KENYA COAST NATIONAL POLYTECHNIC

RESEARCH AND INNOVATION OFFICE

TRACER STUDY REPORT FOR FY 2021/2022

Kenya Coast National Polytechnic
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EXECUTIVE SUMMARY

Kenya Coast National Polytechnic (KCNP) formally Mombasa Technical Training Institute (Mombasa TTI) is located in the coastal town of Mombasa. It was established in 1950 as a Technical High School. Upon the introduction of the 8-4-4 system of education, it was elevated to a middle level technical college in 1984 to provide technical training for the middle level man power for both the private and public sectors of the economy.

Kenya Coast National Polytechnic is managed by Council appointed by the Government to represent the community, industrialists, professionals and various governmental departments. The Chief Principal serves as the Secretary to the Council. The Institution operates under the TVET Act 2013.

KCNP hierarchy of operations comprises ten academic departments (Applied Sciences, Business and Media Studies, Building and Civil Engineering, Electrical and Electronic Engineering, Fashion Design and Cosmetology, Hospitality and Tourism, Mechanical and Automotive Engineering, Medical Sciences, ICT and Secretarial Studies) and six non-academic departments namely Administration, Library and Information, Procurement and Supplies, Accounts and Audit, Dean of Students (student affairs) and Registry. The polytechnic has also established service coordination offices like ILO, Performance and Contracting, Research and Innovation, Career guidance and placement, short courses and linkages, sports office and other support offices. The institution manages a restaurant that serves students, staff and outside customers with meals and refreshment at a fee. The academic departments are headed by Heads of Department who coordinate affairs of the departments.

KCNP is ISO 9001:2015 quality management system certified. The system is an essential management tool in implementing better process control and flow of activities. As an element of performance contracting which was introduced primarily for improving efficiency and effectiveness in public institutions, ISO has contributed to provision and satisfaction of customers. KCNP emphasizes the importance of integrity and merit in their services.

The World Bank is financing the establishment and implementation of an East Africa Skills for Transformation and Regional Integration Project (EASTRIP), which involves three East African countries along the Northern Transport Corridor including Ethiopia, Kenya, and Tanzania. The borrower for this Kenya Project Component is the National Treasury for Kenya. The Kenyan government secured funds from the World Bank for strengthening selected TVET Centre of Excellence for high quality skills development in selected priority sectors. The principal implementing entity for the project component is the Ministry of Education, for Kenya through the National Project Coordination Unit.

EASTRIP aims to increase access, improve quality of technical and vocational education and facilitate regional integration. Kenya Coast National Polytechnic was competitively selected as one of the beneficiaries to strengthen skills in marine transport and port logistics priority sector. EASTRIP aims to increase access, improve quality of technical and vocational education and facilitate regional integration. The project is implemented through three key project development objectives (PDOs).

Under PDO 2, the project aims at Improving quality and relevance of TVET programs through annual tracer study for our graduates and built capacity of trainers for all other departments in the polytechnic to continue conducting tracer study. During the FY 2020/2021, the tracer study revealed that the employability rate was 65% against a target of 50%. With assistance of the Industry Advisory Board, KCNP developed 7 market driven Competency Based Curriculum against the expected target for year 3. Nineteen (19) members of staff were sent for industrial attachment to improve the quality of training. Further to this, the flagship centre has entered MOUs with 6 industries to support internship and also employment of their graduates.

The objectives of this survey were;

Graduates
The study assessed;
  i.   Attitude of the KCNP graduates regarding job quality, relevance, and effectiveness of their training in securing employment;
  ii.   Attitude of the KCNP graduates regarding business quality, relevance, and effectiveness of their training in supporting self-employment.

Employers
The study evaluated;
  i.   The perception of employers regarding the quality of the employees they have recruited from the pool of KCNP graduates;
  ii.   The perception of employers regarding the quality of the interns they have recruited from the pool of KCNP graduates.

Program Staff
The study examined;
  i.   The perception of KCNP staff regarding the relevance of curriculum and physical and administrative factors within the KCNP;
  ii.   The perception of KCNP staff regarding the quality of the teaching received by students before they graduate;
  iii. The perception of KCNP staff regarding their participation in external activities including innovation fairs, industrial attachments and exchange programs.

The population of the tracer studies included KCNP graduates, employers of KCNP graduates and KCNP program staff. A total of three hundred and fifty-eight (358) KCNP graduates, twenty-eight (28) employers of KCNP graduates and eighty-one (81) KCNP program staff. According to the target population of 925, the minimum sample size with a 5% margin error and a confidence level of 99% was found to be exhaustively representative with 467 respondents.

Findings

Graduates (358 Respondents)

1.1 Demographic information

a. Gender of traced graduates
  i.   53.5% of traced graduates were Male;
  ii.   45.0 % of traced graduates were Female
  iii. 3% Preferred not to say
b. Marital Status of traced graduates
  i.   77.3% of traced graduates were Single;
  ii.   21.2% of traced graduates were Married;
  iii. 0.8% Preferred not to say their status;
  iv.   0.3% were Engaged;
  v.   0.3% were Separated.
c. Age of traced graduates
  i.   37.7% of traced graduates were Below 25 years;
  ii.   60.6% of traced graduates were between 25 – 35 years;
  iii. 1.7% of the traced graduates were Above 35 years;
d. Level of Study
  i.   45.2% of traced graduates had Diploma qualification;
  ii.   43% of traced graduates had Craft qualification;
  iii. 11.8% of traced graduates had Artisan qualification;

1.2 Year of completion of study

The survey results indicated that at least 39% of the graduates which accounted for the highest response rate completed their studies in the year 2021. Another 33.52% completed in 2019 while 10.89% and 9.17% completed their studies in 2018 and 2019 respectively. Staggering 6% of our alumni completed their studies at least 48 months and beyond.

1.3 Present employment status of traced graduates

The average employability rate for those gaining direct entry into formal employment accounted for 41.19%, n = 148 graduates. That is, (M = 26.99%, n = 95 and F = 14.20%, n = 50) while 57.67% were unemployed. That, out of the 41.19% in formal employment, 26.56% are employed on full-time while 5.86% and 14.45% were in parttime and temporary employment respectively. Furthermore, the survey reveals that 14.06% of the graduates were in self-employment, while 37.11% of the unemployed were still seeking employment.

The **overall employability rate** was **77.75%,** N = 225, classified either as employed under formal contract terms, 41.19% of the graduates, self-employed, 14.06% of the graduates or unemployed but pursuing further studies, 22.50%. Graduates pursuing further studies are considered employed by World Bank classification of employment statuses.

The responses received further revealed that 45.2%, (n=160) graduated with Diploma qualifications, 43%, (n=152) and 11.8% (n=42) graduated with artisan qualifications. Out of these, 51.90% of the diploma graduates had secured employment, 33.33% of the craft graduates and 38.10% of the artisan graduates had secured employment as well. The relative rates of job transition by Diploma graduates were high. 66.67% of Craft graduates had not secured employment.

a.   Duration since Completion of Studies

Out of the total response received;

   i.   20.1% who completed study between 1 – 6 months, 39.01% had secured employment.
   ii.   15.5% who graduated between 7 – 12 months, 13.89% secured employment,
   iii.   25% who graduated between 13 – 24 months, 10.53% were employed
   iv.   25.6% who graduated between 25 – 36 months, 12.98% were employed.
   v.   Finally13.8% who graduated over 36 months ago were also tracked had 2.83% employed.

The survey findings revealed that within the **first six months of completion of the study, 39.01%** of the KCNP graduates had **secured employment** either by formal employment, in self-employment or pursuing further education. This represents at least 17.34% of the female graduates and 21.67% of the male graduates. The findings further reveal that a great percentage, 10.53% of graduates got employed after 13 – 24 months of study and completion and another 12.98% after 25 – 36 months of study completion.

b.   **Employment data on EASTRIP Priority Programmes**

From data Collected it was observed that;

   i.   27.3 %, n= (96) out of the total response of 352 represented EASTRIP priority programme courses. From this, 25%, n = 24 were Employed 7.29%, n= 7 self-employed, and the rest 55.21%, n= 53 were unemployed.
   ii.   It was also noted that from the sample of EASTRIP priority programme courses, (27.3%, n=96), Female accounted 69.8%, n=67, while 30.2%, n= 29 accounted for male respondents.
   iii.   Compared against overall employment outcome of 41.19%, the proportion of female who secured employment under the priority programmes was 29.15%, n=28, while male was 15.64%, n=15 on either case.

iv.   The overall employability rate when tallied against the total number of respondents who pursued **EASTRIP priority programmes accounted 44.79%, n=43**. However, when compared against the overall response rate across all the programmes, the rate obtained was 12.22%.

c.   Employment by sectors

At least 47.10% of the graduates were employed in the private sector. Under public sector employment, only 14.19% of the graduates secured opportunity while 7.74% were employed under SAGAs otherwise known as the Parastatals. Furthermore, 3.87% of the graduates were working with Non-governmental Organizations (NGOs). Proportion of the graduates in self-employment accounted for 20.00% while other unspecified sectors accounted for 7.10% of the graduate responses.

d.   Wage Employment of KCNP graduates by industry sector

The survey findings revealed that 18.92%, (n=32) were employed in the Electricity, Steam, Gas and Airconditioning sector. Accommodation and food services and Information Communication Technology each employed 9.5%, (n=16) graduates. Another 10.1% (n=17) of the graduates were employed in construction sector. Agriculture, Forestry and Fishing Sectors employed 3%, (n=5) graduates, while manufacturing 7.7% (n=13). 23.7% of the graduates are employed in other economic sectors.

e.   First job after study completion

From the study, 65.5% of the graduates consented that their current workstation was indeed their first employment while 34.5% did not agree. Reasons for staying in their jobs were cited as, 48% considered relevance of the employment to their skill as a motivating factor to maintain the same job. Another 36% considered salaries and benefits as a factor while 37.6% were driven by course program they studied

f.   Duration of Work with Current Employer

The survey revealed that 31.79% graduates who were in formal employment had stayed in their current work stations for less than 6 months, 26.49% had worked in their present worked station for about 6 – 12 months. In addition, 23.84% of the graduates had worked in their current workstation for about 13 – 24 months. 11.26% of the graduates had worked with their current employers for over 36 months. Amongst reasons for changing employer by the graduates included; Sought improved wage, sought improved working conditions, wanted a new challenge, Found employment in my area of specialisation.

g.   Means of securing employment

The survey results show that up to 23% of the graduates were recommended by someone to gain the employment; at least 20% responded to an advert and secured a chance. Further 15% secured a chance through individual push and walk-ins to the employer. 12% of the graduates secured employment through door-to-door job hunting while 10% had connections.

h.   Monthly salary at present Job

The study shows that 71.3% of the graduates earned below Kshs. 20,000 per month. Another 28.0% earned between Kshs. 20,000 – 50,000 and only 0.6% earned between Kshs. 50,000 – 75,000. None earned above Kshs. 75,000. The wages were considerably low compared to other professional qualifications.

i.   Number of efforts made to secure employment

The survey findings revealed that 44.94% (n=71) of the graduates contacted 0 – 5 employers before securing employment. At the same time, 21.52% (n=34) of the graduates contacted 6 – 10 employers before securing employment. 18.35% (n=29) of the graduates secured employment immediately after completing their attachment while 4.43% (n=7) said that organisations offered them a chance for employment after course completion. Some 5.7% (n=9) of the graduates contacted over 20 employers.

j.   Employment in Relevant Skill area

The survey revealed that 55.4% of the graduates were employed in the program areas they trained in while 42.8% were not employed in their program areas of study. The proportion of the graduates who were not employed in their program of study accounted for 42.8% but rather sought paid up employment in other formal employment setup contrary to the program area of study. These categories of graduates were considered to have made a change in their careers. The reasons for career change were cited as;

The factors that motivated career change included;
  i.   65.82% suggested lack of job satisfaction and other factors not specified;
  ii.   16.46% suggested lack of career progression;
  iii. 5.06% attributed poor working conditions.

1.4 Graduate Present Situation;

From the findings, the graduates were engaged as follows;
  i.   75.47% of the unemployed graduates were currently looking for employment;
  ii.   12.26% of the unemployed graduates continued to study;
  iii. 0.94% of the unemployed graduates were busy with upbringing their families.

1.5 Further Education/Training

Results have been taken from a sample of 341 KCNP graduates. 25.5% (n = 87 KCNP graduates) "Participated in Further Training". 74.5% (n = 254 KCNP graduates) "did not participate in further training". The proportion of the unemployed graduates but pursuing further education constituted 22.5% disintegrated into M = 10%, n=20 and F = 12.5%, n=25. In addition, 77% of the KCNP graduates or n = 154 were not employed and did not pursue further education. 2.4% suggested family influence, 21.6% were persuaded by job security while 3.2% suggested the relative proximity of the workplace to their residence.

1.6 Relevance of Training Received at KCNP

From the survey findings, 47.68% of the graduates said that the training they received at KCNP were very relevant and another 32.82% acknowledged that the training was relevant. In total, 80.50% acknowledge that training offered was relevant. At the same time, 2.17% and 3.41% said the training was slightly relevant and irrelevant respectively. 13.93% of the graduates felt that the training was fairly relevant. The survey findings further revealed that 61.99% of the graduates worked in an area related to the course they studied. However, 38.01% of the graduates were formally employed in other sectors not related to the area of study

1.7 Adequacy of KCNP Training, Graduate Employability and Work Competency

In the context of this tracer study survey, 30.18% strongly agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 42.75% also strongly agreed that they could easily be trained to improve their level of skill at work. In addition, 42.81% agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 38.04% also agreed that they could easily be trained to improve their level of skill at work. The graduate's relative ability to perform at work account of the adequate training received at KCNP was 72.99% and on account of being easily trained to improve their level of skill was 80.79%. This confirms the work readiness and adequacy of the training at KCNP. Furthermore, 34.39% strongly agree that the entrepreneurial skills imparted adequately prepared them for self-employment.

1.8 Employment Considerations

The graduates considered the following factors to be **Very Important** when applying for employment;
  i.   Matching study program with professional qualification, 52.05%
  ii.   Better grades in the chosen area of study, 50.81%

iii. Basic skills on social and individual competencies, 49.74%
iv. Reputation of the TVET College, 47.78%
v. Relations and connections, 47.74%

The graduates also considered the following factors to be **Somewhat Important** when applying for employment;

Deficit of employees in their profession, 23.37%

1.9 Extent of Competency Development

From the survey results, **to a great extent**, the training helped the graduates to;

i. Develop the social competencies and individual attitudes that are required in the world of work, 33.66% of the graduates;
ii. Lay foundation for self-employment, 32.36% of the graduates;
iii. Develop practical skills required for the profession, 28.45% of the graduates;
iv. Another 32.38% of the graduates are overall satisfied with the training they received.

From the survey results, **to a little extent**, the training helped the graduates to;

i. Acquire theoretical knowledge, by 20.91% of the graduates;
ii. Get along with life independently, 17.81% of the graduates;
iii. 19.23% of the graduates were to a little extent not satisfied with the training.

1.10 Gaps in KCNP Training

The findings of the study revealed that in the course of graduate study;

i. 37.45% of the trainers lacked practical skills;
ii. 31.64% of the graduates felt that the materials and equipment used for training were either insufficient, not operational, outdated or just not available;
iii. 13.82% of the trainers lacked commitment in their work. Perhaps attributed to high rates of absenteeism, mismanagement of time or other factors;
iv. 9.09% of the graduates were of the feeling that dissemination of the theory knowledge was insufficient;

Employers (28 respondents)

2.1 Company Profile

From the responses;
i. 7.1% of the employers who responded had more than 1000 employees, predominantly large companies of more than 499 employees;
ii. 14.3% of the employers who responded had between 500 – 1000 employees, considered as large companies;
iii. 28.6% of the responses were submitted by medium sized companies of less than 500 employees;
iv. 46.5% of the responses were submitted by small sized employers of less than 100 employees;

From the findings, 39.3% *(n = 11) of the employers confirmed that the they were based in Head Office while another proportional size, 39.3% were working in branches. 14.29% of the employers were neither based in head office nor branches. 3.57% of the respondents chose not to respond.

2.2 Industry Sector Analysis

The survey findings revealed that the principal activities of the employers who submitted back the questionnaires were as follows;

i. 50.00% offered other services;
ii. 21.43% offered Transportation, Communications, Electric, Gas and Sanitary services;
iii. 10.71% were based in public administration;
iv. 7.14% offered manufacturing services;
v. 3.57% ventured in Blue Economy portfolios including Agriculture, Forestry, Fishing Services

2.3 Status of the Industry Ownership

The survey findings reveal that 39.29% of the employers were drawn from the pool of public sector, another 39.29% of the employers comprised private sector employers. The SAGAs constituted 14.29% of the employers while 3.57% were NGO employers. 3.57% of the respondents chose not to answer the question.

2.4 Number of TVET graduates working for the company/organization

a. Employment Rate of TVET Graduates

The survey findings revealed that up to 92.9% of the industry employers prefer TVET graduates. These may be attributed to the skill set and competency levels of the graduates while at the same time industry consider TVET graduates not too demanding in terms of labour costs. 3.6% of the employers did not answer the question.

b. Number of TVET graduates recruited

The survey findings revealed that 35.71% of employers had recruited less than 5 TVET graduates in their organisations. 17.86% of the employers recruited 10 to less than 25 graduates in their organisation. Employers who contracted 25 to less than 50 graduates constituted 10.71%. In addition, 17.86% of the employers recruited more than 100 TVET graduates.

c. Proportion of Female TVET Graduates Employed

Up to 92.86% of the employers acknowledged that in the spirit of gender inclusivity, they do recruit female TVET graduates. 3.57% of the employers chose not to answer the question. A majority of the employers employed less than 5 female TVET Graduates which accounted for 53.57% of the sample. 17.86% of the employers recruited 5 to less than 10, while at the same time 10.7% recruited 25 to less

than 50. Employers who engaged more than 100 TVET graduates accounted 7.1% and 50 to less than 100%, employed 7.14%. There was no feedback from 3.57% of the employers.

2.5 Proportion of Industries that employed KCNP Graduates

The survey further revealed that 53.57% of the employers recruited less than 5 KCNP graduates. Another 10.71% of the employers recruited 5 to less than 10 KCNP graduates, while 7.15% of the employers recruited 25 to less than 100 KCNP graduates. 14.29% of the employers did not recruit any KCNP graduate due to the following reasons;

i.   Didn't get one;
ii.   Never seen one;
iii.   We have not come across applicants from KCNP;
iv.   Another respondent said it was beyond their capacity to answer;
v.   A respondent claimed to be KCNP Alumni;
vi.   Employer said most have low qualifications i.e., certificate and diploma. The employer recommended they be encouraged to take further studies;

2.6 Procedure for sourcing TVET Graduates

The survey results revealed that 32.14% of the employers sourced TVET graduates through internet advertisements, another 21.43% of the employers recruited through direct application by the graduates. At the same time, 17.86% of the employers recruited through advertisements in newspapers (daily newspapers and special periodicals).

2.7 Employer Considerations for TVET Graduate
The survey revealed that the employer considered these attributes **Very Important** during the selection and recruitment of the graduates;
i.   69.23% emphasised on the field of graduate study;
ii.   59.26% considered subject area of specialization;
iii.   46.15% laid emphasis on final examination subjects;
iv.   50% of the employers' stresses on practical experience;
v.   50% relies on behaviour during the interview or rather the interview outcome and;
vi.   65.38% considers recognise the TVET KNEC Certificate.
The survey findings also revealed that the employers consider the following factors as **Slightly Important** during the selection and recruitment of the TVET graduates;
i.   The grades of examination at the TVET Institute, 3.85%;
ii.   Main focus of subject area of specialization, 3%;
iii.   Experience abroad, 19.23%.

2.8 Provision of On Job Training (OJT)
The study findings reveal that 67.86% of the employers prefer OJT for the fresh TVET graduates they recruit while 28.57% of the employers do not prioritize it at all. The findings are consistent with the employer considerations favouring graduates with practical experience while also improving the work experience of the graduate employees as discussed in the employment considerations by the employer and employee.

2.9 Duration fresh graduate takes to become professionally competent
The study findings showed that 25% of the employers acknowledged it takes less than 3 months for KCNP TVET graduates to be competent in the industry. 25% of the employers further revealed that it takes 3 months to less than 6 months and 6 months to less than 9 months for graduates to be professionally competent. 10.71% added that duration of competency varies between 9 months to 12 months and 12 months or more. However, it was understood that graduates from different TVET institutes require different durations to be able to carry out professional tasks properly.

2.10 Induction of the TVET graduates at workplace

It was evident that 50% of the employers acknowledged that new TVET graduates get help from experienced colleagues for them to settle at the workplace 28.57% added that they take the graduates through an extensive formal/induction training course for them to be able to assume tasks normally. 10.71% of the employers asserted that TVET graduates assume tasks without any support from experienced colleagues.

2.11 Assessment of Competency and Satisfaction levels by the employer

On level of competency of the TVET graduates, 53.57% of the employers ranked the competency level as High while 39.29% ranked it as fair.

On Satisfaction with TVET graduates, 53.57% of the employers agreed that they were satisfied with the TVET graduates they recruited. Another 39.29% of the employers strongly agreed that the TVET graduates met their expectations.

On ability to train and adopt to ever changing job demands, 67.86% of the employers strongly greed that TVET graduates are trainable and adaptable to changing work environment and another 28.57% agreed to the question

2.12 Comparison of TVET graduates Kenya with those of other countries

From the study, 64.29% of the employers said that they had employed TVET graduates from other countries. 28.57% of the employers of the employers said they did not employ graduates from other countries while 7.14% of the employers chose not to reply.

The 64.29% of the employers who employed the foreign TVET graduates commented on their work competency as follows;

i. 21.43% of the employers said they had specialised training;
ii. 21.43% of the employers said they were better;

The 28.57% of the employers who said they did not employ graduates from other countries commented that;

i. 28.57% of the employers said they were the same;
ii. 7.14% of the employers said they were less competent;

Program Staff (80 responses)

3.1 Response Rate

The Electrical and Electronics department and Business and Media Studies department had the highest response rate which accounted for 18.18% of the total number of responses received. The Secretarial and Liberal Studies departments had the lowest response rate of 1.30%. Responses from the polytechnic administration constituted 2.60% of the total responses received. Other departments responded as follows; Medical Sciences, 5%, ICT 6.25%, Hospitality and Tourism, 11.25%, Fashion Design and Cosmetology, 11.25%, Applied Sciences and Building and Civil Engineering each 7.50%. 15 out of the 80 responses received were classroom tutors and this represented 18.75%. Other officers who participated in the survey included, the Chief Principal, Dean of Students, 3 Exam Coordinators, 5 Attachment Coordinators and Deputy Dean of Students. Trainers also had additional roles they coordinate at the polytechnic. 6.25% were Departmental Attachment Coordinators as they work closely with The Polytechnic Liaisons Officer to prepare the students to go on attachments.

