. The employers ranking on the graduates show that they exhibited above average levels of innovativeness (4.17 , $SD=0.94$) at the work place.

The ability to work with minimum supervision and at the same time maintain quality had scores of ($m=4.17$, $SD=0.72$) and ($m=4.0$, $SD=0.85$) respectively. The evaluation show that the employers a relatively high level of confidence in the graduates based on the quality of work as well as the ability to work with minimum supervision. The graduates were also evaluated on marketing skills as well as working in safe way. The score of ($m=3.92$, $sd=0.90$) and ($m=3.83$, $sd=1.11$) for marketing and safe working respectively showed that the graduates did not have a problem in marketing a s well as the ability to work safely in the work place.

The emotional intelligence and practical use of computers were items that items that were also considered in the study. The summary from the findings indicate that the scores were ($m=3.58$, $SD=1.24$) and ($m=3.5$, $SD=1.09$) respectively for emotional intelligence and practical use of computers. The scores being slightly higher than 3.5 imply that the employers felt that the graduate competencies were slightly more than average. There would need based on this findings to strengthen training in the use of computers especially in areas that may include learning to use building and construction software. The last construct that graduates were evaluated on was the use of other languages. The employers rated the use of other languages as slightly more than average ($m=3.33$, $SD=1.16$).

3.2.2.6. UPTAKE OF ADDITIONAL RESPONSIBILITIES

Ability to multitask and take up other responsibilities at work increases the employability of graduates. The survey therefore sought to find out from the respondents if the Meru national polytechnic graduates working with them who the ability to multitask.

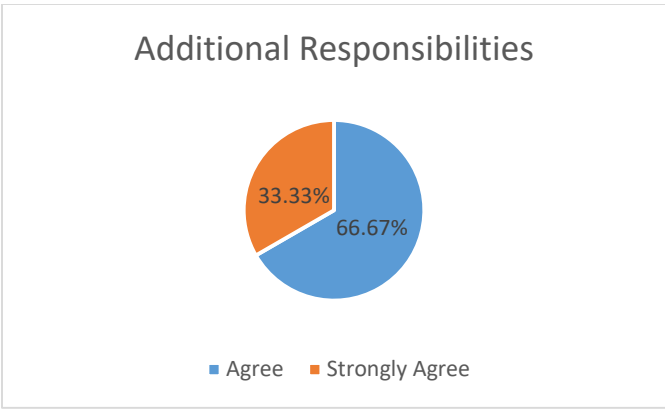
Table 3.2.2.6 summarizes the “*Uptake of additional responsibilities*” by Building and Civil Engineering programs graduates as stated by employers.

Table 3.2.2.6		SATISFIED WITH CURRENT JOB	
Satisfaction Level	Count	Percentage	
Agree	4	33.3%	
Not Sure	8	66.7%	
Total	12	100%	

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.2.6 above indicates the level of agreement by the employers pertaining the taking up of additional responsibilities by the MNP graduates. The majority of the employers 66.7% were not sure if the graduates probably because the graduates had been hired to do specific assignments. The were 33.3% of the employers however who had the opinion that the graduates would be able to handle other assignments

Figure 3.2.2.6: Graduates Age brackets



Source: Collected from field data of MNP tracer study, 2023

3.2.2.7. GRADUATES UNDERGOING INTERNSHIP

Table 3.2.2.7 summarizes the “*Graduates undergoing internship*” by Building and Civil Engineering programs graduates as stated by employers.

Table 3.2.2.7		GRADUATES UNDERGOING INTERNSHIP	
Response	Count	Percentage	
Yes			
No			
Total			

Source: Collected from field data of MNP tracer study, 2023

The table above illustrates the number of MNP graduates on internship. In this regard, 2 employers had graduates from MNP undergoing internship and 10 did not.

3.2.2.8. GENDER DISTRIBUTION FOR INTERNSHIP GRADUATES

Table 3.2.2.7 summarizes the “*Gender Distribution for internship graduates*” by Building and Civil Engineering programs graduates as stated by employers.

Table 3.2.2.7		GENDER DISTRIBUTION FOR INTERNSHIP GRADUATES	
Response	Count	Percentage	
Female			
Male			
Total			

Source: Collected from field data of MNP tracer study, 2023

The total graduates undergoing internship by the 2 employers are 2 female graduates and 4 male graduates, totaling to 6. One employers answered – several

3.2.3 DEMOGRAPHIC INFORMATION

This section highlights the working environment of employers of Building and Civil Engineering programs graduates, , their “*Number of employees*” (see 3.2.3.1), their “*Position/ Role in Organisation*” (see 3.2.3.2) and their “*Type of Enterprice*” (see 3.2.3.3).

3.2.3.1. NUMBER OF EMPLOYEES

Table 3.2.3.1 summarizes the “*Number of Employees*” of the employer of Building and Civil Engineering programs graduates.