3.2 Length of Service

From the responses, 25.3% of staff had served at the Polytechnic for a period of between 2 to 4 years. Only 6.3% of the respondents had served for between 7 to 10 years. More than half of the respondents which accounted for 65.82% had served for not more than 4 years.

3.3 Level of program accreditation

From the sampled data, 70% of the respondents said that the courses they taught were not internationally accredited, which means that the courses being offered were only recognised nationally. 22.50% said that the courses were internationally accredited and 7.5% chose not to answer. However, 68.8% of the respondents agreed that TVET courses were recognized by professional associations. 10.0% responded that TVET courses were not recognized by professional associations.

3.4 Periodical Review of TVET Courses

From the survey, 68.4 % of the respondents agreed that TVET courses at Kenya Coast National Polytechnic are reviewed while 31.6% were of the opinion that TVET courses are not frequently reviewed at the college.

33.75%, n=27, said that it takes over 60 months before a curriculum is reviewed. 7.50% or n=6, suggested that reviews are conducted after 48 months to less than 60 months while 12.50% or n=10 suggested 24 months to less than 48 months. 22.5% of the total respondents however chose not to answer because either did not know how long it takes before the curriculum is reviewed or actually there has been no review during their stay at the polytechnic.

39.66% of the staff supported conducting industry labour market surveys as a tool for curriculum review. This would be important because it would aid in matching the industry expectation with the student's skill set. 29.31% of the respondents chose to use occupational standards. 12.07% of the respondents supported the use of recommendations from tracer studies while 6.90% chose not to answer.

The respondents further highlighted the following reasons for slow uptake of course reviews by either the polytechnic or the regulators;

   i. Inadequate resources to facilitate the process;
  ii. The curriculum is provided by KICD & the trainees are expected to be examined by KNEC. The Ministry of Education doesn't provide forums to discuss the relevance of the course content;
 iii. Because they were developed by KICD and they are the ones mandated to review;
  iv. It is seen as an Initiative of curriculum developers i.e., KICD, CBET;
   v. The courses are under the government guidelines and it can take long before reviewing is done;
  vi. There was no negative feedback from what is already being offered
 vii. Failure of KICD to advise;

viii.	Because reviewing requires thorough research to identify areas of need;
ix.	Lack of personnel;
x.	Due to lack of incentives;

3.5 Availability of Training Aids

From the survey, to **Very High Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;
i.	30.67% agreed that Industrial Attachment is a component in training at KCNP;
ii.	37.33% said that course curriculums are available for training;
iii.	21.62% acknowledged the availability of practice workshops and classrooms;
iv.	18.06% also added that learner log books are available and aids training;

From the survey, to **Some Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;
i.	40.79% were concerned about access workshops/seminars;
ii.	40% raised an issue on involvement of local employers;
iii.	38.57% lamented on study packs availability;
iv.	35.62% also added concern on industrial visits;

From the survey, to **Moderate Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;
i.	30.26% had concerns on Access to Qualification Standardisation Workshops/seminars (TVETA, CDACC, KNQA and others);
ii.	26.32% commented on availability of tools and equipment;
iii.	32.47% highlighted the availability of Recommended Text Books (including Reference Materials).

3.6 Study Conditions and Provisions

The survey findings reveal that the program staff Agree on the following study conditions;
i.	52.11% of the program staff involve theoretical training related to the occupation;
ii.	54.05% of the program staff acknowledge the involvement of students in Innovation, Symposium, Trade fair and Research;
iii.	48.61% of the program staff administer practical use of computers;
iv.	47.30% of the program staff are involved in practical use of workshop/laboratory tools;
v.	46.58% of the program staff are involved in practical use of machines and equipment;
vi.	52.70% of the program staff are involved in practical use of materials and parts;
vii.	62.50% of the program staff are involved in theory and practice of equipment maintenance/calibration;
viii.	50.00% of the program staff ensure that graduates understand and produce drawings;
ix.	51.35% of the program staff are involved in use of written instructions and working guides (manuals);
x.	53.42% of the program staff have diverse knowledge of the industry;
xi.	44.59% of the program staff are involved in discipline and adherence to work ethics;
xii.	42.47% of the program staff are involved in careers advice;

Recommendations

Quality and relevance in TVET training foregrounds the importance of knowledge and skills acquisition at the Polytechnic. The polytechnic should continually undertake program review to determine their effectiveness, currency and viability both in terms of discipline-based knowledge and cross-cutting skills. The polytechnic should identify and encourage innovative programs that address the changing workforce needs in order to keep pace with the competitive and continually evolving global environment.

Changes recommended by Graduates to improve KCNP Training
Theoretical Learning;
    i.   Increase study time;
    ii.   Align theory classes to match practical classes;
    iii.   Improve on effective communication strategies;
Practical Study
    i.   Increase Practical Study time;
    ii.   Increase industry visits;
    iii.   Add more practice lessons;
    iv.   Equip workshops and laboratories;

Training and Reference Materials
    i.   Keep stock of training materials in the workshop;
    ii.   Make the reading materials available and accessible at all time;
    iii.   Revision materials should be increased;
Training Needs and Mode of training
    i.   Introduce School Based, Weekend and/or evening Training classes;
    ii.   Trainer Commitment is necessary;
    iii.   Employ new methods of content delivery;
    iv.   Increase the number of trainers;
    v.   Recruit marine trainers;
    vi.   Introduce STCW Courses;
    vii.   Introduce Swimming Skills;
    viii.   Introduce Higher Diploma Courses;
    ix.   Scrap long holidays for trainees since syllabus coverage needs time;
    x.   Incorporate Employability and Marketing Skills in Training;
    xi.   Ensure timely delivery of relevant skills;
    xii.   Possession of Driving licence should be a requirement for both trainee and trainer;
    xiii.   Introduce training on Indian and Mexican Meals;
    xiv.   Training durations should be reduced;
    xv.   Introduce modern programming languages for ICT and Engineering students;
    xvi.   Scrap Diploma in Accountancy and replace with CPA;
Graduate study completion and graduation
    i.   Procure decent gowns and mortarboard for graduates and match with programs;
    ii.   Organize graduations annually;
    iii.   Sensitize graduates on alumni procedures;
Infrastructure Needs
    i.   Library Space needs;
    ii.   Classroom Space needs;
    iii.   Workshop Space Needs;
    iv.   Marine Swimming Space;
    v.   LAN and Hardware needs;
    vi.   Classroom furniture;
The training graduates received from KCNP needed improvements so as to realize quality and relevance;

Training areas for Improvement

Significant Proportion of training that deserves 100% Improvement
   i.   Improvement in Theory training, 26.96%
   ii. Provision of instructional manuals, 21.03%
   iii. Upgrading the teaching delivery methods, 20.00%
   iv. Coverage of course content, 19.20%
   v.   Provision of relevant textbook, 18.92%

Significant Proportion of training that deserves 50% Improvement
   i.   Improving training on practical skills, 47.40%
   ii. Beefing up workshop equipment, 46.36%
   iii. Empowering Industrial Attachments, 41.50%
   iv. Equipping trainers' laboratory skills, 40.58%
   v.   Improving trainers' practical skills, 40.27%

Significant Proportion of training that deserves 0% Improvement (no improvement)
   i.   Decrease Training duration, 29.89%

Changes recommended by the Program Staff

On Industrial Attachment;

● Sign more MOUs with industries for internship
● Strengthen staff industrial attachment and extend the duration of the attachment

On Practical Training;

● Increase number of laboratories for practical assignments;
● Initiate dual training that involves equal time in the industry and in school;
● More hands-on activities and work closely with the professional bodies and employers;
● Use of current tools and equipment used in the market;
● More improvements in setting up a computer and Telecommunications laboratory in the Electrical department;
● Emphasis more on practice by acquiring the required training models and equipment especially in automotive engineering. Each enrolment should have a functional vehicle for practice;
● Improve the CNC machines and separate training workshops with production workshops.

On Curriculum Review;

● The curriculum should be reviewed to suit the technological changes;
● Regular revision of the curriculum focusing on more practical aspects in teaching by providing materials as requested by trainers in their department;
● Should be competency-based and industry demands driven;

On Training and Delivery;

● Recruitment of permanent trainers;
● Motivation of staff in the course of training;
● Invite experts to assist in technical training;
● Capacity building for trainers;
● The management should ensure that there are enough learning materials for use by both trainers and trainees;
● Boost the resource centre with a variety of materials;

- Standardise the number of trainees per class to 30 in technical areas;
- Introduce more market-driven CBET courses that will enable graduates to easily secure jobs or be self-employed;
- Reduce course duration for CBET courses to churn out graduates quickly to the various industries;

On Research and Innovation;

- Exhibit the work done by the students, this will motivate learners and they will have the courage to even work harder in their field of study

Future Surveys Comments/Recommendations
- Use the trainees to trace their classmates;
- Include only relevant questions to the study;
- A special committee should be set up to handle a tracer study yearly;
- The report should be made available to key stakeholders in the education sector;
- Exclude confidential information e.g., designation, added responsibility to protect the respondents' responses;
- Study the conditions under which the trainer works and how it influences delivery;
- Conduct more surveys which should cover a wide spectrum of training aspects including the need for continuous professional development opportunities;
- Incorporate the challenges faced by the trainers during the training period. It influences the competencies imparted;

Employer Suggestions on how Training can be improved

Training Equipment

- Equip the institution with modern equipment

Industry Linkages

- Linking students with the industry
- TVET institute should involve the industry during training

Practical oriented training

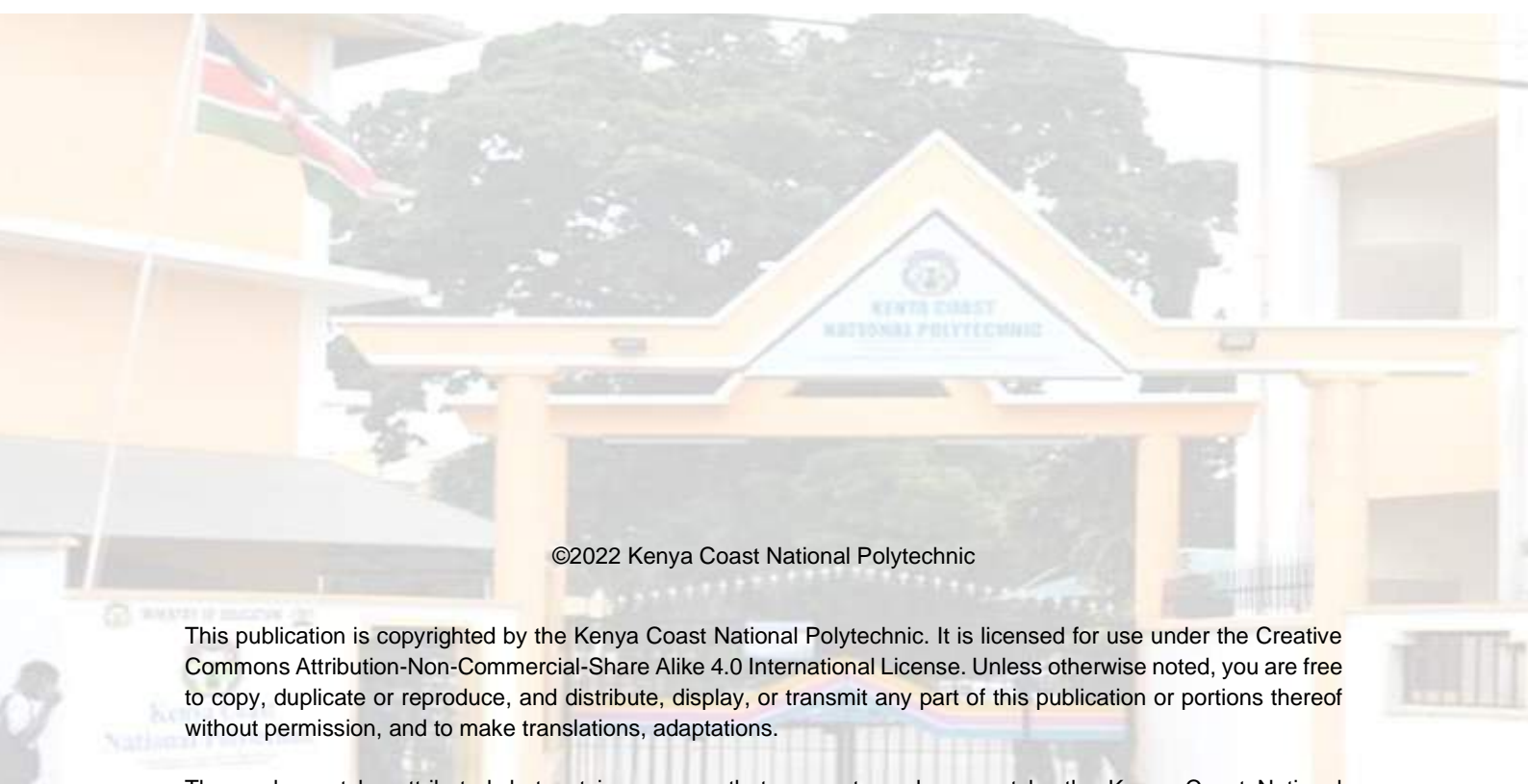- More emphasis should be placed on practical

Human resource

- Use of qualified professionals to implement a trade area of specialisation
- More trainers are needed to improve and train more trainees

Improved training

- Involve life skills training

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FOREWORD

Anne Mbogo (Mrs.)
Chief Principal

Kenya Coast National Polytechnic (KCNP), formerly Mombasa Technical Training Institute (MTTI), is a public Technical and Vocational Education and Training (TVET) institution. KCNP was established in 1950 as a Technical High School. Upon the introduction of the 8-4-4 system of education, it was elevated to a Technical Training Institute in 1984. The institution acquired its National Polytechnic status through Kenya Coast National Polytechnic Order, 2016 as published in the Legal Notice No. 88 and in conformity with the TVET Act No. 29 of 2013.

Through the support of the Government of Kenya, the Polytechnic is equipped with state-of-the-art equipment in Engineering, Hospitality, Fashion Design, Cosmetology as well as ICT. The Polytechnic is on the airwaves broadcasting in Mombasa via Mvita FM 106.2 Radio Station established in collaboration with Mvita NG-CDF.

The Polytechnic has seen tremendous growth in terms of courses offered and student enrolment; from an initial population of 23 students and 24 teaching staff in 1990 to over 7500 students and over 150 teaching staff presently. The polytechnic rallies behind the national concept that emphasizes on the place of TVET by increasing access, quality and relevance to all in order to improve the welfare of people, society and the nation which will thus become an effort for the nation building process. This is anchored in the government development blue print; The Kenya Vision 2030 and big 4 agenda which is being implemented through successive five-year medium-term plans, currently the under Medium Term Plan (MTP) III. The Kenya Vision 2030 aims to transform Kenya into an industrialized middle-income country offering a high quality of life to all the citizens.

To meet the government development agenda, the polytechnic offers different programs with multiple subjects in 10 departments to meet the labour market demands. This aims basically to uplift the standard of the TVET education so that the graduates who pass out from KCNP will have the closer access to the labour market and hence uplift their socio-economic level. The tracer study is intended to trace graduates soon after completion of study or graduation from the polytechnic to their place of employment or self-employment. The study further interrogates the employer on the quality of the graduates we churn out as well as the program staff on inadequacies in curriculum implementations.

Kenya Coast National Polytechnic (KCNP) was one of the five TVET institutions competitively selected by the World Bank and government of Kenya to be a RFTI in January 2018 under EASTRIP. EASTRIP project was designed to address challenges in skills shortage and mismatch, by providing technical, financial and industry partnership to increase the access and improve the quality of training

programs in 16 selected Regional Flagship TVET Institutes (RFTIs) in Kenya, Ethiopia and Tanzania, to facilitate regional integration by providing a regional platform to promote exchanges of policies and practices, students and faculty mobility and harmonization of standards and qualifications.

This report forms the fourth annual tracer study survey in line with the Project Development Objective II, which aims at Improving Quality and Relevance of TVET programs through annual tracer study for our graduates and building capacity of trainers for all other departments in the polytechnic to continue conducting tracer study. The aspect of relevance, quality and adequacy of training is addressed through this process which also forms the basis of this exercise.

I therefore urge the polytechnic staff and management, policy experts, government agencies and line ministries, TVET institutions, stakeholders from the industry and non-governmental organisations as well as development partners to use this report as point of reference for effective decision-making processes. This report will enable the training and labour market policy makers decide on the configuration of education and training systems, employment policies and investments. Training institutions will decide on the type and content of the training courses to be delivered. Individuals and their families will also make decisions on their own education and training, while employers take decisions on how to enhance the skills of their workers.

Anne M Mbogo (Mrs.)
Chief Principal

ACKNOWLEDGEMENT

Compilation of the 2021/2022 Tracer Study Report would not have been possible without the immense contribution of several people.

First, I would like to thank the Chief Principal, Anne Mbogo (Mrs.), Polytechnic Council Chairman, Prof. James F Kanyua and the entire Polytechnic Council for their support to ensure successful delivery of the report.

Secondly, I would like to thank the Departmental Attachment Coordinators for their steadfast support during the compilation of the graduate database, data collection and processing. Much appreciation also goes to the Polytechnic Registrar for providing valuable secondary data for the survey.

I would also like to thank KCNP staff, graduates, public and private company employers for providing data on the thematic areas which have been analysed in this report and for working closely with the Polytechnic to validate the data so that the report captures accurately all the information they shared. In addition, I gratefully acknowledge the efforts by the EASTRIP Team members for their wise counsel, engagement and determination to provide much needed resources during the study.

Last but certainly not least, I would like to express my deepest appreciation to the time and expertise devoted to reviewing of the document by the Tracer Study Technical Committee for their hard work and commitment to the task of producing this important report. These include Emma Wangari – Research, Dissemination and Outreach Officer, Felix Omondi – Intellectual Property and Commercialisation Officer and team of Data Analysts comprising Geoffrey Kirui, Joseph Omuruli, Linda Kajuju and Mathew Mutinda who worked tirelessly to deliver this report.

Michael Njogah
Chair – Research, Innovation and Alumni Committee (RIAC)

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ABBREVIATIONS

AAK	Architectural Association of Kenya
AKLMSO	Association of Kenya Medical Laboratory Scientific Officers
APS-K	Associate in Procurement and Supply of Kenya
CBET	Competency Bases Education and Training
CCNA III	Cisco Certified Network Administrator Level III
CCTV	Closed Circuit Television
CDACC	Curriculum Development Assessment and Certification Council
CICT	Certified Information Communication Technologists
CNC	Computer Numerical Control
CPA	Certified Public Accountant
DLI	Disbursement Link Indicator
EABL	East African Breweries Limited
EASTRIP	East Africa Skills for Transformation and Regional Integration Project
EBK	Engineers Board of Kenya
ECDE	Early Childhood Development Education
EPZ	Export Processing Zone
FTC	Fixed Term Contract
FY	Financial Year
HFG	HIV-Free Generation
HIV	Human Immunodeficiency Virus
IAB	Industry Advisory Board
ICPAK	Institute of Certified Public Accountants of Kenya
ICS	Institute of Certified Secretaries, Institute of Chartered Shipbrokers
ICT	Information Communication Technology
IEEE	Institute of Electrical and Electronics Engineers
IEK	The Institution of Engineers of Kenya
IET	The Institution of Engineering Technologist and Technicians of Kenya
ILO	International Labor Organization
ISCED	International Standard Classification of Education
ISIC	International Standard Industrial Classification
ISK	Institution of Surveyors of Kenya
ITU	International Telecommunication Union
KARLO	Kenya Agricultural and Livestock Research Institute
KBC	Kenya Broadcasting Corporation
KCNP	Kenya Coast National Polytechnic
KEBS	Kenya Bureau of Standards
KEMFRI	Kenya Marine and Fisheries Research Authority
KEMRI	Kenya Medical Research Institute
KenGen	Kenya Electricity Generation Company
KENHA	Kenya National Highways Authority
KERRA	Kenya Rural Roads Authority
KETRACO	Kenya Electricity Transmission Company
KETRB	Kenya Engineers and Technologists Registration Board
KICD	Kenya Institute of Curriculum Development
KISM	Kenya Institute of Supplies Management
KMLTTB	Kenya Medical Laboratory Technicians and Technologists Board
KNBS	Kenya National Bureau of Statistics
KNQA	Kenya National Qualification Authority
KPA	Kenya Ports Authority
KPLC	Kenya Power and Lighting Company
KPSGA	Kenya Professional Safari Guides Association
KTTC	Kenya Technical Trainers' College
KUCCPS	Kenya Universities and Colleges Central Placement Service
KURA	Kenya Urban Roads Authority
LAN	Local Area Network
MIS	Management Information System

MOU	Memorandum of Understanding
MRM	Mabati Rolling Mills
MTP	Medium Term Plan
MTTI	Mombasa Technical Training Institute
NA	Not Applicable
NCA	National Construction Authority
NCPB	National Cereal and Produce Board
NGO	Non-Governmental Organization
NHIF	National Hospital Insurance Fund
NNAK	National Nurses Association of Kenya
NSE	Non-Standard Employments
NYS	National Youth Service
OEC	Open-Ended Contract
PDOs	Project Development Objectives
PPB	Pharmacy and Poisons Board
PSS	Private Security Services
RCE	Regional Center of Excellence
RFTI	Regional Flagship TVET Institutes
SAGAs	Semi-Autonomous Government Agencies
SDGs	Sustainable Development Goals
SPSS	Statistical Packages for Social Sciences
STCW	Standard Of Certification and Watch-keeping
STEM	Science, Technology, Engineering and Mathematics
TPA	Tourism Professional Association
TS	Tracer Studies
TVET	Technical Vocational Education and Training
UNESCO	United Nations Education, Scientific and Cultural Organization
	UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training

INTRODUCTION

1.0 Background

The World Bank is financing the establishment and implementation of an East Africa Skills for Transformation and Regional Integration Project (EASTRIP), which involves three East African countries along the Northern Transport Corridor including Ethiopia, Kenya, and Tanzania. The borrower for this Kenya Project Component is the National Treasury for Kenya. The Kenyan government secured funds from the World Bank for strengthening selected TVET Centre of Excellence for high quality skills development in selected priority sectors. The principal implementing entity for the project component is the Ministry of Education, for Kenya through the National Project Coordination Unit.

EASTRIP aims to increase access, improve quality of technical and vocational education and facilitate regional integration. Kenya Coast National Polytechnic was competitively selected as one of the beneficiaries to strengthen skills in marine transport and port logistics priority sector. EASTRIP aims to increase access, improve quality of technical and vocational education and facilitate regional integration. The project is implemented through three key project development objectives (PDOs).

Throughout the world, different countries are trying to create closer synergies between the needs and purposes of their education training systems, the local and regional labour markets, and their national economies. This is largely a result of an international consensus which, though contested, argues that people and organisations need to embrace new skills and knowledge at regular periods in order to meet the challenges of a much more dynamic and unstable economic climate (Unwin, 2003). Such developments ask important questions of national education systems in terms of curriculum content, teaching and learning processes, skills acquisition and expertise of educational professionals. In an environment where there is lack of a systematic and accurate examination of employment outcomes of TVET graduates, it is difficult to establish any synergy between the economy and labour markets. In such cases, tracer studies could be used as a means of maintaining curriculum relevance and providing targeted benefits to graduates to enhance marketability of TVET programs.

Adequate knowledge on employment outcomes of TVET graduates could assist in formulating policy towards combating some of social problems such as unemployment.

The East Africa Skills for Transformation and Regional Integration Project (EASTRIP), funded by the World Bank, is designed to address challenges in skills shortage and mismatch, by providing technical, financial and industry partnership to increase the access and improve the quality of training programs in 16 selected Regional Flagship TVET Institutes (RFTIs) in

Kenya, Ethiopia and Tanzania, to facilitate regional integration by providing a regional platform to promote exchanges of policies and practices, students and faculty mobility and harmonization of standards and qualifications.

Kenya Coast National Polytechnic (KCNP) was one of the five TVET institutions competitively selected by the World Bank and government of Kenya to be RFTI in January 2018 under EASTRIP. KCNP is therefore developing a regional centre of excellence in Marine Transport & Port Logistics, a centre which aims to develop competent graduates for the maritime sector.

The polytechnic endeavors to offer market relevant and industry driven curriculum to the graduates. This quality objective is achieved by tracking the response of the graduates in the industry as well as their employers. The polytechnic is therefore mandated to conduct annual tracer study to determine the status of their graduates in the industry. The polytechnic draws from a pool of qualified staff who have undergone vigorous training to carry out the tracer study survey in their programs and make recommendations that can have impact.

Under World Bank Expenditure Framework, Tracer Study is part of the DLIs that support and incentivize the implementation of the EASTRIP Project. In Project Development Objective II, the project aims at Improving Quality and Relevance of TVET programs through annual tracer study for our graduates and building capacity of trainers for all other departments in the polytechnic to continue conducting tracer study.

The tracer study team was expected to;

i. Conduct tracer studies (TS) for a sample size of 800 graduates with a mixed cohort (2018, 2019, 2020 and 2021) drawn from ten (10) academic departments (including, Applied Sciences, Business and Media Studies, Building and Civil Engineering, Electrical and Electronic Engineering, Fashion Design and Cosmetology, Hospitality and Tourism, ICT, Mechanical, Marine and Automotive, Engineering, Medical Sciences and Secretarial Studies;

ii. Collect data from 75 staff on quality of training and areas based on identified gaps, both long term and short term based on the proposed training programs for the Marine Transport & Port Logistics and general management and governance; and

iii. Identify the gaps in training for the TVET graduates working for the Maritime industries and other areas by collecting data from at least 50 industry partners.

This report will assist KCNP to transform into RFTI and a Regional Centre of Excellence (RCE) in Marine Transport & Port Logistics and enable KCNP to develop industry-recognized TVET programs that are demand driven, highly specialized and offer industry-oriented skills.

The general objective of this project will be to track down KCNP TVET graduates and establish the impact of employment opportunities.

1.1 Tracer Study Framework

Graduates
- Employed
- Self-employed
- Interns/Cadets
- Further studies
- Unemployed

KCNP Program Staff
- Ensure Curriculum enhancement
- Provide Physical & Administratvie Facilities
- Produce Competitive Graduates

KCNP Employers
- Advise on Quality and Relevant skills needed in the industry
- Feedback on Skills acquired
- Feedback on Graduate performance (employed, internship and self-employed

Figure 1; Tracer Study Framework

This study was premise on the fact that KCNP graduates have to be appraised relative to the skills they acquired from their training. How they fare in the labour market after graduation holds an important aspect in determining the relevance and quality of the curriculum. The acquired knowledge and skills coupled with linkage of the polytechnic with the labour market will make the graduates competitively employable.

1.2 Analysis of Employability Trends and Outcomes of the Previous Tracer Studies

Under Project Development Objective II, the project aims at Improving Quality and Relevance of TVET programs through annual tracer study for our graduates and building capacity of trainers for all other departments in the polytechnic to continue conducting tracer study. During the FY 2020/2021, the tracer study revealed that the employability rate was 65% against a target of 50%. Abridged version of employment trends over the past three Financial Years is as indicated;

1.2.1 Tracer Study FY 2018/2019

The employment status of this baseline survey in the FY 2018/2019 showed that since completion of studies in the stated calendar; 26% *(n = 54) of the graduands had secured

employment, 70% *(n =145) were unemployed and 4% (n = 8) were in self-employment. The graduands further responded that 21.3% had secured employment in their relevant areas of training, 25.6% had secured employment but in other areas that did not match their study areas while 53.1% had no knowledge about their exact deployment. 68% confirmed that they are not employed where they had their attachment, 21% were employed at the attachment place and finally 11% did not know. The graduands also noted that they were aggressively pursuing employment.

1.2.2 Tracer Study FY 2019/2020

TVET Graduates' situation in the first six months post-graduating in the FY 2019/2020. The analysed results were as follows;

Table 1; Tracer Study FY 2019/2020

Employment Status		Frequency	Percent
i.	Employed	7	17.5%
ii.	Self Employed	13	32.5%
iii.	Further Academic Education (higher education, for example degree)	7	17.5%
iv.	Further vocational education/training (such as, certificate, Craft, advanced diploma)	9	22.5%
v.	Other	4	10%
	Total	**40**	**100%**

Source; TS Report FY 2019/2020

However, during the FY, "Employment Status" of the traced TVET graduates after graduating from Kenya Coast National Polytechnic were as follows; 20 per cent were "Employed". None were "Self-Employed with Employees". 23 per cent were "Self-Employed without Employees". While, 57 per cent were "Neither Employed nor Self-Employed" (unemployed).

1.2.3 Tracer Study FY 2020/2021

The employment status of traced graduates during the FY 2020/2022 from a sample size of 1432 graduates were tabulated as shown below;

Table 2; Tracer Study FY 2020/2021

S/No.	Employment Status	Gender			
		Male		Female	
		Frequency	Percentage, %	Frequency	Percentage, %
i.	Employed	169	11.8%	125	8.7%
ii.	Self-employed	307	21.4%	244	17.0%
iii.	Further Education	57	4%	25	1.7%
	TOTAL	**533**	**37.5%**	**394**	**27.4%**
	GROSS EMPLOYMENT RATE				**64.6%**

Source; TS Report FY 2020/2021

The employment rate for FY 2020/2021 2 was 64.6% disintegrated by gender. Twenty-one (21) percent were "employed", Thirty-eight (38) percent were "self-employed", Thirty (30) percent were "unemployed", Two (2) percent were engaged in "internship programs", Six (6)

percent were pursuing "further education/training", three (3) percent "did not disclose their employment status". Employed graduates accounted for 294 graduates from both the gender.

Duration taken to find the first job; Twenty (20) percent took "up to 3 months" to find their first job, twenty-one (21) percent took "between 4 and 6 months" to find their first job, twenty-four (24) percent took "between 7 and 9 months" to find their first job, nineteen (19) percent took "between 10 and 12 months" to find their first job.

With assistance of the Industry Advisory Board, KCNP developed 7 market driven Competency Based Curriculum against the expected target for year 3. Nineteen (19) members of staff were sent to industrial attachment to enable us to improve our quality of training. Further to this, the flagship centre has entered MOUs with 6 industries to support internship and also employment of our graduate.

1.3 Tracer Study Deliverables and Roll Out Strategy FY 2021/2022

The delivery of this report was broken down into 12 stages with specific timelines, outcomes, responsible personnel and budget attached to achievement to each deliverable. The survey was expected to take a duration of 66 days. Detailed Workplan is attached in the Appendix. The stages were outlined as follows;

   i.   Compilation of the Tracer Study Database
   ii. Development of data collection tools
   iii. Collection of secondary data
   iv. Compilation of introductory pages
   v.   Piloting of data Collection and Data collection
   vi. Data cleaning and coding
   vii. Data Entry
   viii. Data Analysis and Interpretation
   ix. Development of first draft report
   x.   Tracer Study Report Validation
   xi. Development of final report
   xii. Reproduction and packaging of the Report

1.4 Graduation Trends for the past three Graduations

The polytechnic is mandated as per the Polytechnic Order of 2016 as published in the Legal Notice No. 88 and in conformity with the TVET Act No. 29 of 2013 to graduate students who have successfully completed their studies annually. Through this, the Polytechnic ensures that the Institutional priority areas, policies and strategies are in line with National Priorities and aligned to the Big Four Agenda, Vision 2030, Mitigation of COVID 19 pandemic and SDGs.

Number of Graduates vs. Year of Graduation

Figure 2; Graduation Trend for past 3 graduations

S/No.	Year of Graduation	Number of Graduates
1.	2017	764
2.	2019	709
3.	2022	1339

KCNP graduations have been hinged on four thematic areas that include Gender disintegration, Level of Award (Artisan, Craft or Diploma), Grading of Awards (Pass, Credit or Distinction) and Domain of Award which classifies graduands per department. The number of graduands during the academic calendar 2017/2018 were 764 distributed against the four thematic groupings. During the academic calendar 2018/2019, the number of graduating candidates went down by 55 candidates compared to 2017/2018 academic calendar. However, the learning cycle was affected due to covid 19 pandemic which pushed essential activities to be conducted much later. In the academic calendar 2021/2022, the number of graduating candidates went up to 1339. The average graduation rate over the past three graduations, as indicated in the R^2 trendline was 75.4%.

1.5 Objective of the Tracer Study

The objective the study was to track the effectiveness of the KCNP in equipping her graduates with the necessary skills to successfully gain employment, self-employment or pursue further academic or vocational training. To do so, the study traced the whereabouts of KCNP graduates and assessed how successful they had been able to integrate into the labour market after completing their learning program, between 2019 and 2021. The study was conducted between December 2021 and May 2022. The study was disintegrated to cover graduate responses, curriculum implementers who include trainers and management team and industry responses to provide information on readiness of the TVET graduates they employ.

1.6 Specific Objectives

Specifically, the Study objectives of each category were as follows;

Graduates

The study assessed;

i.   Attitude of the KCNP graduates regarding job quality, relevance, and effectiveness of their training in securing employment;

ii.   Attitude of the KCNP graduates regarding business quality, relevance, and effectiveness of their training in supporting self-employment.

Employers

The study evaluated;

i.   The perception of employers regarding the quality of the employees they have recruited from the pool of KCNP graduates;

ii.   The perception of employers regarding the quality of the interns they have recruited from the pool of KCNP graduates.

Program Staff

The study examined;

i.   The perception of KCNP staff regarding the relevance of curriculum and physical and administrative factors within the KCNP;

ii.   The perception of KCNP staff regarding the quality of the teaching received by students before they graduate;

iii.   The perception of KCNP staff regarding their participation in external activities including innovation fairs, industrial attachments and exchange programs.

The population of the tracer studies included KCNP graduates, employers of KCNP graduates and KCNP program staff. A total of three hundred and fifty-eight (358) KCNP graduates, twenty-eight (28) employers of KCNP graduates and eighty-one (81) KCNP program staff.

SURVEY METHODOLOGY

This survey was conducted within the framework of the EASTRIP project FY 2021/2022, financed by EASTRIP and to be implemented by KCNP. The main objective was to provide information on the KCNP TVET graduates' job search methods and current employment statuses, employment conditions and on the job training, as well as the quality of the TVET education including the conditions of KCNP curriculum implementation by the program staff and industries where they get internships, employments or self-employments.

The approach of this Tracer Study is to track and keep database of students once they graduate from the institution. The objective is to evaluate ones progress up to the time they get a job and beyond. It can be viewed as a simple tool designed to measure the relevance of KCNP TVET training. It will also help to monitor the delivery of training.

The information received in this tracer study will be used for minimizing any possible deficits in a given program in terms of content, delivery and relevance and for further development by the institution in the context of quality assurance. TVET institutions, industries and policy makers will benefit from the tracer study report since it will help them to know what the status of their products after graduating. The importance of this Tracer study is to measure the relevance of KCNP TVET training.

2.1 Research Design

The overall sampling strategy was to generate large and representative samples for all the groups. Thus, a scientific method based on statistical techniques was applied involving selection of a random sample of the respondents. The Survey adopted a mixed design methodology that entailed use of structured questionnaire triangulated per category. The survey questionnaire was transcribed into electronic format to enable respondents with reliable internet to fill up their responses electronically and submit back. The secondary data relied on previous tracer study surveys, data of staff from human resources office, records of previous graduation obtained from the graduation booklets and academic affairs office. The Survey also benefited from review of past similar Surveys in Kenya and other Countries.

With respect to academic programmes, the International Standard Classification of Education (ISCED) developed by UNESCO was adopted. It classifies programmes offered in academic setting into ten clusters and provides a means for comparison of education statistics and indicators across countries through uniform and internationally agreed definitions (UNESCO Institute for Statistics, 2014).

The tool captured database of KCNP graduate responses disintegrated by gender, academic level, marital status, country and county of origin and disability. For academic staff, data on

designation, role in the polytechnic, staff establishment and tenure (i.e., whether full time or part time) were captured in the tool.

2.2 Sampling

A sampling frame refers to, for instance, groups from which respondents were drawn. It also refers to targeted respondents' lists obtained from KCNP for the survey. The sample size used were as follows:

Table 3;Rate of Response

RESPONDENTS	Targeted	Achieved	Response Rate (%)
Students	800	358	44.75%
Staff	75	81	108%
Suppliers	50	28	56%
TOTAL	**925**	**467**	**50.49**%

All the respondents were given equal opportunity to participate in the survey within the survey data collection timeframe. In order to effectively capture the differences by category from the study population, stratified random sampling technique was adopted in the survey design. The benefit of stratification was that it allowed the sampler to control the stratum and ensured a defined level of statistical precision and comparability. Therefore, a sample size of 925 respondents were then drawn cutting across graduates from all the academic departments, Staff from the departments and industry stakeholders otherwise referred to as employers in the value chain. The **response rate** was **50.49%,** for 467 responses. The response rate was sufficient to gather the feedback of the respondents.

Table 4; Response rate of graduates per department

Department	Prefer not to say	Female	N (F)	Male	N(M)	Grand Total	N(Total)
Blank			1		2		4
Applied Science		2.54%	9	2.82%	10	5.37%	19
Building and Civil Engineering		0.56%	2	3.67%	13	4.24%	15
Business and Media Studies		8.19%	29	8.19%	29	16.38%	58
Electrical and Electronics Engineering	0.28%	2.26%	8	18.93%	67	21.47%	76
Fashion Design and Cosmetology		5.08%	18	2.82%	10	7.91%	28
Hospitality and Tourism Management	0.28%	17.51%	62	4.80%	17	22.60%	80
Information Communication Technology		6.21%	22	6.50%	23	12.71%	45
Mechanical Engineering	0.56%	0.56%	2	3.95%	14	5.08%	18
Medical Sciences Department		0.85%	3	1.41%	5	2.26%	8
Secretarial and Liberal Studies		0.85%	3			0.85%	3
Grand Total	**1.41%**	**44.92%**	**159**	**53.67%**	**190**	**100.00%**	**354**

2.3 Sampling frame

A stratified sampling methodology was adopted with staff and students being the first level with departments being the Primary Sampling Units. A sample of 925 respondents was estimated for the Survey.

The respondents targeted for the survey included KCNP graduates, KCNP employers and teaching staff who access the KCNP services. Random sampling was used to arrive at the achieved sample size. The respondents were given equal opportunity to participate in the survey within the survey data collection timeframe.

Quantitative data was collected using semi-structured questionnaires while qualitative data was obtained by short clarification interviews/discussions with respondents during data collection to validate responses to the questionnaire. Secondary information was obtained from the website and previous reports.

Table 5; Key Survey Characteristics

1.	*Sample Frame*	Disintegrated Data on Curriculum Implementers and Industry
2.	*Target Population*	KCNP Graduate (Selected) cohorts of 2019 - 2021 KCNP Program Staff KCNP Graduate Employers
3.	*Sample size*	925 respondents
4.	*Clustering*	Year of Completion, Level and Program of Study (Graduates) Department, Designation and Years of Service (Program Staff) Industry Sector and Ownership (Employer)
5.	*Non-Response*	Random substitution
6.	*Confidence Level*	99%
7.	*Design factor*	3.3
8.	*Absolute precision*	1%
9.	*P value*	Conservatively at 0.5

According to the target population of 925, the minimum sample size with a 5% margin error and a confidence level of 99% was found to be exhaustively representative with 467 respondents.

2.4 Data Collection and Analysis

Semi-structured questionnaires were used to collect the data. Data coding and entry was done concurrently with data collection in the field. The questionnaire was transcribed into online platform to ease the process of filling up questionnaire and submitting. After which the researcher embarked on analysis of the data, comments and observations obtained from field visits and secondary sources.

Database of past graduates were compiled by the survey team from different sources including past student attachment schedules, graduation records and Polytechnic MIS Archiving records.

Up to two call backs were used to reach selected respondents who may not have been available at the time of the call. In some cases, enumerators made walk-ins to industries.

The researcher carried out data coding, framework development for data entry and analysis of data using Ms Excel Pivot Table Platforms and SPSS.

2.5 Methodological Difficulties

Identification of graduates was mainly expected to begin through the use of databases. Identified graduates from the databases were expected to help identify other graduates who could participate in the study, by snowballing. Employers were also to be contacted to establish if they employed KCNP TVET graduates or generally TVET with the intention of using the identified employees to identify other graduates. Employers were also to be requested to administer the questionnaire to the respondents to minimize interference with their production processes. While these approaches were expected to generate a significant number of respondents, fieldwork indicated otherwise. The main limitations were that;

Table 6; Methodological Difficulties

S/No.	Limitation	Description and Mitigation
1.	*Inconsistent and partial data on the lists of graduates retrieved in the MIS System*	The list of graduates obtained from the MIS ABN for KCNP TVET graduates mainly included phone numbers of the parents. The Polytechnic archives registered only home phone number or mobile phone number of one parent at the beginning of the education of the student. This of course resulted in the enumerator not being able to reach the graduates directly but had to make the double number of calls instead, in order to obtain the mobile phone number of the graduate. The lists provided had a high percentage of phone numbers which were disconnected and not active anymore. Multiple approaches like comparison with graduation contacts and attachment records were employed.
2.	*No Pre-field work awareness and sensitization meetings between field research staff and relevant stakeholders due to the time limitation*	It was not possible to have meetings with the graduates, staff and industry partners during the implementation of the Tracer study, owing to closeness of activities and conflicting time schedules. An introductory letter to familiarize the study was provided on the questionnaire to sensitize the respondents.
3.	*Low percentage of graduates willing to participate in the survey*	Due to the high unemployment rate and difficult financial situation of the majority of the students, it was expected that a certain number of graduates would not participate in the survey since they do not see any the benefits for themselves. This affected the result of the survey to a great extent and should be a concern for future activities. Out of the available list of 800 graduates for this Tracer Study, it was not possible to receive any data from 442 graduates.

		There were two main reasons for this; the first reason being that the graduates were not willing to provide the necessary information needed on account of not being in employment while other graduates could not be reached due to non-existent phone number on the lists previously provided. Others felt persistent follow ups were a bother. Some graduates needed assurance that they will be employed after filling in the questionnaires.
4.	*Low Study Completion and Pass Rates*	It was observed that for a number of graduates, cases of subject refers and failure affected their participation and opportunity for employment. The tracer study tool had an option of finding out what affected their continuity of study and how the management can assist in this case.
5.	*Remoteness and Unreliability of Mobile Network in some areas*	Lack network connectivity limited potential reach and participation of some graduates. Remote locations of the graduates and unrealistic work demands by some graduates challenged the submission of the responses.
6.	*Lack of commitment by the respondents*	Questionnaires left with respondents for completion and to be collected at a later date yielded low returns and were more time consuming since one had to make several follow ups before the questionnaires were completed; At the same time, several employers, were approached to administer the questionnaire to their employees. While they agreed to do so, the actual process of administering the questionnaire became a problem. There was lack of commitment despite several follow ups. In the majority of cases, the questionnaires never reached prospective respondents. Even in this case there were managers who were not cooperative.

PRESENTATION OF FINDINGS AND STATISTICAL OUTCOME

The sample size aimed to be representative of graduates and their departments, staff and industry or employers of KCNP graduates with a target sample of approximately 925 graduates. The achieved sample was 467, which accounted for a 50.49% *(n = 467) response rate. It should be noted that there was not much variation in terms of response. Weighting of the data was necessary to account for variation in response rates between departments

3.0 GRADUATE TRACER STUDY FINDINGS

3.1 GRADUATE DEMOGRAPHIC DATA

Table 7; Graduate Demographic Characteristics

Demographic Status		
Gender	Frequency, N	Percentage, %
i. Male	189	53.5%
ii. Female	159	45.0 %
iii. Prefer not to say	5	3%
Marital Status		
i. Single	273	77.3%
ii. Married	75	21.2%
iii. Prefer not to say	3	0.8%
iv. Engaged	1	0.3%
v. Separated	1	0.3%
Age		
i. Below 25 yrs.	133	37.7%
ii. 25 – 35 yrs.	214	60.6%
iii. Above 35 yrs.	6	1.7%
Level of Study		
i. Diploma	160	45.2%
ii. Craft	152	43%
iii. Artisan	42	11.8%
Blank	4	
Total Response	**358**	

From the questionnaires submitted, 358 responses were obtained cutting across the ten departments of the polytechnic. After collating and coding, 4 were dismissed as either incomplete or not incoherently filled out. 54.3% of the respondents were female while 45% of the respondents were male. Out of this 45.2 % (160) graduated with Diploma, 43.0 % (152) graduated with Craft while 11.8% (42) graduated with Artisan Certificates. The average age of graduates was between 25 – 35 years accounting for 60.6%.