Table 3.2.3.1	Number of Employees	
Number of Employees	Count	Percentage
2 Employees	1	8.3
5 Employees	2	16.7
7 Employees	1	8.3
8 Employees	1	8.3
10 Employees	1	8.3
15 Employees	1	8.3
>30 Employees	1	8.3
40 Employees	1	8.3
55 Employees	1	8.3
139 Employees	1	8.3
>500 Employees	1	8.3
Total	12	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.3.1 illustrates the number of employees that the employers have. The employers with 2 employees are 8.3%, those with 5 are 16.7%, those employers with 7 employees are 8.3%, those with 8 employees are 8.3%, those who have 10 employees are 8.3%, those with 15 employees are 8.3%, those with more than 30 employees are 8.3%, those with 40 employees are 8.3%, those who have 55 employees are 8.3%, those with 139 employees are 8.3%, while those with more than 500 are 8.3%.

3.2.3.3. TYPE OF ENTERSEPRISE

Table 3.2.3.3 summarizes the “*Type of Enterprise*” of the employer of Building and Civil Engineering programs graduates.

Table 3.2.3.3	TYPE OF ENTERPRISE	
Positions	Count	Percentage
Public	1	8.30%
Private	11	91.70%
Total	12	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.2.3.3 illustrates the type of organization for the employers. It is evident that 91.7% of employers are in private enterprises while as 8.3% are in public organizations. Therefore, a high percentage of employers are in private organizations.

TRAINERS QUESTIONNAIRE

3.3 TRAINERS FINDINGS - BUILDING AND CIVIL ENGINEERING PROGRAM

This section provides the findings from the assessments made by 9 trainers of the MNP Building and Civil Engineering program graduates. The section includes a review of the effectiveness and relevance of training of Building and Civil Engineering program graduates from the trainers' perspectives. It also covers the outcome of trainers' assessment of the Building and Civil Engineering program in meeting the needs of the job market. All the traced trainers of the Building and Civil Engineering programs graduates from MNP are based in Kenya and more so, within the school and its surroundings. The data obtained from the completion of the online questionnaires by the trainers of Building and Civil Engineering programs graduates is presented in section 3.3.1 through to section 3.3.3

3.3.1 COURSES OFFERED

This section highlights the training environment of trainers of Building and Civil Engineering programs graduates, their "*highest qualification*" (see 3.3.1.1), their "*comparison between areas of specialization vs areas assigned*" (see 3.3.1.2), their "*training hours*" (see 3.3.1.3), their "*years of experience*" (see 3.3.1.4), their "*Preparation desk/room*" (see 3.3.1.5), their "*Subject Requiring Lab Facilities*" (see 3.3.1.6)

3.3.1.1. HIGHEST QUALIFICATION

Table 3.3.1.1 summarizes the "*highest qualification*" from which the trainers of Building and Civil Engineering programs graduates works in.

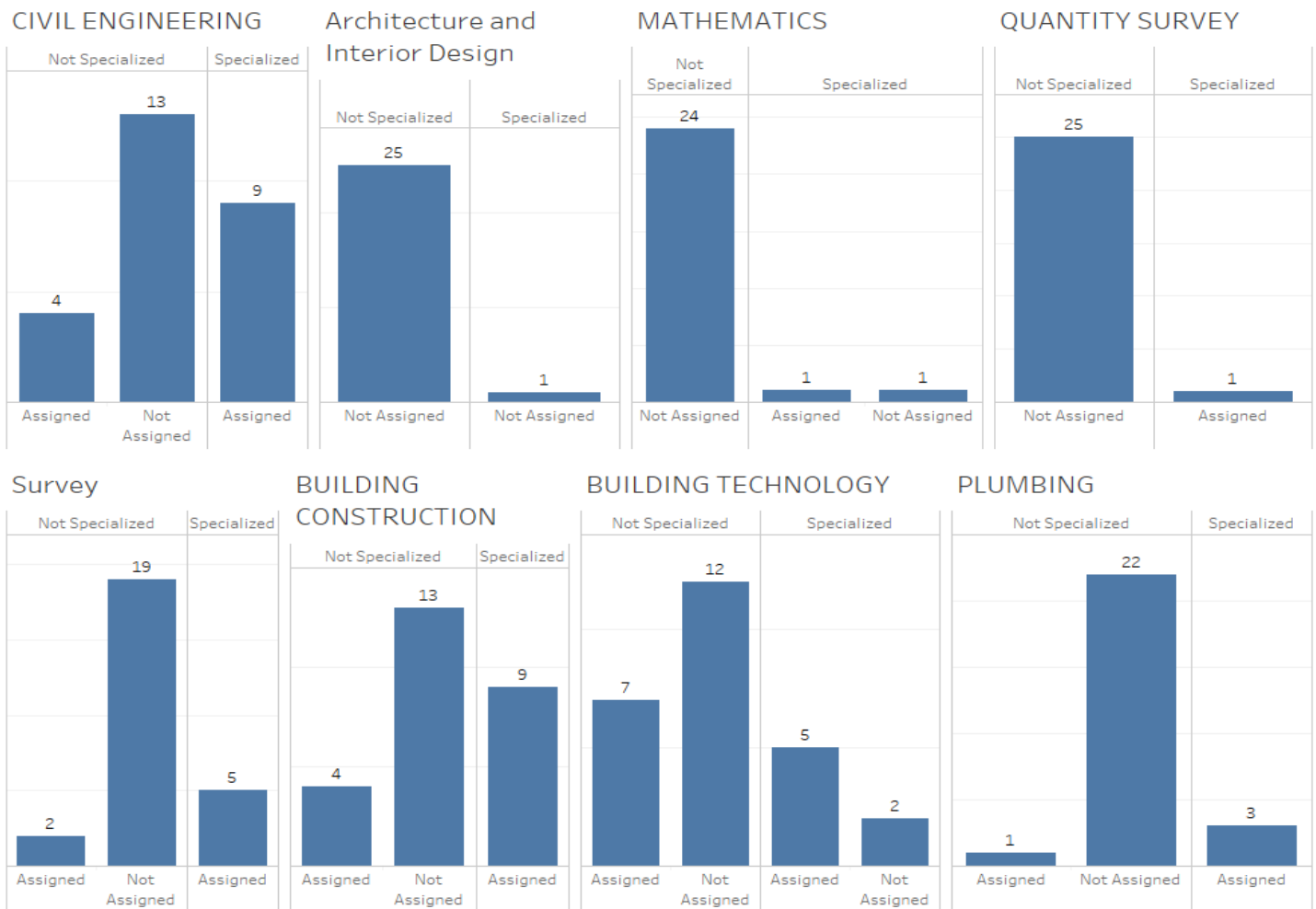
Table 3.3.1.1	HIGHEST QUALIFICATION	
	Highest Qualification	Count
Masters	1	3.8
Bachelor	18	69.2
Higher Diploma	5	19.2
Diploma	2	7.7
Total	26	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.1 gives an illustration of the highest qualifications by the trainers of the MNP. Those who had done Master's Degree were 1(3.8%), Bachelor's Degree 18(69.2%), Higher Diploma 5(19.2%) while those who had done Diploma were 2(7.7%)..