3.2 GRADUATE EDUCATION AND TRAINING BACKGROUND

3.2.1 Course undertaken by the Graduate

The polytechnic programmes were clustered as follows;

Table 8; Course undertaken by the Graduate

S/No.	Classification	Programs	
1.	Business and Media	i.	Business Studies Courses
		ii.	Media Studies Courses
		iii.	Tourism Studies Courses
2.	Humanities and Social Sciences	i.	Hospitality Courses
		ii.	Liberal Studies Courses
		iii.	Secretarial Courses
3.	STEM	i.	Applied Sciences Courses
		ii.	Building and Civil Engineering Courses
		iii.	Electrical and Electronic Engineering Courses
		iv.	Information Communication Technology Courses
		v.	Mechanical, Marine and Automotive Courses
		vi.	Medical Sciences Courses

Proportion of graduates who undertook each program is analysed in the bar graph below. Compared to humanities, fewer number of graduates trained in STEM programs.

Figure 3; Program uptake by graduates

The data received revealed that 50.28% of the traced graduates pursued STEM courses. Disintegrated by gender, 37.29% who pursued STEM courses were male while 12.99% were female graduates. The STEM courses have significant contribution to the government Big 4 agenda in the various fields of Housing, Engineering, Manufacturing, Constriction, Food Security and Health care. At the same time, 16.38% graduates took business and media studies an integral unit in enhancing and preparing the graduates for self-employment while

31.06% graduated with humanities and social sciences qualification, development skills for the modern society.

3.2.2 Graduate Completion of Studies and Graduate formal employment status

The study was to track graduate cohorts of 2019, 2020 and 2021, that is, for at most 36 months since completion of studies. Allowance was given to enable tracking of those graduates who may have graduated over 36 months ago from the year 2021. The study also determined the status of employment of the graduates since completion of study.

Table 9; Duration since Study Completion vs Employment Outcome

Gender	Duration Since Study Completion	Frequency, N	Percent, %
Others		1	0.28%
		2	0.57%
	Others	3	0.85%
Female	1-6 months	26	7.41%
	13- 24 months	45	12.82%
	25-36 months	42	11.97%
	7-12 months	30	8.55%
	Over 36 months	14	3.99%
Female Total		**160**	**45.58%**
Male		1	0.28%
		2	0.57%
	Others	3	0.85%
	1-6 months	45	12.82%
	13- 24 months	42	11.97%
	25-36 months	45	12.82%
	7-12 months	23	6.55%
	Over 36 months	33	9.40%
Male Total		**191**	**54.42%**
Grand Total		**351**	**100.00%**

The findings showed that 87.2% of the graduates tracked were within the timeline of the tracer study scope. The disintegrated data shows that 20.1% completed study between 1 – 6 months. Again, 15.5% who completed study between 7 – 12 months, 25% who completed study between 13 – 24 months and 25.6% who completed study between 25 – 36 months. Finally13.8% who graduated over 36 months ago were also tracked.

3.2.3 Year of Course Completion

Depending on the year of completion of study or graduation, it was important to group and analysed the response rate based on the year of exit. As indicated earlier, the study was to track graduate cohorts of 2019, 2020 and 2021, that is, for at most 36 months since completion

of studies. Allowance was given to enable tracking of those graduates who may have graduated over 36 months ago from the year 2021.

Year of completion of study

Figure 4; Year of Course Completion

The survey results indicated that at least 39% of the graduates which accounted for the highest response rate completed their studies in the year 2021. Another 33.52% completed in 2019 while 10.89% and 9.17% completed their studies in 2018 and 2019 respectively. Staggering 6% of our alumni completed their studies at least 48 months and beyond.

3.2.4 Reason(s) for taking or pursuing the course

Graduate performance both in class and after study completion is closely related to the motivating factors behind the career choices. Through this, the graduate either dedicate fully by giving extra attention to their duties or becomes negligent. The survey interrogated the factors behind selection of the programs. The figure below shows summary of factors analysed by percentage.

Reason(s) for taking or pursuing the course	Representation based on Analysis of the choices influencing uptake of programs
- High grades in the course or subject area(s) related to the course - Good grades in high school - Influence of parents or relatives - Peer influence - Inspired by a role model - Strong passion for the profession - Prospects for immediate employment - Status or prestige of the profession - Availability of the course at KCNP - Prospects of career advancement - Prospects of attractive compensation - Opportunity for employment abroad - Placement by KUCCPS - No Particular choice or no better idea - Others (Please specify)	

Figure 5; Reason(s) for taking or pursuing the course

N = 353

The results shows that 81% were driven by the strong passion for their choices. 15.6% considered prospects for immediate employment as a motivating factor while 23.2% were inspired by role models. 9.9% pursed their choices since they were placed by the placing agency KUCCPS. Other factors included prospects for career advancement, 19.3%, opportunity for employment, 12.5% and good grades in High School, 3.7%. Other factors are explained in the chart.

3.2.5 Professional qualifications and/or certificates acquired after completion of studies at KCNP

In some programs, it is a necessity to have professional recognition by a professional body. The graduates were asked whether they pursued a training to attain professional qualification to enable them to be registered with the regulating agencies for issuance of practicing licenses.

351 responses

Yes
No

75.5%

24.5%

Figure 6; Professional certifications acquired

The survey results shows that 75.5% of the graduates have not pursued additional training to obtain professional licenses while only 24.5% have pursued professional trainings in their areas of specialization with professional bodies. Some of the professional trainings and licenses pursued by the graduates are listed below;

i.	APS-K	xvi.	Geriatric in St Johns Ambulance
ii.	Bars, store and controls license	xvii.	Global Media Safety
iii.	CCNA III	xviii.	ICT Repair and Maintenance
iv.	CCTV installation, solar photovoltaic installation	xix.	Industry fire
v.	STCW (standard of certification and watchkeeping)	xx.	Interior design
		xxi.	Leadership skills
vi.	Plant operator machine excavator	xxii.	Machine operator
vii.	Certificate in First Aid	xxiii.	NCA certificate of wiring
viii.	Certificate in Vocational Training (NYS)	xxiv.	Solar power T1 T2 &T3
ix.	Certificate in HIV and testing services	xxv.	Standard of Training Certification and Watch Keeping
x.	Certificate of competence of national construction.	xxvi.	Pedagogy training
xi.	Cisco IT Essential	xxvii.	Theology
xii.	Computer Maintenance and Networking	xxviii.	User level maintenance of HPLC-LMS
xiii.	Discharge certificate (NYS)	xxix.	Web Development
xiv.	Driving course	xxx.	Training at Generation Kenya to acquire more skills in garment making and speed per hour
xv.	Excavator, forklift operator and health and safety.	xxxi.	Digital Marketing Certification

3.2.6 Graduates in Further Studies

During the tracer study, the respondents were asked if they have "Participated in further education" that leads to higher qualification. The bar chart below captures "Participation in

further training" after graduation for the traced 341 KCNP graduates who responded. Results have been taken from a sample of 341 KCNP graduates. 25.5% (n = 87 KCNP graduates) "Participated in Further Training". 74.5% (n = 254 KCNP graduates) "did not participate in further training".

Figure 7; Participation in Further Education

Graduate undertook further training in the following program areas;

i. Short course related to coding and software development
ii. Bachelor of Journalism and Mass Communication
iii. Bachelor of Science in Food Technology and Quality Assurance
iv. Bachelor of Science in Marine Biology
v. Degree and Masters in Public Health
vi. Degree in Cooperate Communications and Public Relations
vii. Degree in Mass Communication
viii. Diploma Business Management
ix. Diploma in Analytical Chemistry
x. Diploma in Business Information Technology
xi. Diploma in civil engineering
xii. Diploma In Electrical and Electronic Engineering Power
xiii. Diploma in ICT at TUM
xiv. Diploma in Information Communication Technology
xv. Diploma in Marime Engineering
xvi. Diploma in Procurement in Material Management
xvii. Diploma in Social Work and Community Development
xviii. Diploma in Social Work and Community Development
xix. Diploma in Supply Chain Management
xx. Diploma in Tourism Management
xxi. Diplomat in Electrical Engineering
xxii. Enrolment to KTTC
xxiii. Higher Diploma at Teachers Training Centre
xxiv. PhD BA Strategic Management Option

3.3 JOB SEARCH, TRANSITION TO WORK AND EMPLOYMENT STATUS

With growing TVET education, employability and entry into the labour market becomes a more important criterion for assessing quality and relevance. This chapter details the graduate lifecycle, i.e., different phases from application, during and after study into employment or further education.

3.3.1 Graduate Employability

The study compiled proportion of KCNP graduates who have secured employments in various sectors of industry and economy.

Figure 8; Graduate Rate of Employment

The findings show that for the years under survey, average employability rate for those gaining direct entry into formal employment accounted for 41.19%, n = 148 graduates. That is, (M = 26.99%, n = 95 and F = 14.20%, n = 50) while 57.67% were unemployed. Compared to FY 2018/2019, employability rate was estimated at 26%. In the FY 2019/2020, the rate went down to 20.5% while in the FY 2020/2021, the rate was 21%. The trends in employability are illustrated in the line graph below;

Figure 9; Graduate Employment Trends

3.3.2 Employment Status by Terms of Employment

The study therefore sought to find out the nature of employment terms the graduates were exposed to given the deliberate advantage employers have in maintaining casual, piece-rating or temporary employment.

Bentolila, Dolado and Jimeno (2019) finds evidence that fixed term contract (FTC) workers are less productive than open ended contract (OEC) workers and that higher FTC rate leads to lower productivity growth. The employed graduates were contracted as follows;

The breakdown of employability as per category of employment is indicated in the table below. The data was critical in compilation of the final employment rates for the tracer study.

Table 10; Classifications of Graduate Employment

Current Employment Status	Gender	Frequency, N	Percentage
Employed on full time		1	0.39%
	Female	20	7.81%
	Male	47	18.36%
Employed on full time Total		**68**	**26.56%**
Employed on part-time	Female	6	2.34%
	Male	9	3.52%
Employed on part-time Total		**15**	**5.86%**
Employed temporarily	Female	13	5.08%
	Male	24	9.38%
Employed temporarily Total		**37**	**14.45%**
Self-employed		1	0.39%
	Female	12	4.69%
	Male	23	8.98%
Self-employed Total		**36**	**14.06%**
Unemployed and not seeking job	Female	3	1.17%
	Male	2	0.78%
Unemployed and not seeking job Total		**5**	**1.95%**
Unemployed and seeking job		3	1.17%
	Female	49	19.14%
	Male	43	16.80%
Unemployed and seeking job Total		**95**	**37.11%**
Grand Total		**256**	**100.00%**

The data presented shows the proportion of terms of graduate employment. That, out of the 41.19% in formal employment, 26.56% are employed on full-time while 5.86% and 14.45% were in parttime and temporary employment respectively. The Non-Standard Employments (NSE), including those on either casual term, temporary or parttime terms is becoming more prevalent in economies with high redundancy costs (World Bank 2019).

Furthermore, the survey reveals that 14.06% of the graduates were in self-employment, while 37.11% of the unemployed were still seeking employment.

3.3.3 Proportion of the unemployed KCNP graduates but pursuing further education

Results from a sample of 341 KCNP graduates indicated that overall, 25.5% (n = 87 KCNP graduates) "Participated in Further Training" while 74.5% (n = 254 KCNP graduates) "did not participated in further training".

It was necessary to compute the proportion of the unemployed graduates that pursue further studies as this category was considered to be in employment by World Bank classifications. The data was tabulated to show proportion pursuing further studies juxtaposed with their employment statuses.

Table 11; Unemployed graduates pursuing further education

Taking further Training(s) / Advance studies after graduating from KCNP	Gender	Employment Status	Frequency, N	Percentage, %
No			1	0.50%
	Total		1	0.50%
	Female	Unemployed	79	39.50%
	Female Total		**79**	**39.50%**
	Male		1	0.50%
		Unemployed	73	36.50%
	Male Total		**74**	**37.00%**
No Total			**154**	**77.00%**
Yes		Unemployed	1	0.50%
	Total		1	0.50%
	Female	Unemployed	25	12.50%
	Female Total		**25**	**12.50%**
	Male		1	0.50%
		Unemployed	19	9.50%
	Male Total		**20**	**10.00%**
Yes Total			**46**	**23.00%**
Grand Total			**200**	**100.00%**

The proportion of the unemployed graduates but pursuing further education constituted 22.5% disintegrated into M = 10%, n=20 and F = 12.5%, n=25. In addition, 77% of the KCNP graduates or n = 154 were not employed and did not pursue further education.

3.3.4 Overall Employment status for Traced KCNP Graduates by Gender

The proportion of the employability rates for KCNP graduates was divided into three clusters. This included the proportion who successfully secured employment either on full-time, parttime, temporary terms or contract but in formal terms. The data was analysed and presented as shown below;

Table 12; Overall Employment status for Traced KCNP Graduates by Gender

Status	Male	Female	Frequency	Percent, %
Employed	M = 26.99%, n = 95	F = 14.20%, n = 50	145	41.19%
Self-employed	M = 8.98%, n = 23	F = 4.69%, n = 12	35	14.06%
Unemployed but pursuing Further Education	M = 10.00%, n = 20	F = 12.50%, n = 25	45	22.50%
Total	**M = 45.97%, n = 138**	**F = 31.39%, n = 87**	**225**	**77.75%**

The **overall employability rate was 77.75%**, N = 225, classified either as employed under formal contract terms, 41.19% of the graduates, self-employed, 14.06% of the graduates or unemployed but pursuing further studies, 22.50%. Graduates pursuing further studies are considered employed by World Bank classification of employment statuses. The status of the graduates measured in the first six months of study completion is as tabulated below;

Table 13; Graduate status six months after completion of study

Duration Since Completion of Studies	Employed		Self employed		Pursuing further studies		
	Male	Female	Male	Female	Male	Female	Total
1 – 6 months	13.42%	9.42%	1.75%	4.17%	6.50%	3.75%	**39.01%**
7 – 12 months	1.42%	2.42%	1.50%	1.20%	4.01%	3.34%	**13.89%**
13 – 24 months	2.69%	1.99%	1.17%	1.14%	2.04%	1.50%	**10.53%**
25 – 36 months	3.55%	2.98%	1.42%	1.09%	2.02%	1.92%	**12.98%**
Over 36 months	1.42%	1.41%	0.00%	0.00%	0.00%	0.00%	**2.83%**

The survey findings revealed that within the first six months of completion of the study, 39.01% of the KCNP graduates have secured employment either by formal employment, in self-employment or pursuing further education. This represents at least 17.34% of the female graduates and 21.67% of the male graduates. The findings further reveal that a great percentage, 10.53% of graduates got employed after 13 – 24 months of study and completion and another 12.98% after 25 – 36 months of study completion.

3.3.5 Graduate Tracking by Geographical Location of Work

While it was only necessary to track the graduates by places of work, the model interrogated the geographical spread and absorption of various KCNP across the country. KCNP Graduates registers presence in 38 out of 47 counties in Kenya, a representation of 76.59% of the country. Individually, they occupy various towns within the counties.

Gradute Distribution by Location of Work in Kenya

By country setup, the Polytechnic has one student who did Artisan Certificate in Masonry and working in Qatar. This has a far-reaching implication on the Polytechnic visibility across borders.

3.3.6 Representative employment data on EASTRIP Priority Programme

Table 14; Representative employment data on EASTRIP Priority Programme

	Female	**Male**	**Total**
Employed	12.5%, n=12	12.5%, n=12	25%, n=24
Self Employed	6.25%, n=6	1.04% n=1	7.29%, n=7
Pursuing Further Studies	10.4%, n=10	2.1%, n=2	12.5%, n=12
Employability rate on priority programmes	**29.15%, n=28**	**15.64%, n=15**	**44.79%, n=43**
Unemployed	40.64%, n=39	13.51%, n=14	55.21% n=53
Total	**69.79%, n=67**	**30.21%, n=29**	**100%, n=96**

From data Collected it was observed that

i. 27.3 %, n= (96) out of the total response of 352 represented EASTRIP priority programme courses. From this, 25%, n = 24 were Employed 7.29%, n= 7 self-employed, and the rest 55.21%, n= 53 were unemployed.

ii. It was also noted that from the sample of EASTRIP priority programme courses, (27.3%, n=96), Female accounted 69.8%, n=67, while 30.2%, n= 29 accounted for male respondents.

iii. Compared against overall employment outcome of 44.79%, the proportion of female who secured employment under the priority programmes was 29.15%, n=28, while male was 15.64%, n=15 on either case.

iv. The overall employability rate when tallied against the total number of respondents who pursued EASTRIP priority programme accounted 44.79%, n=43. However, when compared against the overall response rate across all the programmes, the rate obtained was 12.22%.

3.3.7 Number of graduates employed in EASTRIP Priority Programmes

Table 15; Number of graduates employed in EASTRIP Priority Programmes

Gender	Employment Status	Programme of Study	No. Employed
NA	Self-employed	Craft Certificate in Refrigeration and Air Conditioning	1
NA	Self-employed Total		1
NA	**Unemployed Total**		**2**
Total	Unspecified gender cohort		3
Female	Employed	Artisan in Food and Beverage	2
		Craft Certificate in Food and Beverage Production Service and Sales	3
		Craft Certificate in Marine Engineering	1
		Diploma in Food and Beverage Management	1
		Diploma in Food Science Technology	4
		Diploma in Tourism Management	1

	Employed Total		12
	Self-employed	Craft Certificate in Food and Beverage Production Service and Sales	4
		Diploma in Food Science Technology	1
		Diploma in Tourism Management	1
	Self-employed Total		6
	Unemployed Total		**49**
Female Total			**67**
Male	Employed	Artisan Certificate in Refrigeration and Air Conditioning	1
		Artisan Certificate in Storekeeping	2
		Artisan Plumbing and Pipe Fitting	1
		Craft Certificate in Food and Beverage Production Service and Sales	1
		Craft Certificate in Supply Chain Management	1
		Craft Certificate in Tour Guiding and Travel Operations	1
		Cratf Certificate in Food Science Technology	1
		Diploma in Catering and Accommodations Management	2
		Diploma in Food and Beverage Management	1
		Diploma in Supply Chain Management	1
	Employed Total		12
	Self-employed	Craft Certificate in Food and Beverage Production Service and Sales	1
	Self-employed Total		1
	Unemployed Total		**16**
Male Total			29
Grand Total			**99**

3.3.8 Employment Status by level of study

The data was analysed and categorized into three, 3 fields recognized by KNQA, UNESCO and Polytechnic Order of 2016 as published in the Legal Notice No. 88 and in conformity with the TVET Act No. 29 of 2013. The polytechnic has the mandate to train graduates up to Higher Diploma and with possibility of collaborating with universities to offer degree programs.

During the period under study, the polytechnic offered Diploma, Craft, Artisan and customized short courses. The employability rates were analysed and presented as shown below;

Employment status by level of study

Figure 10; Employment Status by level of study

The responses received 45.2%, (n=160) graduated with Diploma qualifications, 43%, (n=152) Craft Certificate and 11.8% (n=42) graduated with artisan qualifications. Out of these, 51.90% of the diploma graduates had secured employment, 33.33% of the craft graduates and 38.10% of the artisan graduates had secured employment as well. The relative rates of job transition by Diploma graduates were high. 66.67% of Craft graduates had not secured employment.

3.3.9 Employment Status by Department

The polytechnic executes the services of the core mandate through ten academic departments which offers variety of programs. Each department has tailormade courses that suites the industry job requirements.

The relative rates of employability vary across departments. This is attributed to the nature of skill area trained on. Employment rates are high amongst Medical Sciences graduates, 75%, Fashion Design and Cosmetology graduates, 71.43% and Building and Civil Engineering graduates 66.67%.

Employability rate among Mechanical, Marine and Automotive Engineering Department was 50.00%.

Employment Status by Department

Figure 11; Employment Status by Department

The table below shows how departments were ranked relative to the employability rates. The response rates affected the counts and therefore departments that had high response rates like Hospitality and Tourism department, 22.60% of the total number of respondents may have contributed to high number of unemployed cases for the department. Overall, Medical Sciences department had the highest number of employability rates, 75% amongst their graduates. In addition to low response rate, Secretarial and Liberal department had the lowest ranking in employability rates, 0.00%.

Table 16; Ranking of Employment Rates across Departments

Employment Rate			
Department	Not Employed	Employed	Rank
Medical Sciences Department	25.00%	75.00%	1
Fashion Design and Cosmetology	28.57%	71.43%	2
Building and Civil Engineering	33.33%	66.67%	3
Mechanical Engineering	50.00%	50.00%	4
Applied Science	52.63%	47.37%	5
Electrical and Electronics Engineering	56.00%	44.00%	6
Business and Media Studies	60.34%	39.66%	7
Hospitality and Tourism Management	64.99%	35.02%	8
Information Communication Technology	65.91%	34.09%	9
Secretarial and Liberal Studies	100.00%	0.00%	10
Grand Total	57.71%	42.29%	

3.3.10 Graduate Formal Sector Employment

Formal sectors represent all jobs with specific working hours and regular wages and the worker's job is assured. The workers are employed by the government, state or private sector enterprises. It is a licensed organization and is liable to pay taxes. Policy and development interventions have focused largely on the young people themselves, particularly as they move into the workforce. In addition to investment in general education, technical and vocational education and training (TVET) remains a common intervention, along with employability (soft) skills and entrepreneurship training. The notion of a "skills gap" underpins these interventions (World Bank, 2017).

Programmes that promote savings and provide access to credit and other financial services are also widely promoted as having an important role to play in supporting self-employment and entrepreneurship (Flynn & Sumberg, 2017). The sector analysis was presented as illustrated in the bar graph below;

Figure 12; Graduate Formal Sector Employment

At least 47.10% of the graduates were employed in the private sector. Under public sector employment, only 14.19% of the graduates secured opportunity while 7.74% were employed under SAGAs otherwise known as the Parastatals. Furthermore, 3.87% of the graduates were working with Non-governmental Organizations (NGOs). Proportion of the graduates in self-employment accounted for 20.00% while other unspecified sectors accounted for 7.10% of the graduate responses.

It was necessary to document and classify the proportion of employed graduates by the program of study, employment status, place of employment, formal employment category, wage employment sector and their current designation. The table below provide summary of the documented graduate occupation to enable comparison and uptake of programs in the labour market situation.

3.3.11 Formal Employment Status per Programme

Table 17; Formal Employment Status per Programme

S/No.	Course Studied	Employment Status	Name of your employer (e.g., KPA)	Current terms of employment	Type of employer	Wage Employment sector/area of specialization/Industry	Current Job Title
1.	Artisan Certificate in Electrical Installation	Employed on full time	Brinks Security Service	Contract	Private sector		Security Guard
2.			Mombasa apparel	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Maintenance
3.			Mombasa Apparel unit	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Electrical Technician
4.			Mr. Yash	Casual	Private sector	Electricity, gas, steam and air conditioning supply, Construction	Electrician
5.		Self-employed		Contract		Construction	Electrical And Plumbing Contractor
6.		Unemployed and seeking job					
7.		Self-employed		Self-employed	Self-employed	Agriculture, forestry and fishing	Electrician
8.	Artisan Certificate in Refrigeration and Air Conditioning	Employed temporarily	Hotpoint	Casual	Private sector	Electricity, gas, steam and air conditioning supply	Technician
9.	Artisan Certificate in Storekeeping	Employed on full time	Fly 748	Permanent	Private sector	Other service activities	Ground Operations
10.		Employed temporarily	Mombasa Dolphin Hotel Shanzu	Casual	Private sector	Construction	Storekeeper
11.	Artisan in Food and Beverage	Employed on full time	Liz Chinese Restaurant	Casual	Private sector	Accommodation and food service activities	
12.		Employed temporarily	Mika	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Sales And Marketing Lady
13.		Self-employed		Self-employed		Accommodation and food service activities	House Keeping
14.	Artisan Plumbing and Pipe Fitting	Employed temporarily	Leads human capital limited	Contract	Other (please specify)	Construction	Pipe Fitting/ Rebar Fixing
15.	CISCO Certified Network Administrator	Self-employed		Self-employed	Self-employed	Information and communication	ICT Technician

16.		Employed temporarily		Casual		Construction	
17.	Craft Certificate in Business Management	Employed temporarily		Casual		Human health and social work activities	Business
18.	Craft Certificate in Electrical Installation	Employed on full time	Christian industrial training collage	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Technician
19.		Employed on full time	KPLC	Contract	Public sector (national government, county government)	Electricity, gas, steam and air conditioning supply	Regional Coordinator in Operation and Maintenance
20.		Employed on full time	Sanergy	Contract	Private sector	Other, please specify	Nursery Management
21.		Employed on full time	Speedaf logistics express	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Electrician
22.		Employed on full time	Transtrailers ltd	Permanent	Private sector	Manufacturing, Electricity, gas, steam and air conditioning supply	Electrician
23.		Employed temporarily	Agakhan academies	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Electrician
24.		Employed temporarily	County Government of Uasin Gishu	Casual	Public sector (national government, county government)	Electricity, gas, steam and air conditioning supply, public administration and defence; compulsory social security	Electrical Engineer
25.		Employed temporarily	HOSADA Investment Ltd Company	Casual	Private sector	Electricity, gas, steam and air conditioning supply	Electrician
26.		Employed temporarily	Kensalt ltd	Casual	Parastatal or semi-autonomous government agencies	Mining and quarrying, Manufacturing	Junior Staff
27.		Employed temporarily	Kisauni Vocational training centre	Contract	Private sector	Electricity, gas, steam and air conditioning supply, Professional, scientific and technical activities, Education	Instructor
28.		Employed temporarily	MRM	Casual	Private sector	Electricity, gas, steam and air conditioning supply	Electrician

29.		Employed temporarily	Samuel Njue	Contract	Parastatal or semi-autonomous government agencies	Electricity, gas, steam and air conditioning supply, Information and communication	ICT Man
30.		Employed temporarily	Tradecon Mombasa	Contract	Private sector	Wholesale and retail trade; repair of motor vehicles and motorcycles, other service activities	Salesman
31.		Employed temporarily	Chandarana food plus supermarket	Contract	Private sector	Wholesale and retail trade; repair of motor vehicles and motorcycles	Chandarana Supermarket
32.		Unemployed and not seeking job		Casual	Other (please specify)	Electricity, gas, steam and air conditioning supply	
33.		Self employed		Casual		Manufacturing	Scrap Metal Dealer
34.	Craft Certificate in Fashion Design and Garment Making Technology	Employed on full time	EPZ	Contract	NGO	Manufacturing, Human health and social work activities	Machinist /Operator
35.		Employed on full time	FK	Permanent	Private sector	Other service activities	
36.		Employed on full time	Imani Collection	Contract	Self-employed	Construction	Fashion Construction
37.		Employed on full time	Maga couture clothing industry	Permanent	Private sector		Quality Assurance
38.			Nora	Contract	Other (please specify)	Other service activities	House Manager
39.		Employed on part-time	Rose Warombo	Part-Time	Self-employed	Manufacturing	A Designer
40.		Employed temporarily	Kenya Coast National Polytechnic	Contract		Public administration and defence; compulsory social security, other service activities	Technician
41.		Self-employed		Self-employed	Self-employed	Other service activities	Sales
42.	Craft Certificate in Food and Beverage Production Service and Sales	Employed on full time	I working with PSS company in Qatar	Contract	Private sector	Administrative and support service activities	Security Guard
43.		Employed on part-time	HFG	Contract	NGO	Human health and social work activities	Mentor

44.		Employed temporarily	Faith Ventures Christian Academy	Casual	Private sector	Accommodation and food service activities	Production And Service
45.			TRINITY	Casual	Self-employed	Accommodation and food service activities	Waitress
46.		Self-employed		Self-employed		Other service activities	Business Woman
47.		Self-employed				Accommodation and food service activities	Chef
48.		Self-employed	Self-employed	Self-employed	Self-employed	Other service activities	Brenda's Cake House
49.	Craft Certificate in Information Communication Technology	Employed on full time	High Flyers Academy	Contract	Private sector	Education	ECDE Teacher
50.		Employed on full time	Kilifi County Government	Permanent	Public sector (national government, county government)	Administrative and support service activities	Clerk
51.		Employed on full time	Polucon Services Kenya Limited	Contract	Private sector	Information and communication, Professional, scientific and technical activities	Assistant Sales and Customers Relations Coordinator
52.		Employed on full time	SAFEPACK LIMITED	Permanent	Private sector	Manufacturing	Supervisor
53.		Employed temporarily	Sonlink Motorbikes Company	Contract	Public sector (national government, county government)	Wholesale and retail trade; repair of motor vehicles and motorcycles, Information and communication	Office Assistant
54.		Self-employed	Self employed	Self-employed	Self-employed	Other service activities	Proprietor at City Cakes Bakery
55.	Craft Certificate in Marine Engineering	Employed on part-time	Infinite salon	Part-Time	NGO	Other, please specify	Salon Assistant
56.	Craft Certificate in Mechanical Engineering	Employed on full time	Jumbo Steel mill	Contract	Private sector	Other, please specify	Mechanical Turning
57.	Craft Certificate in Refrigeration and Air Conditioning	Self-employed		Self-employed	Self-employed	Electricity, gas, steam and air conditioning supply	
58.	Craft Certificate in Science Laboratory Technology	Employed on full time	Lukore sec. School	Permanent	Other (please specify)	Professional, scientific and technical activities	Lab Assistant

59.		Employed on part-time	Mariakani Secondary	Contract	Other (please specify)	Education	Laboratory Technician
60.		Employed on full time	Hatari Security Limited	Contract	Private sector	Other service activities	Security Guard
61.		Employed on full time	Shaffi Hussein Ali	Contract	NGO	Education, Human health and social work activities, Other service activities	Community Activist
62.	Craft Certificate in Supply Chain Management	Employed on part-time	KISM	Contract	Public sector (national government, county government)	Professional, scientific and technical activities	Ass. Supply Chain Officer
63.	Craft Certificate in Telecommunication Engineering	Employed temporarily	KBC	Contract	Parastatal or semi-autonomous government agencies	Information and communication	Technical Trainee
64.		Employed on part-time	Qwetu Beach Resort	Part-Time	Private sector	Accommodation and food service activities	Room Service Operator and Guest Relations
65.	Craft Certificate in Welding and Fabrication	Employed on full time	Kenya Power	Contract	Parastatal or semi-autonomous government agencies	Electricity, gas, steam and air conditioning supply	Craftsman
66.	Cratf Certificate in Food Science Technology	Employed on full time	Mombasa Maize Millers	Contract	Private sector	Manufacturing	Quality Control Officer
67.	Craft Certificate in Electrical Installation	Employed on part-time	Switch gear company	Casual	Private sector	Electricity, gas, steam and air conditioning supply	Electrician
68.	Diploma in Accountancy	Employed on full time	Fadhili micro enterprise	Contract	Private sector	Financial and insurance activities	Business Relationship Officer
69.		Employed on full time	Public service board	Permanent	Public sector (national government, county government)	Administrative and support service activities	Administration
70.		Employed on full time	Siginon Global Logistics	Contract	Private sector	Transportation and storage, Financial and insurance activities	Accounts Clerk II
71.		Employed temporarily	Wote Technical Training Institute	Contract	Public sector (national government, county government)	Information and communication, Financial and insurance activities, Professional, scientific and technical activities, Other service activities, Other, please specify	Account Assistant
72.		Employed on full time	Aquatreat solutions limited	Contract	Private sector	Water supply; sewerage, waste management and remediation activities,	Technical Sales Representative

No.	Course	Employment	Employer	Terms	Sector	Industry	Position
						Professional, scientific and technical activities	
73.	Diploma Analytical Chemistry	Employed on full time	Mvita Oils Limited	Permanent	Private sector	Manufacturing	Quality Control
74.		Employed on full time	Intern SGS Kenya	Contract	Private sector	Mining and quarrying, Other service activities, Other, please specify	Cargo Control Operator
75.	Diploma in Applied Biology	Employed on full time	Kenya marine and fisheries research institute	Permanent	Parastatal or semi-autonomous government agencies	Agriculture, forestry and fishing	Laboratory Technologist
76.		Employed on full time	Regional Veterinary investigation Laboratory	Casual	Public sector (national government, county government)	Agriculture, forestry and fishing, Professional, scientific and technical activities	Laboratory Assistant
77.		Employed on part-time	Amurt	Part-Time	NGO	Human health and social work activities	Mentor
78.		Self-employed		Self-employed	Self-employed	Other, please specify	Shoe Dealer
79.	Diploma in Automotive Engineering	Employed on full time	NFT	Contract	Private sector	Transportation and storage	
80.		Employed on full time	Simba Corp	Contract	Private sector	Wholesale and retail trade; repair of motor vehicles and motorcycles	Automotive Technician
81.		Employed temporarily	Tahmeed Transport Ltd	Casual	Private sector	Transportation and storage	Mechanic
82.		Self-employed	Supplies	Contract	Public sector (national government, county government)	Mining and quarrying, Construction, Wholesale and retail trade; repair of motor vehicles and motorcycles, Transportation and storage	Manager
83.	Diploma in Banking and Finance	Employed on full time	Mafanikio sacco	Permanent	Private sector	Financial and insurance activities	Customer Service
84.			Spire Bank Limited	Permanent	Private sector	Financial and insurance activities	Officer Customer Experience
85.	Diploma in Building Technology	Employed on part-time	CD DONDA & CO. LTD	Part-Time	Private sector	Construction	Site Supervisor
86.		Employed temporarily		Casual	Private sector	Construction	

87.		Employed temporarily	Godoma Technical Training Institute	Part-Time	Public sector (national government, county government)	Education	Trainer
88.		Employed temporarily	Riocraft construction limited	Casual	Private sector	Water supply; sewerage, waste management and remediation activities, Construction	Building Technician/Leveller
89.		Self-employed		Self-employed	Self-employed	Construction	Construction
90.		Self-employed	Self employed	Self-employed	Self-employed	Information and communication	Freelancer. (Online Transcription)
91.	Diploma in Business Management	Employed on full time	Watu Africa	Permanent	Private sector	Financial and insurance activities	Complaint Management
92.		Self-employed		Self-employed	Self-employed	Other service activities	
93.	Diploma in Catering and Accommodation Management	Employed on full time		Casual		Accommodation and food service activities	
94.		Employed on full time	NYS	Permanent	Public sector (national government, county government)	Accommodation and food service activities	Nys Officer
95.	Diploma in Catering and Accommodation Management	Employed on full time	National Youth Service	Permanent	Public sector (national government, county government)	Accommodation and food service activities	Civil Servant
96.	Diploma in Civil Engineering	Employed on full time	County Government of Tana River	Permanent	Public sector (national government, county government)	Construction	Road Inspector
97.	Diploma in Electrical and Electronics Engineering	Employed on full time	KPLC	Contract	Parastatal or semi-autonomous government agencies	Electricity, gas, steam and air conditioning supply, Construction	Craftsman
98.		Employed on full time	MCL	Contract	Private sector	Electricity, gas, steam and air conditioning supply	Technician
99.		Employed on part-time	Nyayo Tea Zones	Contract	Parastatal or semi-autonomous government agencies	Electricity, gas, steam and air conditioning supply	Factory Electrician
100.		Employed temporarily		Contract	Private sector	Electricity, gas, steam and air conditioning supply	Electrician
101.		Employed temporarily	KPLC	Casual	Parastatal or semi-autonomous government agencies	Electricity, gas, steam and air conditioning supply	Casual
102.		Employed temporarily	MCC	Casual	Other (please specify)	Electricity, gas, steam and air conditioning supply	Technical Operator

103.	Diploma in Environmental Science	Employed temporarily		Contract	Private sector	Other, please specify	
104.	Diploma in Fashion Design and Garment Making	Employed on full time	County Government of Mombasa	Permanent	Public sector (national government, county government)	Education	Instructor
105.		Employed on full time	CRAFT WITH MEANING	Casual	Private sector	Manufacturing	Operator
106.		Employed on full time	Holy Ghost Fathers Technical Training institute	Contract	Private sector	Education	Technical Instructor
107.		Employed on full time	Kilifi county	Permanent	Public sector (national government, county government)	Professional, scientific and technical activities	Instructor
108.		Employed on full time	MLW	Contract	Private sector	Other service activities	Machinist
109.		Employed on part-time	National youth service	Contract	Public sector (national government, county government)	Manufacturing	Naivasha Nys Factory
110.		Employed temporarily	NYS(TGTI)	Casual	Parastatal or semi-autonomous government agencies	Manufacturing	Machine Operator
111.		Employed on full time	Ruruma vocational training center	Casual	Public sector (national government, county government)	Education	Instructor
112.		Self-employed		Self-employed	Self-employed		Melody's Designs Mastery
113.		Self-employed	Self-employed			Arts, entertainment and recreation	Fashion Desinger
114.		Self-employed	N/A	Self-employed	Self-employed	Transportation and storage	Self Employed
115.	Diploma in Food and Beverage Management	Employed on part-time	Cafe Mocha	Casual	Public sector (national government, county government)	Accommodation and food service activities	Barista
116.		Employed temporarily	Baobab beach resort and spa	Contract	Other (please specify)	Other, please specify	Hostess
117.	Diploma in Food Science Technology	Employed on full time	Gold Crown Foods EPZ	Contract	Private sector	Agriculture, forestry and fishing, Manufacturing	Quality Control Assistant

118.		Employed temporarily	Kenya Coast national polytechnic	Casual	Parastatal or semi-autonomous government agencies	Education	Lab Technician
119.			NCPB	Contract	Parastatal or semi-autonomous government agencies	Agriculture, forestry and fishing	Commodity Grader
120.			Perfect fruits and nuts	Casual	Private sector	Other service activities	Quality Inspector
121.		Self-employed	Self-employed	Self-employed	Self-employed	Other service activities	Sales Manager
122.							
123.	Diploma in Human Resource Management	Employed on part-time	Kuku foods	Part-Time	Other (please specify)	Other service activities	Hospitality
124.	Diploma in Information Communication Technology	Employed on full time	Coast general teaching and referral hospital	Casual	Public sector (national government, county government)	Information and communication	IT Officer
125.		Employed on full time	Dr	Contract	Private sector	Information and communication, Administrative and support service activities, Education	Operations Manager
126.		Employed on full time	Jirani Smart	Contract	Private sector	Other, please specify	
127.		Employed on full time	Jirani smart limited	Permanent	Private sector	Financial and insurance activities	Business Development Officer
128.		Employed on full time	MFI DOCUMENT SOLUTIONS	Contract	Private sector	Information and communication, Professional, scientific and technical activities, Other service activities	Junior Engineer
129.		Employed on full time	Vendani Kids Centre	Contract	Private sector	Information and communication, Administrative and support service activities, Education	Operations Management
130.		Employed temporarily	Tsebo	Contract	Private sector	Other, please specify	
131.		Self-employed		Contract	Self-employed		Cyber Attendant
132.		Self-employed		Self-employed	Self-employed	Information and communication	Self Employed

133.	Diploma in Journalism and Media Studies	Employed on full time		Casual	Private sector	Information and communication	Presenter/Reporter
134.		Employed on full time	KRA	Contract	Public sector (national government, county government)	Financial and insurance activities	Communication Officer
135.		Employed on part-time	PALO BIKES	Casual	Private sector	Wholesale and retail trade; repair of motor vehicles and motorcycles, Accommodation and food service activities, Information and communication	Sales Person
136.		Employed temporarily	Shaffi Hussein Ali	Part-Time	NGO	Information and communication	Peer Educator
137.		Self-employed		Self-employed	Self-employed	Other service activities	Salonist
138.	Diploma in Mechanical Engineering	Self-employed		Self-employed	Self-employed	Other service activities	Cyber Cafe Service
139.	Diploma in Medical Laboratory Technology	Employed on full time	Kwale county	Permanent	Public sector (national government, county government)	Human health and social work activities	Medical Laboratory Technician
140.		Employed on full time	Mariakani community Hospital	Permanent	Private sector	Human health and social work activities	Medical Laboratory Technologist
141.	Diploma in Pharmaceutical Technology	Employed on full time	ASFALI PHARMACY	Casual	Private sector	Human health and social work activities	Pharmtech Assistant
142.		Employed on full time	GOODLIFE PHARMACY LIMITED	Permanent	Private sector	Professional, scientific and technical activities, Other, please specify	Branch Manager
143.		Employed on full time	Harleys Ltd	Permanent	Private sector	Human health and social work activities, Other, please specify	Medical Representative
144.		Employed on full time	Sayyida Fatimah Hospital	Contract	Private sector	Human health and social work activities	Pharmaceutical Technologist
145.	Diploma in Social Work and Community Development	Employed on full time	county government of Kwale	Permanent	Public sector (national government, county government)	Administrative and support service activities	Village Administrator.
146.		Employed temporarily	Pwani oil	Casual	Private sector	Other service activities	Helper

147.	Diploma in Supply Chain Management	Employed on full time	Bridge International Academies	Contract	Private sector	Administrative and support service activities, Education	Academy Manager
148.	Diploma in Telecommunication Engineering	Self-employed		Self-employed	Self-employed		
149.			Personal	Contract	Private sector	Information and communication	Technician
150.	Diploma in Tourism Management	Employed temporarily	Chandarana supermarkets Ltd	Contract	Private sector	Other, please specify	Retail Shop
151.		Self-employed		Self-employed	Self-employed	Other service activities	Self Employed
152.	Electrical Installation Wireman	Employed on part-time		Part-Time		Real estate activities	Realtor
153.		Employed temporarily	Standard rolling mills	Casual	Private sector	Electricity, gas, steam and air conditioning supply	Technician
154.		Self-employed		Self-employed	Self-employed	Electricity, gas, steam and air conditioning supply, Construction, Wholesale and retail trade; repair of motor vehicles and motorcycles, Real estate activities	Electrical Installation Technician
155.	Masonry	Employed on full time	Qatar Aviation Services	Permanent	Private sector	Other, please specify	Airport Ground Handling Agent

3.3.12 First Job After Study Completion

The graduates who secured employment were asked if that was their first job after completion of the study. This was analysed in response to employment elasticity and labour market mobility among the TVET graduates.

Figure 13; First Job After Study Completion

From the study, 65.5% of the graduates consented that their current workstation was indeed their first employment while 34.5% did not agree.

Reasons for maintaining same employer were suggested as shown in the bar graph below;

3.3.13 Reason(s) for staying on the job

Figure 14; Reason(s) for staying on the job

A big percentage of employed graduates, 48% considered relevance of the employment to their skill as a motivating factor to maintain the same job. Another 36% considered salaries and benefits as a factor while 37.6% were driven by course program they studied.

Other factors that necessitated slow change in employer included 2.4% suggested family influence, 21.6% were persuaded by job security while 3.2% suggested the relative proximity of the workplace to their residence.

3.3.14 Duration of Work with Current Employer

The graduates also revealed the length of time they had stayed with their current employers.

Figure 15; Duration of Work with Current Employer

The survey revelaed that 31.79% graduates who were in formal employment had stayed in their current work stations for less than 6 months, 26.49% had worked in their present worked station for about 6 – 12 months. In addition, 23.84% of the graduates had worked in their current workstation for about 13 – 24 months. 11.26% of the graduates had worked with their current employers for over 36 months.

3.3.15 Reasons for Change of Employer

For graduates who felt necessary to change their employer, a number of factors for the decision were highlighted as shown in the table below;

Table 18; Reasons for Change of Employer

S/No.	Combination of factors under play	%
i.	Sought improved wage, needed to change environment, Wanted a new challenge	1.14%
ii.	Sought improved wage, sought improved working conditions, wanted a new challenge, Found employment in my area of specialisation.	1.14%
iii.	Sought improved working conditions, Found employment in my area of specialisation.	1.14%
iv.	Needed to change environment	2.27%
v.	Needed to change environment and wanted a new challenge	3.41%
vi.	Retrenched	4.55%
vii.	Sought improved working conditions	12.50%
viii.	Wanted a new challenge	14.77%
ix.	Found employment in my area of specialisation.	15.91%
x.	Sought improved wage	19.32%
xi.	Other (please specify)	23.86%

A combination of factors as suggested by the graduates came into play. 19.32% sought wage increase, 15.91% found employment in their specialities,14.77% wanted new challenge while

12.50% sought improved working conditions. Other combination of factors constituted 1.14% include cases where graduate sought improved wage, improved working conditions, wanted a new challenge and employment in area of specialisation. Other factors constituted 23.86%.