3.3.1.2. COMPARISON BETWEEN SPECIALIZATION VS AREA ASSIGNED

Table 3.3.1.2.1 and 3.3.1.2.2 summarizes the "*comparison between areas of specialization vs areas assigned*" from which the trainers of Building and Civil Engineering programs graduates works in.



Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.2.1 and 3.3.1.2.2 demonstrates the relationship between areas of specialization and units assigned to the trainers of the MNP. Those who were assigned to train Civil Engineering, 9 trainers that have specialized in the area have been assigned to teach the unit, 4 trainers who were not specialized had been assigned to teach while 13 trainers who were not specialized had not been assigned.

The unit of Architecture & Interior Design, 25 trainers were not specialized and not assigned to handle the unit while 1 trainer was not specialized and not assigned to train the unit. In Mathematics, there was 1 trainer who was specialized and assigned to handle the unit, 1 was specialized but not assigned while 24 trainers were not specialized and not assigned to handle the unit.

In regard to Survey as a unit, 5 trainers were specialized and assigned to handle the unit, 2 trainers were not specialized but assigned to handle while 19 trainers were not specialized and not assigned to handle the unit.

For Building Construction as a unit, 9 trainers were specialized and assigned to handle the unit while 13 who were not specialized were assigned. In Plumbing 3 trainers were specialized and assigned, 1 was not specialized and assigned while 22 trainers who had not specialized in the unit were not assigned.

3.3.1.3. TRAINING HOURS

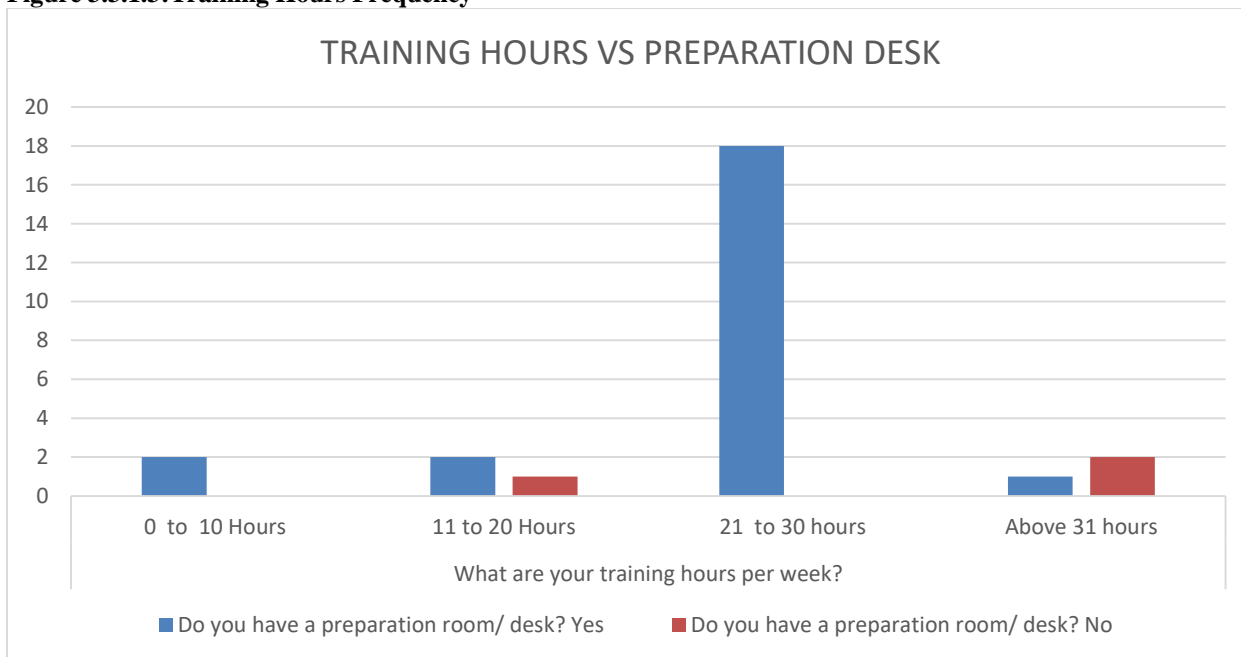
Table 3.3.1.3 summarizes the “**training hours**” from which the trainers of Building and Civil Engineering programs graduates works in.