3.3.16 Wage Employment of KCNP graduates by industry sector

According to ILO, Industry refers to a specific group of companies that operate in a similar business sphere. Essentially, industries are created by breaking down sectors into more defined groupings. Therefore, these companies are divided into more specific groups than sectors. Sector therefore, is one of a few general segments in the economy within which a large group of companies can be categorized. For purposes of these survey, the study focused of four different sectors in an economy:

i. **Primary Sector:** This sector deals with the extraction and harvesting of natural resources such as agriculture and mining;

ii. **Secondary Sector:** This sector comprises construction, manufacturing, and processing. Basically, this sector comprises industries that relate to the production of finished goods from raw materials;

iii. **Tertiary Sector:** Retailers, electricity, transportation, communication, entertainment, and financial companies make up this sector. These companies provide services to consumers;

iv. **Quaternary Sector:** The final sector deals with knowledge or intellectual pursuits including research and development (R&D), business, consulting services, and education.

According to KNBS National Economic Survey 2021, Kenya has experienced limited changes in the composition of employment by sector during the last two decades. Wage employment represents the formally employed; it is to a large degree excluding workers from the informal economy, mainly in the agricultural sector. The wage employment sectors according to International Standard Industrial Classification (ISIC) are divided into 22 distinct sectors. Other subdivisions exist within these classifications as well.

Industry Sectors	Analysis of Wage Employment of KCNP graduates by industry sector
• Agriculture, forestry and fishing • Mining and quarrying • Manufacturing • Electricity, gas, steam and air conditioning supply • Water supply; sewerage, waste management and remediation activities • Construction • Wholesale and retail trade; repair of motor vehicles and motorcycles • Transportation and storage • Accommodation and food service activities • Information and communication • Financial and insurance activities • Real estate activities • Professional, scientific and technical activities • Administrative and support service activities • Public administration and defence; compulsory social security • Education • Human health and social work activities • Arts, entertainment and recreation • Other service activities • Other, please specify	169 responses Agriculture, forestry and fishing — 5 (3%) Mining and quarrying — 3 (1.8%) Manufacturing — 13 (7.7%) Electricity, gas, steam and ai... — 32 (18.9%) Water supply; sewerage, wa... — 2 (1.2%) Construction — 17 (10.1%) Wholesale and retail trade; r... — 8 (4.7%) Transportation and storage — 6 (3.6%) Accommodation and food se... — 16 (9.5%) Information and communicat... — 16 (9.5%) Financial and insurance act... — 9 (5.3%) Real estate activities — 3 (1.8%) Professional, scientific and t... — 11 (6.5%) Administrative and support s... — 8 (4.7%) Public administration and de... — 3 (1.8%) Education — 13 (7.7%) Human health and social wo... — 11 (6.5%) Arts, entertainment and recr... — 2 (1.2%) Other service activities — 25 (14.8%) Other, please specify — 15 (8.9%)

Figure 16; Wage Employment of KCNP graduates by industry sector

The survey findings revealed that 18.92%, (n=32) were employed in the Electricity, Steam, Gas and Airconditioning sector. Accommodation and food services and Information Communication Technology each employed 9.5%, (n=16) graduates. Another 10.1% (n=17) of the graduates were employed in construction sector. Agriculture, Forestry and Fishing Sectors employed 3%, (n=5) graduates, while manufacturing 7.7% (n=13). 23.7% of the graduates are employed in other economic sectors.

3.3.17 Duration of Stay before employment

The absorption rate of the KCNP graduates into formal employment was measured against how long they stayed before gainful employment.

Figure 17; Duration of Stay before employment

The biggest percentage, 31.79% were employed within their 6 months of completion of study. Another 26.49% were employed between 6 – 12 months of study completion. In summary, 58.28% of KCNP graduates secure their 1st employment within first 12

months of study completion. Furthermore, 23.84% of the graduates secured employment within 13 – 24 months since completion of study. A paltry 6.62% of the graduates took 25 – 36 months to secure formal employment.

3.3.18 Job Search Method

The graduates used a number of methods to secure employment. The methods used are highlighted in the bar chart below.
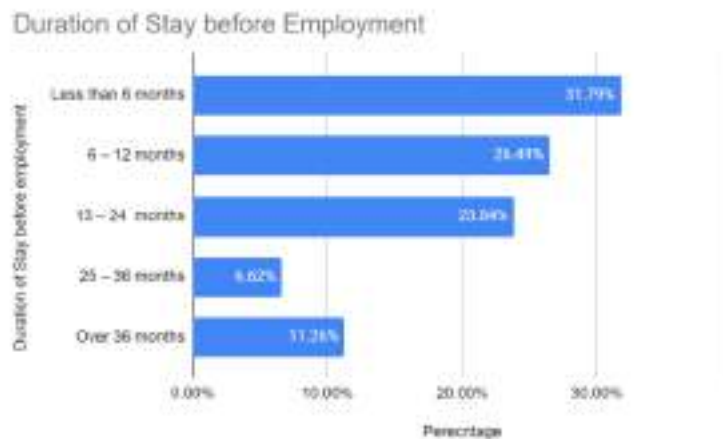

Figure 18; Job Search Method

The survey results show that up to 23% of the graduates were recommended by someone to gain the employment; at least 20% responded to an advert and secured a chance. Further 15% secured a chance through individual push and walk-ins to the employer. 12% of the graduates secured employment through door-to-door job hunting while 10% had connections.

The results obtained can potentially reveal a number of crucial issues for review in the implementation of the apprenticeship model and enhancement of industry linkages. Note that only 4% had referral by the polytechnic Career Services offices. It can also reflect that employer may not take the process of apprenticeships seriously enough or do not train students in occupations related to their study. Furthermore, it is also interesting to highlight that 1% benefitted during a public service career fair event.

3.3.19 Starting Salary of graduates

It should be underscored that Education and Training allows people to secure employment and pursue an occupation. It provides an "in" to the labor market and an opportunity to earn a decent wage or salary. This may not be the sole reason for education as it also provides personal development and the opportunity to pursue an interest.

The survey needed to compare the pay package for TVET trainers as compared to other professional cadres. The researchers gave standard ranges of expected salary of the TVET graduates in a graduating scale. The pie chart below covers the present monthly salary of various TVET graduates who are in formal employment.

Starting monthly earning your first job after completion of studies

- Ksh. 50,001 - 75,000PM 0.6%
- Ksh. 20,000 - 50,000 PM 28.0%
- Below Ksh. 20,000 PM 71.3%

Figure 19; Starting Salary of graduates

The study shows that 71.3% of the graduates earned below Kshs. 20,000 per month. Another 28.0% earned between Kshs. 20,000 – 50,000 and only 0.6% earned between Kshs. 50,000 – 75,000. None earned above Kshs. 75,000. The wages were considerably low compared to other professional qualifications.

3.3.20 Employers Contacted

The graduates job search was scrutinized by the number of contacts they made prior securing employment. The TVET education is expected to play two crucial roles in the national sustainable development (social, economical & environmental development). The first role is to provide training opportunities and career advancement avenues for the increased school leavers. The second role is to provide skilled manpower that is needed at all levels of the economy. The skills so developed should be able to lead to self-reliance in the absence of salaried employment and enhance the industrialization process. This asserts the competitive nature of the training amongst the employers. The number of contacts made were analysed and presented as shown in the bar graph below;

Figure 20; Employers Contacted

TVET garduates are also considered hands on and with matched skills that ensures increased synergies in the production value chain.

The survey findings revealed that 44.94% (n=71) of the graduates contacted 0 – 5 employers before securing employment. At the same time, 21.52% (n=34) of the graduates contacted 6 – 10 employers before securing employment. 18.35% (n=29) of the graduates secured employment immediately after completing their attachment while 4.43% (n=7) said that organisations offered them a chance for employment after course completion. Some 5.7% (n=9) of the graduates contacted over 20 employers.

3.3.21 Employed in area of Training

With increasing emphasis being given to work and skills-based solutions to economic competition, comes a renewed focus on technical and vocational education and training (TVET) as a means to expand opportunities. The TVET skills are measured against how the skills acquired matches the workplace environment.

Figure 21; Employed in area of Training

The survey revealed that 55.4% of the graduates were employed in the program areas they trained in while 42.8% were not employed in their program areas of study.

3.3.22 Reasons for Career Change

The proportion of the graduates who were not employed in their program of study accounted for 42.8% but rather sought paid up employment in other formal employment setup contrary to the program area of study. These categories of graduates were considered to have made a change in their careers. The suggested reasons for the change in career were highlighted in the table below;

Figure 22; Reasons for Career Change

The factors that motivated career change included;

i.   65.82% suggested lack of job satisfaction and other factors not specified;

ii.   16.46% suggested lack of career progression;

iii.   5.06% attributed poor working conditions;

3.3.23 Challenges in Job Search

As suggested by the graduates, the following factors contributed to low transition to work upon completion of studies. The probability of each impact was highlighted as follows;

Table 19; Challenges in Job Search

	Low Impact	>0<5%	
	Moderate Impact	>5%<10%	
	High Impact	>10%	

S/No.	Challenge	% Impact
i.	Employers not interested in my area of specialisation	0.56%
ii.	Employers not interested in my area of specialisation, Lack of work experience, Limited employment opportunities in my area	0.56%
iii.	Employers not interested in my level qualifications	2.23%
iv.	Employers not interested in my level qualifications; Employers not interested in my area of specialisation	0.56%

v.	Employers not interested in my level qualifications, Employers not interested in my area of specialisation, Limited employment opportunities in my area	0.56%
vi.	Employers not interested in my level qualifications, Lack of work experience	1.12%
vii.	Employers not interested in my level qualifications, Lack of work experience, Limited employment opportunities in my area	1.68%
viii.	Employers not interested in my level qualifications, Limited employment opportunities in my area	0.56%
ix.	**Lack of work experience**	**15.08%**
x.	Lack of work experience, Limited employment opportunities in my area	6.70%
xi.	**Limited employment opportunities in my area**	**21.23%**
xii.	Limited employment opportunities in my area, Other (Please specify)	0.56%
xiii.	Other (Please specify)	6.15%
xiv.	**Takes too long to find one**	**18.99%**
xv.	Takes too long to find one, Employers not interested in my area of specialisation, Lack of work experience	0.56%
xvi.	Takes too long to find one, Employers not interested in my area of specialisation, Lack of work experience, Limited employment opportunities in my area	0.56%
xvii.	Takes too long to find one, Employers not interested in my level qualifications	0.56%
xviii.	Takes too long to find one, Employers not interested in my level qualifications, Employers not interested in my area of specialisation	0.56%
xix.	Takes too long to find one, Employers not interested in my level qualifications, Employers not interested in my area of specialisation, Lack of work experience, Limited employment opportunities in my area	0.56%
xx.	Takes too long to find one, Employers not interested in my level qualifications, Lack of work experience	0.56%
xxi.	Takes too long to find one, Employers not interested in my level qualifications, Limited employment opportunities in my area	0.56%
xxii.	Takes too long to find one, Lack of work experience	2.23%
xxiii.	Takes too long to find one, Lack of work experience, Limited employment opportunities in my area	7.26%
xxiv.	Takes too long to find one, Lack of work experience, Limited employment opportunities in my area, Other (Please specify)	0.56%
xxv.	Takes too long to find one, Lack of work experience, Other (Please specify)	0.56%
xxvi.	Takes too long to find one, Limited employment opportunities in my area	7.82%
xxvii.	Takes too long to find one, Other (Please specify)	1.12%

3.3.24 Graduate Present Situation

The present preoccupation of unemployed KCNP graduates were examined in the context of what best describes their status. The survey examined the situation of these graduates in the context of four key parameters. This included; family commitment, job hunting, on internship

or on further education. The table bar graph below best describes the present activities of the unemployed graduates;

Figure 23; Graduate Present Situation

From the findings, the graduates are engaged as follows;

   i.   75.47% of the unemployed graduates were currently looking for employment;

   ii.   12.26% of the unemployed graduates continued to study;

   iii.   0.94% of the unemployed graduates were busy with upbringing their families.

3.3.25 Types of Jobs Graduates Apply

The unemployed graduates applied the following jobs in pursuit of employment.

Figure 24; Types of Jobs Graduates Apply

The tracer study findings revealed that the 47.60% unemployed graduates applied for both related and unrelated jobs to their profession or area of training; at the same time 42.80% applied for jobs related to their profession. In addition, 7.75% applied for jobs related to their professional/area of training and jobs both related and unrelated to their profession/area of training.

3.4 SKILLS ACQUIRED, QUALITY AND RELEVANCE OF TRAINING

The Kenya Coast National Polytechnic was established as per the Polytechnic Order of 2016 as published in the Legal Notice No. 88 and in conformity with the TVET Act No. 29 of 2013. The activities of the Polytechnic are regulated by TVETA, who promote access and relevance of training programmes within the framework of the overall national socio-economic development plans and policies as well as assurance of quality and relevance in programmes of training. Through this, the Polytechnic ensures that the institutional priority areas, policies and strategies are in line with National Priorities and aligned to the Big Four Agenda, Vision 2030, Mitigation of COVID 19 pandemic and SDGs.

Since 2016, The Government through the Kenya Universities and Colleges Central Placement Service (KUCCPS) places students to various TVET institutions across the country. The Kenyan Constitution, 2010, requires all public institutions to ensure equity in terms of gender, Persons with Disability, regional distribution among others.

The Sessional Paper No. 14 of 2012, articulates the need to strengthen and grow academic programmes that support the national priority and strategic areas. There have been efforts to improve the quality and relevance of the programmes on offer in TVET training. The Kenyan Government in the Vision 2030 has identified the need for manpower in Science, Technology Engineering and Mathematics (STEM) programmes in order to achieve its development goals.

The plan to increase access to TVET institutes was initiated by the government intention to elevate some technical institutions to national polytechnics (Nganga, 2017). The Government also wanted to ensure that each of the eight regions has at least a national polytechnic to replace those upgraded to university colleges. By upgrading technical colleges and developing vocational training centres, the Government intended to improve access to training among youth and improve their chances of securing jobs. The 2018 economic survey report noted that the total enrolment in TVET institutions increased by about 36% between 2016 and 2017, mainly due to the registration of more TVET institutions. During the same period, enrolment in Vocational Training Centres (VTCs) rose by 29%, below the national average in TVET enrolment.

In response to the Government's effort to increase enrolment in TVET institutions, the Government of Kenya (at the national level) committed to human resources through recruitment and replacement of tutors to provide relevant and adequate skills and competencies in strategic disciplines by the year 2020 (Republic of Kenya, 2006). Apart from recruiting teaching staff, the Government has also expanded training of TVET teachers as an essential aspect of improving the quality of teaching skills and responding to trained teacher demand in Kenya (Republic of Kenya, 2007).

3.4.1 Employed in an area related to course undertaken

It was important to establish whether the graduate pursued employment in the correct programme area for study.

The survey findings revealed that 61.99% of the graduates worked in an area related to the course they studied. However, 38.01% of the graduates were formally employed in other sectors not related to the area of study.

Figure 25; Employed in an area related to course undertaken

3.4.2 Relevance of Training Received at KCNP

There have been efforts to improve the quality and relevance of the programmes in TVET Colleges. The Kenyan Government in the Vision 2030 has identified the need for manpower in Science, Technology Engineering and Mathematics (STEM) programmes in order to achieve its development goals.
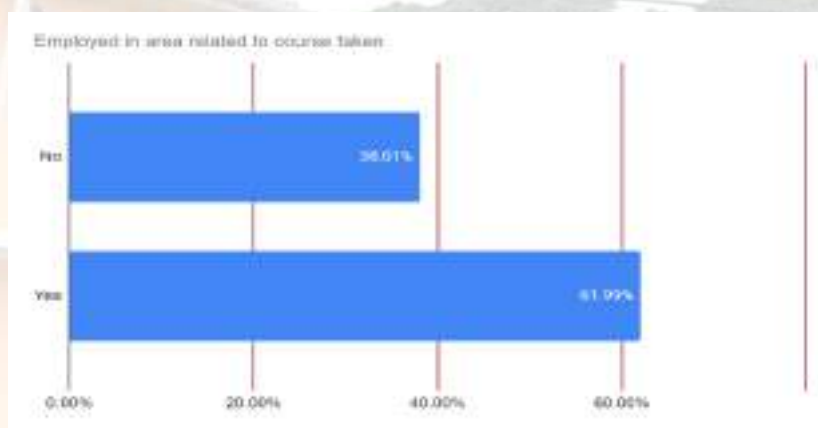
the government has made progressive gains in promoting access to TVET education as the number of TVETs, programmes and students has grown remarkably. However, there is still need for concerted efforts to address relevance, equity, quality and relevance in TVET education. In particular, more should be done to ensure that the quality and type of courses offered by TVETs are in line with the requirements of national development as stipulated in Kenya Vision 2030. The relevance of the training was analysed quantitatively presented in the bar graph below;

Figure 26; Relevance of Training Received at KCNP

From the survey findings, 47.68% of the graduates said that the training they received at KCNP were very relevant and another 32.82% acknowledged that the training was relevant. In total, 80.50% acknowledge that training offered was relevant. At the same time, 2.17% and 3.41% said the training was slightly relevant and irrelevant respectively. 13.93% of the graduates felt that the training was fairly relevant.

3.4.3 Recommendation of the course to a friend or colleague

On possibility to recommend the course and training received at KCNP, 93.79% accepted that they can to a friend, colleague or relative. This asserts the confidence on the quality and relevance of the training received at the polytechnic. The possibility of recommending the course to a friend or colleague was presented as shown below;

Figure 27; Recommendation of the course to a friend or colleague

3.4.4 Training areas for improvement

The dramatic growth in student numbers has been propped by the government policy of absorbing as many students as possible that meet the minimum TVET admissions qualification as well as policy on Recognition of Prior Learning, RPL. To support this growth, the government has periodically developed various legal frameworks and strategies to ensure

that it delivers the envisioned quality and relevant education required for socio-economic and other forms of development in the country. Among some of the legal frameworks and policy documents that have greatly influenced the shaping of the TVET education in Kenya are; the sessional paper no. 14 of 2012, the TVET Act No. 29 of 2013 and Kinyanjui Report of 2007.

It is thus expected that for the country to achieve its ambitious development agenda, TVETs must offer programmes and training that impart the competencies and skills required to meet the aspirations embodied in the development agenda.

The graduates were expected to give their response with regards to the level of satisfaction on key areas of knowledge dissemination. The training areas for improvement were highlighted in the bar chart below;

Figure 28; Training areas for improvement

The training graduates received from KCNP needed improvements so as to realize quality and relevance;

Significant Proportion of training that deserves 100% Improvement
  i.   Improvement in Theory training, 26.96%
  ii.   Provision of instructional manuals, 21.03%
  iii. Upgrading the teaching delivery methods, 20.00%
  iv.   Coverage of course content, 19.20%
  v.   Provision of relevant textbook, 18.92%

Significant Proportion of training that deserves 50% Improvement

    i.   Improving training on practical skills, 47.40%

   ii.   Beefing up workshop equipment, 46.36%

  iii.   Empowering Industrial Attachments, 41.50%

  iv.   Equipping trainers' laboratory skills, 40.58%

   v.   Improving trainers' practical skills, 40.27%

Significant Proportion of training that deserves 0% Improvement (no improvement)

    i.   Decrease Training duration, 29.89%

3.5 ADEQUACY OF KCNP TRAINING, GRADUATE EMPLOYABILITY AND WORK COMPETENCY

The rapid development era requires TVET graduates to have high capabilities and competitiveness in an effort to find work and maintain jobs in the global industrial market. In this regard, each graduate is expected to have Work Readiness which includes readiness in terms of knowledge, skills, attitudes and competences.

Agenda 2063 has envisioned the need to catalyze education and skills revolution and actively promote science, technology, research and innovation, to build knowledge, human resources, capabilities and skills for the African century. To achieve this, it has earmarked strengthening technical and vocational education and training through scaled up investments, the establishment of a pool of high-quality Technical and Vocational Education and Training (TVET) centres across Africa.

The adequacy of the training on work competency and graduate employability was assessed on a 5 likert scale under 6 parameters as to whether the training adequately prepared graduates for work, employer satisfaction, ease of securing employment, ability for self-employment, ease of change of employment and effectiveness at workplace.

The parameters were analysed and illustrated as shown in the bar chart below;

Adequacy of KCNP Training, Graduate Employability and ability to perform at work

Figure 29; Adequacy of KCNP Training, Graduate Employability and Work Competency

In the context of this tracer study survey, 30.18% strongly agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 42.75% also strongly agreed that they could easily be trained to improve their level of skill at work. In addition, 42.81% agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 38.04% also agreed that they could easily be trained to improve their level of skill at work. The graduate's relative ability to perform at work account of the adequate training received at KCNP was 72.99% and on account of being easily trained to improve their level of skill was 80.79%. This confirms the work readiness and adequacy of the training at KCNP.

Furthermore, 34.39% strongly agree that the entrepreneurial skills imparted adequately prepared them for self-employment.

3.5.1 Employment Considerations

The graduands were asked on what they considered important as they lodge their job applications. The study related quality and relevance of training to the expected outcome of the industry work. Under EASTRIP PDO 2, the project aims at Improving quality and relevance of TVET programs through annual tracer study for our graduates and built capacity of trainers for all other departments in the polytechnic to continue conducting tracer study. These considerations were presented in a bar chart as follows;

Figure 30; Employment Considerations

The graduates considered the following factors to be **Very Important** when applying for employment;

i.   Matching study program with professional qualification, 52.05%

ii.   Better grades in the chosen area of study, 50.81%

iii.   Basic skills on social and individual competencies, 49.74%

iv.   Reputation of the TVET College, 47.78%

v.   Relations and connections, 47.74%

The graduates also considered the following factors to be **Somewhat Important** when applying for employment;

i.   Deficit of employees in their profession, 23.37%

Other factors are illustrated in the bar graph above.

3.5.2 Extent of Competency Development

KCNP graduates are taken through extensive workshop practice and other practical trainings during their duration of stay at the Polytechnic. In addition, the students are taken through a mandatory three-month industrial attachment to expose them to industry and work operations. This is a step taken to ensure that graduates are equipped with the job skills needed for the future. Through industrial work practices, students are expected to be able to increase their confidence and improve their experience. Therefore, the role of KCNP is to develop broader student attributes and skills in addition to subject knowledge and academic skills together with the government and industry to improve the employability of graduates. This has an influence on the graduate competency upon completion of training. The extents of competency were assessed and summarized in a bar chart as follows;

Extent of Competency Development

Figure 31; Extent of Competency Development

From the survey results, **to a great extent**, the training helped the graduates to;

  i.   Develop the social competencies and individual attitudes that are required in the world of work, 33.66% of the graduates;
  ii.   Lay foundation for self-employment, 32.36% of the graduates;
  iii.   Develop practical skills required for the profession, 28.45% of the graduates;
  iv.   Another 32.38% of the graduates are overall satisfied with the training they received.