Table 3.3.1.3	TRAINING HOURS	
HOURS RANGE	Count	Percentage
0 to 10 Hours	2	6.7
11 to 20 Hours	3	10.0
21 to 30 hours	18	60.0
Above 31 hours	3	10.0
Total	26	86.7

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.3 demonstrates the trainers’ of MNP contact hours per week. It shows that 2(6.7%) of trainers had a range of 0 to 10 hours, 3(10.0%) of trainers had a range of 11 to 00 hours, 18(60.0 %) of trainers had a range of 21 to 30 hours while 3(10.0%) had a range of Above 31 hours per week. This is further illustrated in the diagram below.

Figure 3.3.1.3: Training Hours Frequency



Source: Collected from field data of MNP tracer study, 2023

3.3.1.4. YEARS OF EXPERIENCE

Table 3.3.1.4 summarizes the “**years of experience**” from which the trainers of Building and Civil Engineering programs graduates works in.

Table 3.3.1.4	YEARS OF EXPERIENCE	
YEARS RANGE	Count	Percentage

0-3 Years	13	50.0
3 to 6 Years	8	30.8
6 to 9 Years	3	11.5
Above 9 Years	2	7.7
Total	26	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.4 illustrates the Trainers' of MNP years of work experience. It shows that 55.6% have an experience ranging from 0 to 3 years. 22.2% have an experience that ranges from 3 to 6 years, while the rest 22.2% have an experience of 6 to 9 years.

3.3.1.4. COMPARISON BETWEEN COURSE TRAINING vs HIGHEST QUALIFICATION

Table 3.3.1.4 summarizes the “*course training vs highest qualification*” from which the trainers of Building and Civil Engineering programs graduates works in.

Table 3.1.1.4		FIRST SIX MONTHS AFTER LEAVING MNP VS COURSE DONE IN MNP				
		CURRENT SITUATION				
	Course Done	Masters	Bachelor's	Diploma	Certificate	TOTAL
Name of Course	Artisan in Plumbing	0	3	0	2	5
	Craft Certificate in Plumbing	0	4	1	2	7
	Craft Certificate in Building and Construction Technology	0	7	1	0	8
	Diploma in Building and Construction Technology	1	12	3	0	16
	Diploma in Civil Engineering	1	16	3	0	20
	Diploma in Quantity Survey	1	16	2	0	19