From the survey results, **to a little extent**, the training helped the graduates to;

  i.   Acquire theoretical knowledge, by 20.91% of the graduates;
  ii.   Get along with life independently, 17.81% of the graduates;
  iii.   19.23% of the graduates were to a little extent not satisfied with the training.

Other factors are explained in the bar graph above.

3.5.3 Gaps in KCNP Training

The graduates highlighted what they considered as limitations to effective uptake of knowledge and skills during their training. These factors could potentially deny graduate opportunity for gainful employment on account of gaps in knowledge and skills. The polytechnic should interrogate and bring feasible solutions to the discourse. The gaps in KCNP TVET training were analysed and illustrated using a bar graph as shown below;

Gaps in TVET Training

Figure 32; Gaps in KCNP Training

The findings of the study revealed that in the course of graduate study;

i.   37.45% of the trainers lacked practical skills;

ii.   31.64% of the graduates felt that the materials and equipment used for training were either insufficient, not operational, outdated or just not available;

iii.   13.82% of the trainers lacked commitment in their work. Perhaps attributed to high rates of absenteeism, mismanagement of time or other factors;

iv.   9.09% of the graduates were of the feeling that dissemination of the theory knowledge was insufficient;

4.0 INDUSTRY/EMPLOYER FINDINGS

4.1 Company Profile

4.1.1 Size of the Industry

The survey wanted to find out the industry size by interrogating the number of staff and/or if it was a branch of the major organisation.

For the company classification into micro, small, medium or large, it was chosen the criterion used by the Service of Support to Micro and Small Companies (Serviço de Apoio às Micro e Pequenas Empresas – SEBRAE, 2009), which is based on hired employees. This is denoted by the following postulations;

Table 20; Classification of Industry Sizes

Micro	Small	Medium	Large
Until 19	20 – 99	100 – 499	More than 499

SEBRAE, 2009

Figure 33; Size of the Industry

From the responses;

i. 7.1% of the employers who responded had more than 1000 employees, predominantly large companies of more than 499 employees;

ii. 14.3% of the employers who responded had between 500 – 1000 employees, considered as large companies;

iii. 28.6% of the responses were submitted by medium sized companies of less than 500 employees;

iv. 46.5% of the responses were submitted by small sized employers of less than 100 employees;

The respondents were further asked distribution of their companies in terms of location and divisions with the context of operation.

Figure 34; Industry Operations

From the findings, 39.3% *(n = 11) of the employers confirmed that the they were based in Head Office while another proportional size, 39.3% were working in branches. 14.29% of the employers were neither based in head office nor branches. 3.57% of the respondents chose not to respond.

4.1.2 Industry Sector Analysis

In International Standard Industrial Classification (ISIC) of all economic activities, is used to identify productive activities withing the sectors. These activities are defined as the use of inputs (e.g., capital, labour, energy and materials) to produce outputs. The outputs that result from undertaking activities can be transferred or sold to other units (in market or non-market transactions), placed in inventory or used by the producing units for own final use.

This survey mapped out 10 economic fields as follows; -

i.   Agriculture, Forestry, Fishing Services
ii.   Mining
iii. Construction
iv.   Manufacturing
v.   Transportation, Communications, Electric, Gas and Sanitary service
vi.   Wholesale Trade
vii. Retail Trade
viii. Services
ix.   Finance, Insurance and Rea Estate Services
x.   Public Administration

Figure 35; Industry Sector Analysis

The survey findings revealed that the principal activities of the employers who submitted back the questionnaires were;

i.   50.00% offered other services;
ii. 21.43% offered Transportation, Communications, Electric, Gas and Sanitary services;
iii. 10.71% were based in public administration;
iv. 7.14% offered manufacturing services;
v.   3.57% ventured in Blue Economy portfolios including Agriculture, Forestry, Fishing Services.

The response was highly representative compared to choices on graduate sector of employment which indicated that 18.92%, (n=32) were employed in the Electricity, Steam, Gas and Airconditioning sector. Accommodation and food services and Information Communication Technology each employed 9.5%, (n=16) graduates. Another 10.1% (n=17) of the graduates were employed in construction sector. Agriculture, Forestry and Fishing Sectors employed 3%, (n=5) graduates, while manufacturing 7.7% (n=13). 23.7% of the graduates are employed in other economic sectors

4.1.3 Status of the Industry Ownership

The graduate employers were categorised into four distinct economic sectors in order to understand their origin and activities. By nature of ownerships, the classifications were as follows;

i.   Public Sector Employer/Local or Central government;

ii.   Private Sector Employer;

iii.   Parastatal/ Semi-Autonomous Government Agencies (SAGAs) and;

iv.   Non-Governmental Organisation (NGOs)

Figure 36; Status of the Industry Ownership

The survey findings reveal that 39.29% of the employers were drawn from the pool of public sector, another 39.29% of the employers comprised private sector employers. The SAGAs constituted 14.29% of the employers while 3.57% were NGO employers. 3.57% of the respondents chose not to answer the question.

4.2 NUMBER OF TVET GRADUATES WORKING FOR THE COMPANY/ORGANIZATION

4.2.1 Employment Rate of TVET Graduates

Graduate employability is one of the main agendas and of grave concern to the government of Kenya. The related ministries, together with the TVET institutions and the industries, are working together to ensure that TVET graduates meet the requirements of the job market. Among the initiatives that have been planned and are continuously carried out include, industry involvement in curriculum, value infused talent, and intervention programs to increase graduate employability. The TVET absorption rate in the industries was analysed as shown in the chart below;

Figure 37; Employment Rate of TVET Graduates

The survey findings revealed that up to 92.9% of the industry employers prefer TVET graduates. These may be attributed to the skill set and competency levels of the graduates while at the same time industry consider TVET graduates not too demanding in terms of labour costs. 3.6% of the employers did not answer the question.

4.2.2 Number of TVET graduates recruited

The survey needed to know how employers absorb the TVET graduates by assessing their numbers in the industry.

Figure 38; Number of TVET graduates recruited

The survey findings revealed that 35.71% of employers had recruited less than 5 TVET graduates in their organisations. 17.86% of the employers recruited 10 to less than 25 graduates in their organisation. Employers who contracted 25 to less than 50 graduates

constituted 10.71%. In addition, 17.86% of the employers recruited more than 100 TVET graduates.

4.2.3 Proportion of Female TVET Graduates Employed

Gender Equality and Social Inclusion (GESI) agenda has been used in all and every discipline of good- governance and development. The challenges we face today are concerned making the Technical and Vocational Education and Training (TVET) system more effective and need based, more dynamic, inclusive, and responsive to the changes taking place in the world of work. This survey was not left out in exploring the role and place of female graduates in determining the program effectiveness.

Table 21; Proportion of Female TVET Graduates Employed

S/No.	Employment of female Graduates	Percentage representation, %
1.	Choose not to answer	3.57%
2.	No	3.57%
3.	Yes	92.86%

Up to 92.86% of the employers acknowledged that in the spirit of gender inclusivity, they do recruit female TVET graduates. 3.57% of the employers chose not to answer the question.

Figure 39; Proportion of Female TVET Graduates Employed

A majority of the employers employed less than 5 female TVET Graduates which accounted for 53.57% of the sample. 17.86% of the employers recruited 5 to less than 10, while at the same time 10.7% recruited 25 to less than 50. Employers who engaged more than 100 TVET graduates accounted 7.1% and 50 to less than 100%, employed 7.14%. There was no feedback from 3.57% of the employers.

4.2.4 Proportion of Industries that employed KCNP Graduates

KCNP being a TVET institution plays a critical role in developing manpower necessary to build the economy. The graduate responses revealed that KCNP Graduates registers presence in

38 out of 47 counties in Kenya, a representation of 76.59% of the country with one student working in the Middle East. At the same time, 41.19% of the graduates were in formal employment.

Figure 40; Proportion of Industries that employed KCNP Graduates

The survey further revealed that 53.57% of the employers recruited less than 5 KCNP graduates. Another 10.71% of the employers recruited 5 to less than 10 KCNP graduates, while 7.15% of the employers recruited 25 to less than 100 KCNP graduates.

14.29% of the employers did not recruit any KCNP graduate due to the following reasons;

    i.   Didn't get one;

    ii.   Never seen one;

    iii.   We have not come across applicants from KCNP;

    iv.   Another respondent said it was beyond their capacity to answer;

    v.   A respondent claimed to be KCNP Alumni;

    vi.   Employer said most have low qualifications i.e., certificate and diploma. The employer recommended they be encouraged to take further studies;

    vii. Some employers chose not to answer.

4.3 RECRUITMENT PROCEDURES AND SELECTION CRITERIA

4.3.1 Procedure for sourcing TVET Graduates

This included sourcing for candidates competitively through various methods including advertising, using private agencies, direct employment or other methods. Selection involves screening potential candidates using tests and interviews, selecting candidates based on the results of the tests or interviews, and on-boarding to ensure that the candidates are able to fulfil their new roles effectively.

The analysed graduate survey results showed that up to 23% of the graduates were recommended by someone to gain the employment; at least 20% responded to an advert and secured a chance. Further 15% secured a chance through individual push and walk-ins to the

employer. 12% of the graduates secured employment through door-to-door job hunting while 10% had connections. Employers reacted differently in sourcing for their potential employees.

Figure 41; Procedure for sourcing TVET Graduates

The survey results revealed that 32.14% of the employers sourced TVET graduates through internet advertisements, another 21.43% of the employers recruited through direct application by the graduates. At the same time, 17.86% of the employers recruited through advertisements in newspapers (daily newspapers and special periodicals).

4.3.2 Employer Considerations for TVET Graduate

A number of factors considered by the employer before recruiting the TVET graduate were assessed on a likert scale of 1 – 5 with 5 considered **Very Important** and 1 **Not Important** in that order. In determining challenges faced by graduates while looking for employment, it was found out that 15.08% of the graduates cited lack of work experience as an impediment to job entry, 21.23% noted limited employment opportunities in their specialties while 18.99% lamented that it takes too long to find employment. Furthermore, 52.05%graduates in their employment persuasion considered matching study program with professional qualification, 50.81% considered better grades in the chosen area of study, 49.74% considered their basic skills on social and individual competencies. Other considerations included reputation of the TVET College, 47.78% and relations and connections, 47.74%. The employers considered the following aspects in a potential candidate;

Figure 42; Employer Considerations for TVET Graduate

The survey revealed that the employer considered these attributes **Very Important** during the selection and recruitment of the graduates;

i. 69.23% emphasised on the field of graduate study;
ii. 59.26% considered subject area of specialization;
iii. 46.15% laid emphasis on final examination subjects;
iv. 50% of the employers' stresses on practical experience;
v. 50% relies on behaviour during the interview or rather the interview outcome and;
vi. 65.38% recognised the TVET KNEC Certificate.

The survey findings also revealed that the employers consider the following factors as **Slightly Important** during the selection and recruitment of the TVET graduates;

i. The grades of examination at the TVET Institute, 3.85%;
ii. Main focus of subject area of specialization, 3%;
iii. Experience abroad, 19.23%.

Other factors are illustrated on the bar chart above.

4.3.3 Provision of On Job Training (OJT)

OJT is a strategic employment plan that supports the employers in their hiring process by adding staff capacity, productivity and training at reduced costs to the employee and is an excellent vehicle for eligible graduate Job Seekers to build their skills and re-establish their employment status. OJT benefits Employers by reducing the cost of training to new graduate employees. In this case, the Employer designs the on-site training which is aligned with the

skills required for the job. The graduates have an opportunity to "earn as they learn" in a hands-on environment, acquire job and career advancement skills, and provides an opportunity for long-term employment. The employer reactions on provision of OJT was analysed as shown;

Figure 43; Provision of On Job Training (OJT

The study findings reveal that 67.86% of the employers prefer OJT for the fresh TVET graduates they recruit while 28.57% of the employers do not prioritize it at all. The findings are consistent with the employer considerations favouring graduates with practical experience while also improving the work experience of the graduate employees as discussed in the employment considerations by the employer and employee.

4.3.4 Duration fresh graduate takes to become professionally competent

The length of time graduates takes before becoming fully competent in work may be attributed to factors such as the quality of training at the TVET institute, practical skills knowledge, work environment and quality of working tools used.

Duration it takes TVET graduates to become competent on job

Figure 44; Duration fresh graduate takes to become professionally competent

The study findings showed that 25% of the employers acknowledged it takes less than 3 months for KCNP TVET graduates to be competent in the industry. 25% of the employers further revealed that it takes 3 months to less than 6 months and 6 months to less than 9 months for graduates to be professionally competent. 10.71% added that duration of competency varies between 9 months to 12 months and 12 months or more. However, it was understood that graduates from different TVET institutes require different durations to be able to carry out professional tasks properly. The reasons cited were as follows;

  i.   Credibility of the Institution & overall appraisal of their graduates over time;
  ii.   Competency differs;
  iii. Low or limited exposure to practical classes by some institutions;
  iv.   The level of exposure in theoretical knowledge which affects the application of such to the industry;
  v.   Other than technical skills/ experience from field of study, graduate attitude plays a major role in an individual's training duration, good attitude promotes motivation and readiness to learn, and vice-versa
  vi.   Some institutions are not well equipped with training equipment and;
  vii. Lack of proper learning environment/ mentorship.

4.3.5 Induction of the TVET graduates at workplace

Induction is considered as an important part of an employer's human resource practices. Many aspects should be addressed when discussing the importance and objectives of an induction process. Induction can be defined as the processes and support provided by the organization

in order to help a new employee to learn to know the new organization and its members as well as the expectations and tasks of the job. The KCNP TVET graduates are inducted into the organisation best practices and offered platform to share their skills and improve the organisation overall performance. This was illustrated as shown in the bar graph;

Figure 45; Induction of the TVET graduates at workplace

The bar chart was used to show the initial experience of the employers with TVET Graduates once they get an opportunity to work in the companies. It was evident that 50% of the employers acknowledged that new TVET graduates get help from experienced colleagues for them to settle at the workplace 28.57% added that they take the graduates through an extensive formal/induction training course for them to be able to assume tasks normally. 10.71% of the employers asserted that TVET graduates assume tasks without any support from experienced colleagues.

4.3.6 Proportion of the knowledge and abilities acquired during the training period

A formal training necessary to assist in the induction process is outlined by the employers who also ensure effective monitoring of the induction process, particularly in the first few months of employment. As suggested by the employers, the key areas of focus are outlined below;

Table 22; Proportion of the knowledge and abilities acquired during the training period

S/No.	Knowledge area	Proportion in %
i.	Interpersonal skills	3%
ii.	Knowledge of the organizational structure of the enterprise or of single section	4%
iii.	Knowledge of the organizational structure of the enterprise or of single section, Workplace-orientation technical knowledge, Knowledge/capability in the field of personnel management, Knowledge/capability in the field of financial management, Interpersonal skills.	43%
iv.	Knowledge/capability in the field of personnel management	11%
v.	Workplace-orientation technical knowledge	32%
vi.	Workplace-orientation technical knowledge, Knowledge/capability in the field of personnel management	4%
vii.	Choose not to answer	3%
	TOTAL	**100%**

43% of the employers train the new employees on the following areas;

    i.   Knowledge of the organizational structure of the enterprise or of single section;

    ii.   Workplace-orientation technical knowledge;

    iii.   Knowledge/capability in the field of personnel management;

    iv.   Knowledge/capability in the field of financial management;

    v.   Interpersonal skills.

3% of the employers did not respond.

4.3.7 TVET Graduate ability to work in Management

Technical and Vocational Education and Training (TVET) and skills development have equally central roles to play in the development of management skills for employability. Quality, demand-driven TVET and skills development, both in and out of school, are potentially among the most important tools for equipping graduates with the right management and leadership skills they will need. Consequently, the right skills set comprising core skills, management/employability skills and leadership skills are assuming increased importance and significance in the TVET and skills sectors. The employers were interrogated on the ability of the TVET graduates to assume future management positions in their organisations. The responses were documented as follows;

Figure 46; TVET Graduate ability to work in Management

The survey findings revealed that 85.71% of the employers were of the opinion that TVET graduates were prepared to assume future management posts when they start to work. 10.7% of the employers felt that the graduates were not prepared to assume future management posts while 3.57% chose not to answer the question.

4.3.8 Level of utilisation of Skills

There was need to find out the whether the employers recruited graduates who trained in a different field other than the primary business of the company, otherwise referred to as mismatch in skills at entry point. Studies shows that high and persistent levels of unemployment, together with job vacancies that remain unfilled, are often attributed to mismatches between jobs and skills.

Skills mismatch is broad and can relate to many forms of labour market friction, including **vertical mismatch** *(where the level of the employee's qualification is not the one required by the job)*, skill gaps, skill shortages, **field of study (horizontal) mismatch** *(where the discrepancy between a person's current occupation and their field of education related to the highest level of education attained)* and skill obsolescence. These various forms of skills mismatch are very different in terms of how they manifest themselves, how they are measured, what causes them and how their consequences are felt. The employer responses were analysed and presented in table below;

Table 23; Level of utilisation of Skills

Employ graduates trained in a different field other than the primary business of the company	Level of competence employed for such graduates	Reasons for not employing graduates trained in a different field other than the primary business of your company	% Response
Choose not to answer			7.14%
No		We don't want to waste time in training them in the required skills	3.57%
		We need people with relevant skills only	25.00%
No			**28.57%**
Yes	Assistant Trainees		14.29%
	Semi – skilled level		10.71%
	Skilled level	We need people with relevant skills only	39.29%
Yes			**64.29%**

The 64.29% of the employers accepted that they recruit TVET graduates to perform other tasks different from their main skill areas. The graduates were employed at different competence levels. 10.71% were employed at semi-skilled level, 14.29% were employed at assistant trainee level while 39.29% were employed at skills level. 28.57% of the employers did not employ graduates without relevant skills. 7.14% chose not to answer the question.

Skills mismatches are driven by low-quality education, demographic change, rapid technological development, new sources of job, creation and new forms of work organization. Regardless of the cause, skills mismatch can negatively affect labour market outcomes, workers' productivity, competitiveness and economic growth.

The survey further revealed that out of total response, 86.67% of the employers need graduates with relevant skills for employment. In addition, 6.67% of the employers do not want to go additional cost of time in retraining the graduates to acquire the relevant skills.

4.4 ASSESSMENT OF COMPETENCY LEVELS BY THE EMPLOYER

Parameters for assessing the competency level of the graduates were based on three key parameters. The survey assessed level of competence of graduates while performing their duties, level of satisfaction of the employers by the TVET graduates and whether TVET graduates were trainable and adaptable to the changing work environments.

Figure 47; Assessment of Competency levels

On level of competency of the TVET graduates, 53.57% of the employers ranked the competency level as High while 39.29% ranked it as fair.

On Satisfaction with TVET graduates, 53.57% of the employers agreed that they were satisfied with the TVET graduates they recruited. Another 39.29% of the employers strongly agreed that the TVET graduates met their expectations.

On ability to train and adopt to ever changing job demands, 67.86% of the employers strongly greed that TVET graduates are trainable and adaptable to changing work environment and another 28.57% agreed to the question.

4.4.1 Comparison of TVET graduates Kenya with those of other countries

The employers were asked whether they employed TVET graduates from other countries. The question was closed ended and the respondents were to choose between 'yes', 'no' or choose not to answer. In addition, employers who acknowledged employment of the foreign trained TVET graduates were asked to comment on their work performance. The data was analysed and presented as shown below;

Figure 48; Comparison of TVET graduates Kenya with those of other countries

From the study, 64.29% of the employers said that they had employed TVET graduates from other countries. 28.57% of the employers of the employers said they did not employ graduates from other countries while 7.14% of the employers chose not to reply.

The 64.29% of the employers who employed the foreign TVET graduates commented on their work competency as follows;

    i.   21.43% of the employers said they had specialised training;

    ii.   21.43% of the employers said they were better;

The 28.57% of the employers who said they did not employ graduates from other countries commented that;

    i.   28.57% of the employers said they were the same;

    ii.   7.14% of the employers said they were less competent;

Other employers did not provide reasons.

4.4.2 Assessment of the Graduate Social Skills

Social skill is becoming increasingly important in today's workplace because organizational structures are becoming flatter with more service-oriented positions. Strong social skill can facilitate interpersonal interactions, which can in turn lead to effective job outcomes.

On a scale of 1 – 5, where '1' denoted **Poor** and '5' **Excellent**, the employers were asked to rate the social skills amongst the TVET graduates at the workplace. The outcome of the survey was analysed and presented as shown below;

Figure 49; Assessment of the Graduate Social Skills

The survey findings revealed that graduates were ranked to have **Excellent** on the following attributes;

  i.   35.71% of the employers ranked excellent on **Innovativeness/creativity;**
 ii.   35.71% of the employers ranked excellent on willingness to learn;
iii.   32.14 of the employers ranked excellent on ability to coordinate;

The findings further revealed that graduates were ranked **Very Good** on the following attributes;

  i.   46.43% of the employers ranked Very Good on ability to reflect upon one's 'own conduct;
 ii.   39.29% of the employers ranked Very Good on ability to perform/commitment;
iii.   39.29% of the employers ranked Very Good on loyalty to the institutions and its objectives;
 iv.   35.71% of the employers ranked Very Good on ability to **solve problems;**
  v.   35.71% of the employers ranked Very Good on ability to **improvise;**
 vi.   35.71% of the employers ranked Very Good on ability to work under pressure;
vii.   35.71% of the employers ranked Very Good on ability to express oneself in writing;

5.0 PROGRAM STAFF FINDINGS

5.1 Staff response rate

The Polytechnic 10 academic departments host more than 40 fulltime programs and over 60 part-time and short courses developed and continually shaped by market needs. Proportion of total number of trainers, n = 258 which comprises trainers under PSC employment, n = 117 and trainers under council terms, n = 86 and those directly on part-time terms, n = 55 employed to seal the gap in staff shortage. Out of this, at least 80 number of staff responded as follows;

Figure 50; Staff response rate

The Electrical and Electronics department and Business and Media Studies department had the highest response rate which accounted for 18.18% of the total number of responses received. The Secretarial and Liberal Studies departments had the lowest response rate of 1.30%. Responses from the polytechnic administration constituted 2.60% of the total responses received. Other departments responded as follows; Medical Sciences, 5%, ICT 6.25%, Hospitality and Tourism, 11.25%, Fashion Design and Cosmetology, 11.25%, Applied Sciences and Building and Civil Engineering each 7.50%.