Source: Collected from field data of MNP tracer study, 2023

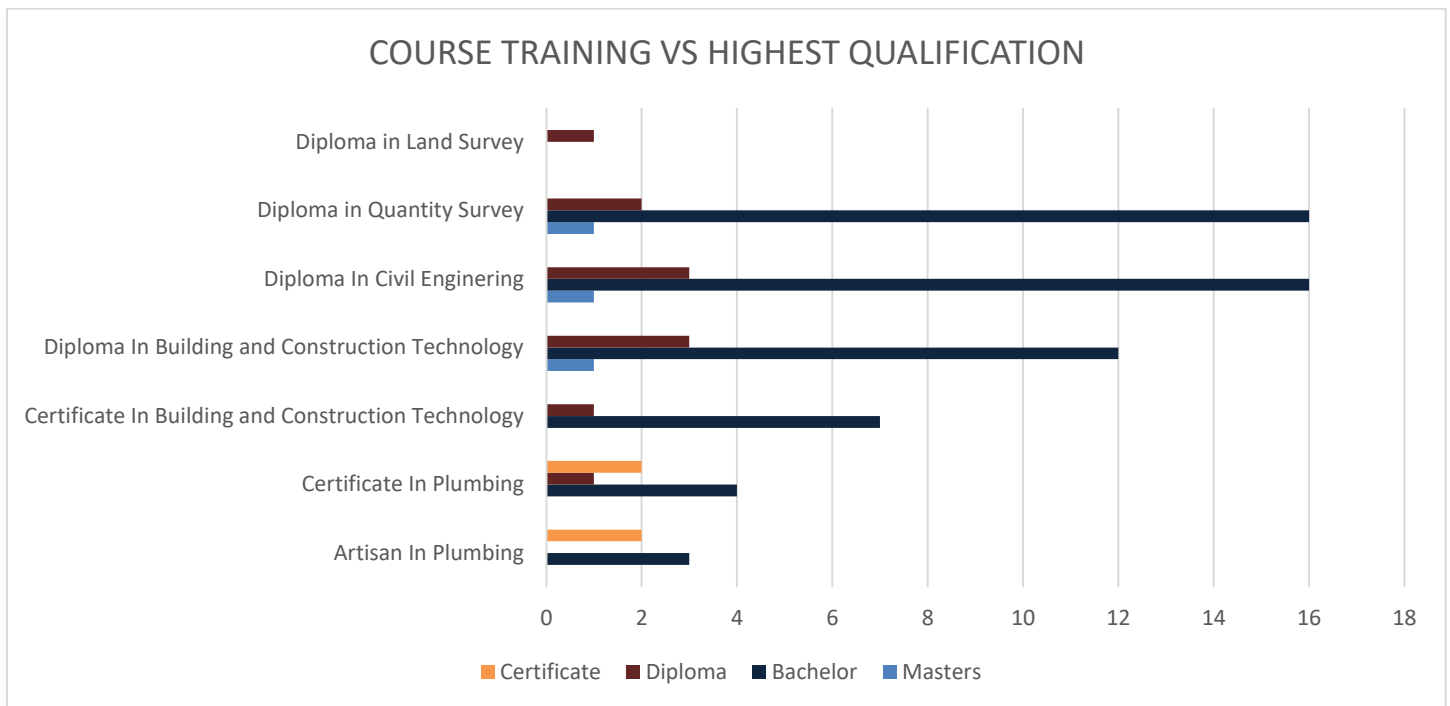
Table 3.3.1.4 illustrates the course training vs highest qualification of the MNP trainers'. For those that taught Artisan in Plumbing, 3 had qualified in Bachelor's Degree while 2 have qualified in certificate.

Those who trained Certificate in Plumbing, 4 trainers had qualified in Bachelor's Degree, 1 in Diploma and 2 in Certificate. Those who taught Craft Certificate in Building and Construction, 7 trainers had qualified in Bachelors while one had a Diploma.

The trainers that taught Diploma in Building and Construction, one trainer had qualified in Masters, 12 trainers had qualified in Bachelors while 3 had a Diploma. Those that had taught Diploma in Civil Engineering, one trainer was qualified in Masters, 16 had qualified in Bachelors and 3 in Diploma. The trainers who taught Diploma in Civil Engineering, one was qualified with a Masters, 16 had Bachelors and 2 had a Diploma.

This information is further illustrated by the diagram below.

Figure 3.3.1.5: Preparation Room



Source: Collected from field data of MNP tracer study, 2023

3.3.1.5. PREPARATION DESK/ROOM

Table 3.3.1.5 summarizes the “Preparation desk/room” from which the trainers of Building and Civil Engineering programs graduates works in.

Table 3.3.1.5		PREPARATION DESK / ROOM	
YEARS RANGE	Count	Percentage	
Yes	23	88.5	
No	3	11.5	
Total	26	100.0	

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.5 illustrates the availability of the MNP trainers’ preparation room/desk. The table above shows the MNP trainers who have a preparation room/desk. 23(88.5%) said that they have while 3(11.5%) do not have a preparation room/desk.

3.3.1.3. COMPARISON BETWEEN TRAINING HOURS PER WEEK vs HAVING A PREPARATION ROOM

Table 3.3.1.3 summarizes the “training hours vs preparation room” from which the trainers of Building and Civil Engineering programs graduates works in.

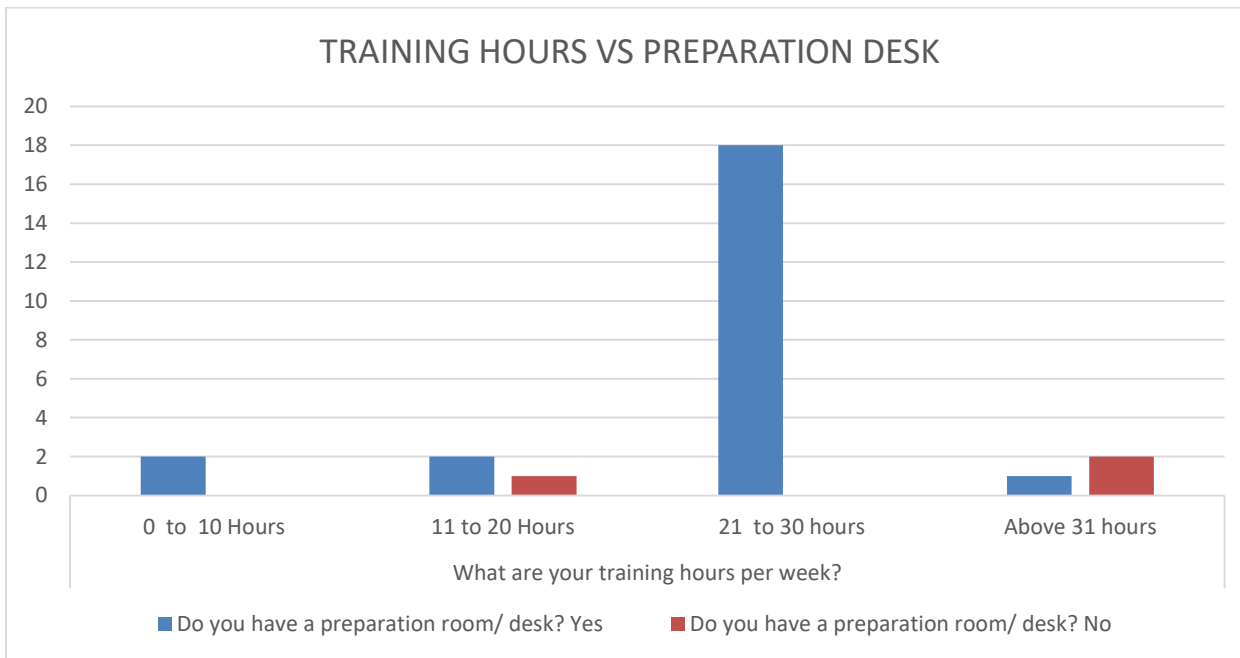
HOURS RANGE	TRAINING HOURS		
	Do you have a preparation room/ Desk		Total
	Yes	No	
0 to 10 Hours	2	0	2
11 to 20 Hours	2	1	3
21 to 30 hours	18	0	18
Above 31 hours	1	2	3
Total	23	3	26

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.3 demonstrates the trainers’ of MNP contact hours per week vs if they have a preparation room. From 0-10 hours; 2 trainers had a preparation desk/room, from 11-20 hours, 2 had a preparation desk/room and one did not have, from 21-30 hours, 18 had a preparation room/desk and for trainers who had above 31 hours, one trainer had a preparation room/desk while one did not have.

This is further illustrated in the diagram below.

Figure 3.3.1.3: Training Hours Frequency vs preparation room



Source: Collected from field data of MNP tracer study, 2023

3.3.1.6. HANDLE SUBJECT REQUIRING LAB FACILITIES

Table 3.3.1.6 summarizes the “Subject Requiring Lab Facilities” from which the trainers of Building and Civil Engineering programs graduates works in.

Table 3.3.1.6		SUBJECTS WITH LAB FACILITY REQUIREMENT	
Response	Count	Percentage	
Yes		15	57.7
No		11	42.3
Total		26	100.0

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.1.6 demonstrates the MNP trainers who handle units that require laboratories. The table above shows whether the MNP trainers handle the subjects that require use of laboratory facilities. Out of 26(100%) trainers, 15(57.7%) said yes while 11(42.3%) said they that they don't use the laboratory facilities.

3.3.2 TRAINING AIDS

This section highlights the training environment of trainers of Building and Civil Engineering programs graduates, their “Availability of training aids” (see 3.3.2.1),

3.3.2.1. AVAILABILITY OF TRAINING AIDS

Table 3.3.2.1 summarizes the “Availability of training aids” from which the trainers of Building and Civil Engineering programs graduates.

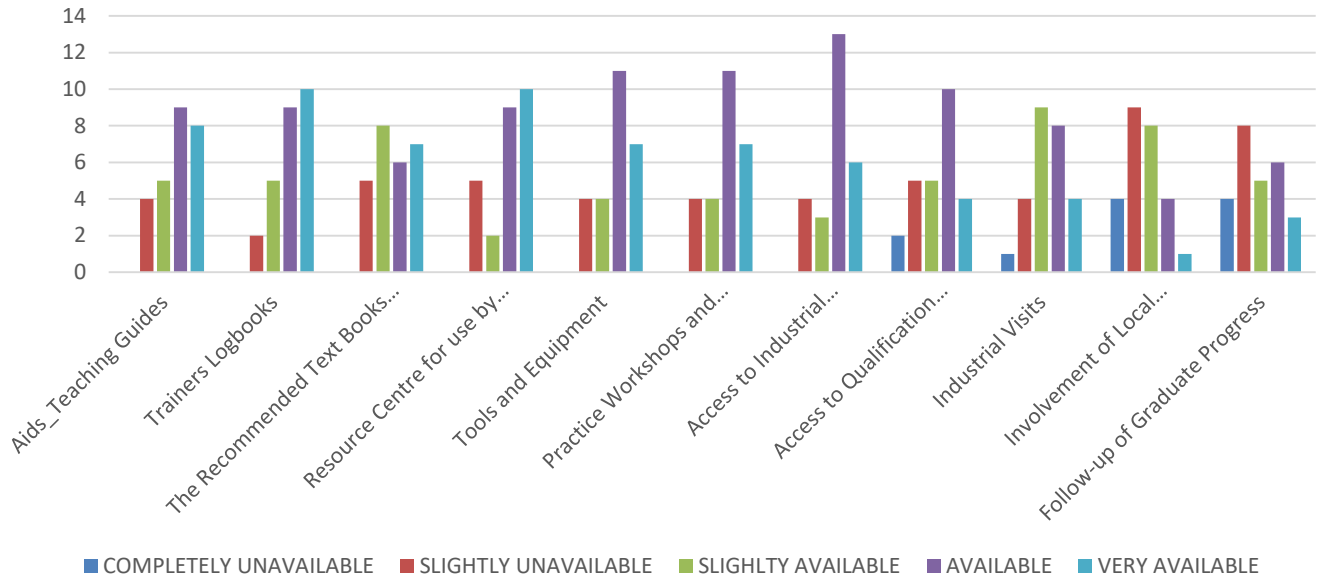
TRAINING AIDS	AVAILABILITY OF TRAINING AIDS						n	Mean
	Rating							
	Completely Unavailable 1	Slightly Unavailable 2	Slightly Available 3	Available 4	Very Available 5			
Teaching Guides	0	4	5	9	8	26	3.81	
Trainers Logbooks	0	2	5	9	10	26	4.04	
The Recommended Text Books (Including Reference Materials)	0	5	8	6	7	26	3.58	
Resource Centre For Use By Learners	0	5	2	9	10	26	3.92	
Access To Qualification Standardization Workshops/Seminars	0	4	4	11	7	26	3.81	
Tools And Equipment	0	4	4	11	7	26	3.81	
Practice Workshops And Classrooms	0	4	3	13	6	26	3.81	
Access To Industrial Attachment Program	2	5	5	10	4	24	3.54	
Industrial Visits	1	4	9	8	4	25	3.48	
Involvement of Local Employers, e.g. guest lecturers	4	9	8	4	1	22	2.86	
Follow-up of Graduate Progress	4	8	5	6	3	22	3.18	

Source: Collected from field data of MNP tracer study, 2023

The table above indicates the availability of the training aids in MNP to the trainers. The teaching guides were readily available, the trainer’s logbooks and the recommended text books (including reference materials). Also the resource centre for use by learners, tools and equipment, centre workshops and classrooms. More so, there was access to industrial attachment program, Access to Qualification Standardization Workshops/seminars and the industrial visits. In addition, the involvement of Local Employers, e.g. guest lecturers and Follow-up of Graduate Progress.

This is further illustrated by the chart below.

Chart Title



3.3.3 TRAINING AIDS

This section highlights the training environment of trainers of Building and Civil Engineering programs graduates, their “*Conditions at MNP*” (see 3.3.3.1)

3.3.3.1. CONDITIONS AT MNP

Table 3.3.3.1 summarizes the “*Conditions at MNP*” from which the trainers of Building and Civil Engineering programs graduates.

Table 3.3.3.1	CONDITIONS AT MNP						
	CONDITIONS	Rating					n
Very Weak 1		Slightly Weak 2	Neutral 3	Slightly Strong 4	Very Strong 5		
Theoretical training related to the occupation	1	1	4	11	9	26	4.00
Adequate Exposure To Computer Practice	1	2	6	10	7	26	3.77
Practical Use Of Working Tools	1	1	5	11	8	26	3.92
Practical Use Of Equipment	2	0	5	13	6	26	3.81
Practical Use Of Materials	1	1	4	14	6	26	3.88
Theory And Practice Of Equipment Maintenance	2	4	1	12	7	26	3.69
Doing Measurements At Work	1	3	5	13	4	26	3.62
Use Of Written Instructions And Working Guides	0	4	4	7	11	26	3.96
Management Of The Institution	1	0	3	16	9	26	4.58
Standard Of Buildings, Classrooms And Workshops/Labs	0	1	4	16	7	26	4.35
Resource Centre For Use By Trainees	0	2	6	13	5	26	3.81
Support From Other Trainers	0	1	6	9	10	26	4.08
Trainers Experience Of The Industry	0	1	6	12	7	26	3.96
Providing Internship/Industry-Based Training	0	2	4	13	7	26	3.96
Time Tabling Of Lessons	0	1	5	9	11	26	4.15

Source: Collected from field data of MNP tracer study, 2023

Table 3.3.3.1 illustrates the level of satisfaction by the MNP trainers in connection to the training conditions.

COMMENTS AND SUGGESTIONS FROM GRADUATES, EMPLOYERS AND TRAINERS

3.4 TRAINERS FINDINGS - BUILDING AND CIVIL ENGINEERING PROGRAM

This section provides the “*Comments and Suggestions*” made during the study. The data obtained from the completion of the online questionnaires by the trainers of Building and Civil Engineering programs graduates is presented in section 3.4.1 through to section 3.4.3

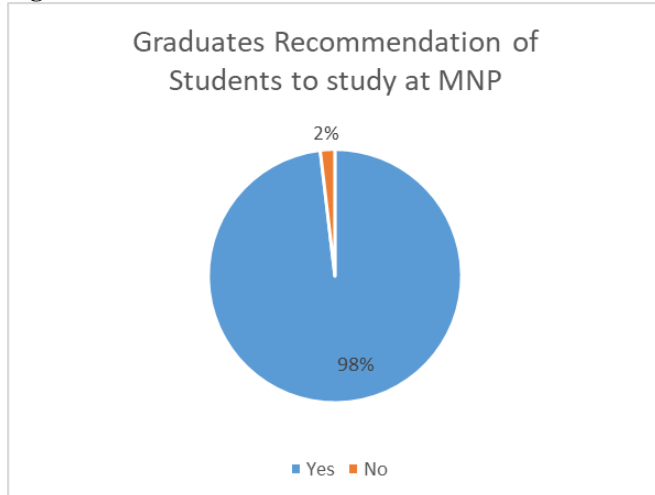
3.4.1 STUDENTS COMMENTS AND SUGGESTIONS

Graduates were asked if they would recommend someone to study a course at The Meru National Polytechnic

RESPONSE TO CHANGES AND RECCOMENDATION		
Response	Count	Percentage
Yes	105	98%
No	2	2%
Total	107	100%

Source: Collected from field data of MNP tracer study, 2023

Figure 3.3.1.6 :Graduates Recommendation of Students to study at MNP



Source: Collected from field data of MNP tracer study, 2023

105(98%) of students stated that they would recommend someone to study at the Meru National Polytechnic while 2(2%) stated that they would not.

CHANGES GRADUATES RECOMMENDED FOR THE MERU NATIONAL POLYTECHNIC STUDY/PROGRAM

1. Improve in the program to make use of technology: that is additional computer practicals on AutoCAD and Arch card to prepare the students for life after school.
2. Graduates emphasized more ion the need to increase more practical sessions than theory to equip them with skills needed in the outside world.
3. Additional of more training sessions on Technical and mathematical sessions.
4. Students’ motivation to be included in the program.
5. I would recommend for internal attachments for 1st Year students especially engineering courses, so that the technician and the lectures would train them before external attachments in 2nd and 3rd Year.

6. Addition of more classes for enough rooms for study
7. Graduates suggested that the school should take students for tour programs to be able to gain more field knowledge in line with the courses they are studying.
8. Encourage students to use online studies.
9. Employing more staffs/trainers to enhance completion of syllabus in time
10. Development of architectural class to teach more on designing i.e designing houses
11. Students to be exposed to materials testing and a library with research resources.
12. Linking students with individuals or companies in their field of study to encourage them and assist in acquiring job opportunities.
13. MNP should partner with other organizations to create job opportunities
14. The staff to be simple to relate with so us some students can explain some of the problems the school can help them solve.
15. The Institution to sign memorandum of understanding with international Universities, to allow us easy in credit transfer to those universities for further education.

FINAL COMMENTS FROM GRADUATES

1. “This is a great survey. Am a proud best graduand in civil engineering for class of 2021 and would recommend many to study in the institution.”
2. “I would highly recommend that you offer employment opportunities in the institution for school alumni.”
3. “Good survey because it's helps individual explain the relation between studies and reality on the ground after studies.”
4. “It is a good survey because it’s assisting the school to know how the graduates are doing on the field apart from being in school. And if they are exercising what they learnt in school out there in the field.”
5. “In Meru National there is construction going on, I would like to suggest to be considered in case of a job Vacancy.
6. “I appreciate your concern on how we're progressing out here. You should create fields for internship studying or graduating to improve on skills and experience.”
7. “It is a good follow up.”
8. “Good engagement. I feel valued.”

3.4.1 EMPLOYERS COMMENTS AND SUGGESTIONS

RECOMMENDATIONS

1. Making sure all trainees on attachments are assessed within the attachment period.
2. Ensure more practicals, lab tests and field works.
3. Exams should be practically based.
4. More exposure to modern technologies.
5. Ensure certificates are issued in time.
6. Increase the attachment period.
7. I would like to suggest that the school should be doing graduation exactly after the exams are out.

EMPLOYERS’ COMMENTS IN REGARD TO SURVEY

1. This survey is good as an evaluating tool.
2. A good source of customer feedback and constructive criticism.
3. Meru national polytechnic has great potential to grow and produce highly skilled individuals.
4. I am happy of MNP for it's the reason why am here I am (the employer is an alumni).

5. Generally it is good having views of your student who have gone through the course.

3.4.1 TRAINERS COMMENTS AND SUGGESTIONS

TRAINERS CHANGE RECOMMENDATIONS

1. For Higher diploma courses, encourage some level of specializations so as to avoid loading trainers with several unrelated teaching subjects.
2. “Some learners say that they might have done engineering and are willing to do an online course while working. I recommend that some courses in business and IT be organized in such a way that they can be offered fully online to cater for such demands.”
3. “Regulate the number of trainees (especially in engineering) in a given class to an ideal number for good study and training experiences. Especially for physical classes.”
4. The MNP institution and management should emphasis on skill training and more of lab work, site work to expose the trainees to the practical world.
5. Increase access to computers by providing more desktops to trainers.
6. Improve on learning guidelines, resources and materials for trainers.
7. Add more lessons on practicals than theory
8. To kindly involve the required department fully in the survey.

FINAL COMMENTS REGARDING THE SURVEY

1. This survey can also be modelled to capture specific subjects a trainer is comfortable with (be done at least twice a year). And data shared to the department for the purpose of identifying potential trade project supervisors as well as the gaps that need to be filled while hiring new personnel.
2. Trainers also need to be prepared in terms of CBET courses. The institution can offer external attachment opportunities in line with someone's area of interest to ensure that curricular is designed to match what is or is projected to happen in the industry.