5.2 Length of Service

Respondents were asked how long they had stayed in their service. The question was close ended and thus responses were coded to fit into discrete categories. Below are some of the ranges of responses.

Figure 51; Length of Service

From the responses, 25.3% of staff had served at the Polytechnic for a period of between 2 to 4 years. Only 6.3% of the respondents had served between 7 to 10 years. More than half of the respondents which accounted for 65.82% had served for not more than 4 years. The respondents served the polytechnic in the following capacities;

Table 24; Roles of Program Staff

S/No.	Role in the department?	Frequency, N	Proportionate Representation, %
i.	Chief Principal	1	1.25%
ii.	Dean of students	1	1.25%
iii.	Deputy Dean	1	1.25%
iv.	Class tutor	15	18.75%
v.	HOD	10	12.50%
vi.	Exams Coordinator	3	3.75%
vii.	HOS	9	11.25%
viii.	IQA	1	1.25%
ix.	Department Attachment Coordinator (DAC)	5	6.25%
x.	Trainer	30	37.50%
xi.	Choose not to answer	4	5.00%
	Grand Total	**80**	**100.00%**

It should be noted that the program staff are initially employed as Trainers. 15 out of the 80 responses received were classroom tutors and this represented 18.75%. Other officers who participated in the survey included, the Chief Principal, Dean of Students, 3 Exam Coordinators, 5 Attachment Coordinators and Deputy Dean of Students. Trainers also had additional roles they coordinate at the polytechnic. 6.25% were Departmental Attachment Coordinators as they work closely with The Polytechnic Liaisons Officer to prepare the students to go on attachments.

5.3 STATUS OF TVET COURSES OFFERED AT KCNP

5.3.1 Level of program accreditation

The program areas were assessed on their level of preparedness for uptake either locally or internationally. The bar graph explains whether local programs are internationally recognized or not.

Figure 52; Level of program accreditation

From the sampled data, 70% of the respondents said that the courses they taught were not internationally accredited, which means that the courses being offered were only recognised nationally. 22.50% said that the courses were internationally accredited and 7.5% chose not to answer. The international awarding bodies were listed as follows;

i. ICM - Institute of Commercial Management
ii. ICS - Institute of Certified Secretaries
iii. UNESCO - UNEVOC
iv. IEEE - Institute of Electrical and Electronics Engineers
v. ITU - International Telecommunication Union
vi. CICT - Certified Information Communication Technologists

5.3.2 Recognition by Professional Associations

In order to enhance relevance and quality, the training programs are regulated in the industry by various professional organisations. It is a mandatory requirement by employers to have their staff professionally registered by a legal professional entity.

Figure 53; Recognition by Professional Associations

68.8% of the respondents agreed that TVET courses were recognized by professional associations. 10.0% responded that TVET courses were not recognized by professional associations. The professional bodies allied to programs taught at KCNP were outlined as follows;

i. AAK - Architectural Association of Kenya
ii. AKLMSO - Association of Kenya Medical Laboratory Scientific Officers
iii. EBK - Engineers Board of Kenya.
iv. ICPAK - Institute of Certified Public Accountants of Kenya
v. ICS - Institute of Certified Secretaries
vi. ICS - Institute of Chartered Shipbrokers
vii. IEK - The Institution of Engineers of Kenya
viii. IET - The Institution of Engineering Technologist and Technicians of Kenya
ix. ISK - Institution of Surveyors of Kenya
x. KETRB - Kenya Engineering and Technology Registration Board
xi. KMLTTB - Kenya Medical Laboratory Technicians and Technologists Board
xii. KPSGA - Kenya Professional Safari Guides Association
xiii. NNAK - National Nurses Association of Kenya
xiv. PPB - Pharmacy and Poisons Board
xv. TPA - Tourism Professional Association

Further to this, 90% of the respondents agreed that the courses offered by The Polytechnic were recognised by employers. 8.8% chose not to answer while 1.3% indicated that the courses were not recognised by employers.

5.4 DEVELOPMENT OF CAREER PATHWAYS

"Career pathways" shows the connections between education, training programs and support services that enable individuals to secure employment within a specific industry or occupational sector, and to advance over time to successively higher levels of education and

employment in that sector. Each step on a career pathway is designed explicitly to prepare for the next level of employment and education. Career pathways target jobs in industries of importance to local economies. These pathways create both avenues of advancement for current workers and future labour market entrants and a supply of qualified workers. In addition, possibility of opening new collaborations though MOU, engaging in student attachment and industrial visits is greatly enhanced. The program staff outlined the potential employers for different departments as follows:

Table 25; Graduate career pathways

S/No.	Department	Employer
1.	Mechanical, Marine & Automotive Engineering	KENYA PORTS AUTHORITY
		KEBS
		EABL
		DT DOBIE
		TOYOTA
		KENYA AIRWAYS
		SECCO
		KENYA PIPELINE
		PUBIC SERVICE
2.	Medical Sciences	HOSPITALS
		RESEARCH INSTITUTIONS
		PUBLIC SERVICE
		KEMRI
		LANCET
		MEDICAL LABORATORIES
		MINISTRY OF HEALTH
3.	Building & Civil Engineering	PUBLIC SERVICE
		KURA
		KERRA
		KENHA
		KPA
		SECCO
		VAPCO CONSTRUCTION
4.	Hospitality & Tourism	HOTELS
		HOSPITALS
		KENYA TOURIST BOARD
		KENYA COAST TOURIST ASSOCIATION
		SCHOOLS
		MANUFACTURING COMPANIES
		BANKS
		AIRPORTS
5.	Secretarial & Liberal Studies	GOVERNMENT MINISTRIES
		PRIVATE COMPANIES

		SAGAs
		PARASTATALS
6.	Business & Media Studies	MICROFINANCE ORGANISATIONS
		MOMBASA ENGINEERING WORKS
		MABATI ROLLING MILLS
		LOGISTICS COMPANIES
		MEDIA HOUSES
		NHIF
		BANKS
		KETRACO
7.	Applied Sciences	PWANI OIL COMPANY
		STANDARD ROLLING MILLS
		KEMFRI
		PWANI UNIVERSITY
		KEMRI
		KAPA OIL REFINERIES
		KARLO
		SCHOOLS
		BAMBURI PORTLAND
		SGS
		GOVERNMENT CHEMISTS
8.	Electrical & Electronic Engineering	KPLC
		MZURI SWEETS
		KENGEN
		TELKOM KENYA
		KBC
		KENYA PIPELINE
		GRAIN BULK HANDLERS
		MABATI ROLLING MILLS
		HOSPITALS
		KENYA FERRY SERVICES
		KETRACO

5.5 PERIODICAL REVIEW OF TVET COURSES

Effectively, institutions should continually review their programs to match the changing labour market demands. Curriculum reviews are a formative component of the overall quality assurance strategy and are focused on the continuing development of students' learning experiences. The process takes into consideration;

i. Changing nature of the disciplines;
ii. To rationalise your offering, for example by avoiding duplicate provision or reducing the assessment burden for staff and students;
iii. Opportunities offered by new learning technologies;

iv.   Increasing cohort size;

v.   Shifting student demographics;

vi.   Trends in student retention, progression and achievement (including attainment gaps between students from different demographic groups);

vii.   Trends in recruitment;

viii. Changing expectations of professional statutory and regulatory bodies;

ix.   Outcomes of cyclical quality assurance processes, such as external examiners' reports;

x.   Outcomes of module and programme evaluations;

xi.   Original aims and outcomes of the programme having been lost through 'module drift' over time.

The program staff acknowledged that indeed it is essential to conduct curriculum review in order to meet the expected outcomes stated above.

Figure 54; Review of TVET Courses

From the survey, 68.4 % of the respondents agreed that TVET courses at Kenya Coast National Polytechnic are reviewed while 31.6% were of the opinion that TVET courses are not frequently reviewed at the college. The frequency of curriculum reviews as suggested by the respondents were as follows;

Table 26; Review of TVET Courses

Period before curriculum review	Number of Respondents, N	Number of respondents (%)
0 - less than 24 months	10	12.50%
24 Months to less than 36 Months	10	12.50%
36 Months to less than 48 Months	9	11.25%
48 Months to less than 60 Months	6	7.50%
60 months or more	27	33.75%
Choose not to answer	18	22.50%
Grand Total	**80**	**100.00%**

In the study, we also wanted to know how long it takes before reviewing the curriculum used in training. 33.75%, n=27, said that it takes over 60 months before a curriculum is reviewed. 7.50% or n=6, suggested that reviews are conducted after 48 months to less than 60 months while 12.50% or n=10 suggested 24 months to less than 48 months. 22.5% of the total respondents however chose not to answer because either did not know how long it takes

before the curriculum is reviewed or actually there has been no review during their stay at the polytechnic.

5.5.1 Curriculum Review Methods

Various sources of data can be used to inform decisions made during the curriculum review process at the polytechnic. In cases where there were reviews, the following data sources were used;

Figure 55; Curriculum Review Methods

39.66% of the staff supported conducting industry labour market surveys as a tool of curriculum review. This would be important because it would aid in matching the industry expectation with the student's skill set. 29.31% of the respondents chose to use occupational standards. 12.07% of the respondents supported the use of recommendations from tracer studies while 6.90% chose not to answer. The respondents further highlighted the following reasons for slow uptake of course reviews by either the polytechnic or the regulators;

i. Inadequate resources to facilitate the process;

ii. The curriculum is provided by KICD & the trainees are expected to be examined by KNEC. The Ministry of Education doesn't provide forums to discuss the relevance of the course content;

iii. Because they were developed by KICD and they are the ones mandated to review;

iv. It is an Initiative of curriculum developers i.e., KICD, CBET;

v. The courses are under the government guidelines and it can take long before reviewing is done;

vi. There is no negative feedback from what is already being offered

vii. Failure of KICD to advise;

viii. Because reviewing requires thorough research to identify areas of need;

ix. Lack of personnel;

x. Due to lack of incentives;

5.6 EXTENT OF DELIVERY OF COURSE CONTENT

5.6.1 Availability of Training Aids

Different methods are used while delivering the straining outcomes to TVET graduates. The Program staff highlighted a combination of training methodologies and training aids that

enable successful training of the TVET graduates at KCNP. The methods were documented and analysed as below;

Figure 56; Availability of Training Aids

From the survey, to **Very High Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;

i.   30.67% agreed that Industrial Attachment is a component in training at KCNP;

ii.   37.33% said that course curriculums are available for training;

iii.   21.62% acknowledged the availability of practice workshops and classrooms;

iv.   18.06% also added that learner log books are available and aids training;

From the survey, to **Some Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;

i.   40.79% were concerned about access workshops/seminars;

ii.   40% raised an issue on involvement of local employers;

iii.   38.57% lamented on study packs availability;

iv.   35.62% also added concern on industrial visits;

From the survey, to **Moderate Extent**, the program staff acknowledged the availability of the following training aids at the polytechnic;

    i.   30.26% had concerns on Access to Qualification Standardisation Workshops/seminars (TVETA, CDACC, KNQA and others);

    ii.   26.32% commented on availability of tools and equipment;

    iii.   32.47% highlighted the availability of Recommended Text Books (including Reference Materials).

The program staff were of the opinion that follow-up of the graduate progress (34.6%), involvement of local employers (40%), industrial visits (35.62%), external assessor (29.17%), access to workshops/ seminars (40.79%) and study packs (38.57%) were used at the polytechnic to some extent.

In addition, industrial attachment (30.67%) and course curriculum (37.33%) were used as training aids in the polytechnic to a very high extent. The majority of the respondents thought that access to qualifications (30.26%), learner logbooks (25.00%), recommended text (32.47%), learner resource centre (30.67%) and tools and equipment (26.32%) were used to moderate extent in the polytechnic. This implies that the polytechnic has not exhausted the training aids that can be used to enhance training.

5.7 STUDY CONDITIONS AND PROVISIONS

Broad range of factors were used to measure learning attributes at the Polytechnic. The survey needed to explore on the relationship between quality in commitment, social and financial bonds, communication, general academic conditions and administrative support and students' satisfaction which in turn influence institutional image and students' loyalty and hence balancing competing goals and expectations in ways that satisfy stakeholders.

Study Conditions at KCNP

Figure 57; Graduate study provisions and conditions

The survey findings reveal that the program staff Agree on the following study conditions;

    i.   52.11% of the program staff involve theoretical training related to the occupation;

    ii.   54.05% of the program staff acknowledge the involvement of students in Innovation, Symposium, Trade fair and Research;

    iii.   48.61% of the program staff administer practical use of computers;

    iv.   47.30% of the program staff are involved in practical use of workshop/laboratory tools;

    v.   46.58% of the program staff are involved in practical use of machines and equipment;

    vi.   52.70% of the program staff are involved in practical use of materials and parts;

    vii.   62.50% of the program staff are involved in theory and practice of equipment maintenance/calibration;

    viii.   50.00% of the program staff ensure that graduates understand and produce drawings;

    ix.   51.35% of the program staff are involved in use of written instructions and working guides (manuals);

    x.   53.42% of the program staff have diverse knowledge of the industry;

    xi.   44.59% of the program staff are involved in discipline and adherence to work ethics;

    xii.   42.47% of the program staff are involved in careers advice;

Analysis of other study conditions are provided in the bar graph above.

CONCLUSION AND RECOMMENDATIONS

The objective the study was to track the effectiveness of the KCNP training in equipping her graduates with the necessary skills to successfully gain employment, self-employment or pursue further academic or vocational training. To do so, the study traced the whereabouts of KCNP graduates and assessed how successful they had been able to integrate into the labour market after completing their learning program, between 2019 and 2021. The study was conducted between December 2021 and May 2022. The study broadly covered graduate responses, curriculum implementers who included trainers and management team and industry responses to provide information on readiness of the TVET graduates they employ.

The outcome of the data received revealed that 50.28% of the traced graduates pursued STEM courses. The data was disintegrated by gender and hence 37.29% who pursued STEM courses were male while 12.99% were female graduates. At the same time, 16.38% graduates took business and media studies an integral unit in enhancing and preparing the graduates for self-employment while 31.06% graduated with humanities and social sciences qualification, development skills for the modern society.

On the question of graduate employability, the overall employability rate was 77.75%, N = 225, classified either as employed under formal contract terms which accounted 41.19% of the graduates, self-employed, 14.06% of the graduates or unemployed but pursuing further studies, 22.50%. Graduates pursuing further studies were considered employed by World Bank classification of employment statuses. The findings further revealed that 87.2% of the graduates tracked were within the timeline of the tracer study scope. The findings showed that 87.2% of the graduates tracked were within the timeline of the tracer study scope. The disintegrated data shows that 20.1% completed study between 1 – 6 months. Again, 15.5% who completed study between 7 – 12 months, 25% who completed study between 13 – 24 months and 25.6% who completed study between 25 – 36 months. Finally13.8% who graduated over 36 months ago were also tracked.

Furthermore, 27.3 %, n= (96) out of the total response of 352 represented EASTRIP priority programme courses. From this, 25%, n = 24 were Employed, 7.29%, n= 7 self-employed and the rest 55.21%, n= 53 were unemployed. It was also noted that from the sample of EASTRIP priority programme courses, (27.3%, n=96), Female accounted 69.8%, n=67, while 30.2%, n= 29 accounted for male respondents. Compared against overall employment outcome of 41.19%, the proportion of female who secured employment under the priority programmes was 29.15%, n=28, while male was 15.64%, n=15 on either case. The overall employability rate when tallied against the total number of respondents who pursued EASTRIP priority

programme accounted 44.79%, n=43. However, when compared against the overall response rate across all the programmes, the rate obtained was 12.22%.

On the question of Skills Acquired, Quality and Relevance of Training, the survey findings revealed that 61.99% of the graduates worked in an area related to the course they studied. However, 38.01% of the graduates were formally employed in other sectors not related to the area of study. From the survey findings, 47.68% of the graduates said that the training they received at KCNP were very relevant and another 32.82% acknowledged that the training was relevant. In total, 80.50% acknowledge that training offered was relevant. At the same time, 2.17% and 3.41% said the training was slightly relevant and irrelevant respectively. 13.93% of the graduates felt that the training was fairly relevant.

On Adequacy of KCNP Training, Graduate Employability and Work Competency 30.18% strongly agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 42.75% also strongly agreed that they could easily be trained to improve their level of skill at work. In addition, 42.81% agreed that the training they undertook at KCNP adequately prepared them well for the world of work. 38.04% also agreed that they could easily be trained to improve their level of skill at work. The graduate's relative ability to perform at work account of the adequate training received at KCNP was 72.99% and on account of being easily trained to improve their level of skill was 80.79%. This confirms the work readiness and adequacy of the training at KCNP.

Furthermore, 34.39% strongly agree that the entrepreneurial skills imparted adequately prepared them for self-employment. The graduates considered the following factors to be Very Important when applying for employment;

   i. Matching study program with professional qualification, 52.05%
   ii. Better grades in the chosen area of study, 50.81%
   iii. Basic skills on social and individual competencies, 49.74%
   iv. Reputation of the TVET College, 47.78%
   v. Relations and connections, 47.74%

The graduates also considered deficit of employees in their profession, 23.37% to be Somewhat Important when applying for employment;

On Extent of Competency Development, the survey results revealed that, to a great extent, the training helped the graduates to;

   i. Develop the social competencies and individual attitudes that are required in the world of work, 33.66% of the graduates;
   ii. Lay foundation for self-employment, 32.36% of the graduates;

iii.   Develop practical skills required for the profession, 28.45% of the graduates;

iv.   Another 32.38% of the graduates are overall satisfied with the training they received.

Data from employers were categorised as follows; 7.1% of the employers who responded had more than 1000 employees, predominantly large companies of more than 499 employees; 14.3% of the employers who responded had between 500 – 1000 employees, considered as large companies; 28.6% of the responses were submitted by medium sized companies of less than 500 employees and; 46.5% of the responses were submitted by small sized employers of less than 100 employees. Out of which 50.00% offered other services, 21.43% offered Transportation, Communications, Electric, Gas and Sanitary services; 10.71% were based in public administration; 7.14% offered manufacturing services and; 3.57% ventured in Blue Economy portfolios including Agriculture, Forestry, Fishing Services.

Based on number of TVET graduates working for the industry/organisation, survey findings revealed that 35.71% of employers had recruited less than 5 TVET graduates in their organisations. 17.86% of the employers recruited 10 to less than 25 graduates in their organisation. Employers who contracted 25 to less than 50 graduates constituted 10.71%. In addition, 17.86% of the employers recruited more than 100 TVET graduates. Overall, 92.9% of the industry employers preferred TVET graduates. These may be attributed to the skill set and competency levels of the graduates while at the same time industry consider TVET graduates not too demanding in terms of labour costs. The survey further revealed that 53.57% of the employers recruited less than 5 KCNP graduates. Another 10.71% of the employers recruited 5 to less than 10 KCNP graduates, while 7.15% of the employers recruited 25 to less than 100 KCNP graduates.

On aspects considered for employment, the survey revealed that the employer considered these attributes Very Important during the selection and recruitment of the graduates;

i.   69.23% emphasised on the field of graduate study;

ii.   59.26% considered subject area of specialization;

iii.   46.15% laid emphasis on final examination subjects;

iv.   50% of the employers' stresses on practical experience;

v.   50% relies on behaviour during the interview or rather the interview outcome and;

vi.   65.38% considers recognise the TVET KNEC Certificate.

In addition, findings also revealed that the employers consider the following factors as Slightly Important during the selection and recruitment of the TVET graduates;

i.   The grades of examination at the TVET Institute, 3.85%;

ii.   Main focus of subject area of specialization, 3%;

iii.   Experience abroad, 19.23%.

Furthermore, 67.86% of the employers prefer On Job Training for the fresh TVET graduates they recruit while 28.57% of the employers do not prioritize it at all.

On assessment of competency level of the TVET graduates, 53.57% of the employers ranked the competency level as High while 39.29% ranked it as fair.

On Satisfaction with TVET graduates, 53.57% of the employers agreed that they were satisfied with the TVET graduates they recruited. Another 39.29% of the employers strongly agreed that the TVET graduates met their expectations.

On ability to train and adopt to ever changing job demands, 67.86% of the employers strongly greed that TVET graduates are trainable and adaptable to changing work environment and another 28.57% agreed to the question.

Based on the status of the courses offered at KCNP, the sampled data revealed that 70% of the program staff said that the courses they taught were not internationally accredited, which means that the courses being offered were only recognised nationally. 22.50% said that the courses were internationally accredited and 7.5% chose not to answer. However, 68.8% of the respondents agreed that TVET courses were recognized by professional associations and 90% of the respondents agreed that the courses offered by The Polytechnic were recognised by employers.

on perception of staff regarding the relevance of curriculum, 33.75%, n=27, said that it takes over 60 months before a curriculum is reviewed. 7.50% or n=6, suggested that reviews are conducted after 48 months to less than 60 months while 12.50% or n=10 suggested 24 months to less than 48 months. 22.5% of the total respondents however chose not to answer because either did not know how long it takes before the curriculum is reviewed or actually there has been no review during their stay at the polytechnic.

On physical and administrative factors in curriculum implementation, to a Very High Extent, the program staff acknowledged the availability of the following training aids at the polytechnic;

i. 30.67% agreed that Industrial Attachment is a component in training at KCNP;
ii. 37.33% said that course curriculums are available for training;
iii. 21.62% acknowledged the availability of practice workshops and classrooms;
iv. 18.06% also added that learner log books are available and aids training;

From the survey, to Some Extent, the program staff acknowledged the availability of the following training aids at the polytechnic;

i. 40.79% were concerned about access workshops/seminars;
ii. 40% raised an issue on involvement of local employers;

iii.   38.57% lamented on study packs availability;

iv.   35.62% also added concern on industrial visits;

From the survey, to Moderate Extent, the program staff acknowledged the availability of the following training aids at the polytechnic;

i.   30.26% had concerns on Access to Qualification Standardisation Workshops/seminars (TVETA, CDACC, KNQA and others);

ii.   26.32% commented on availability of tools and equipment;

iii.   32.47% highlighted the availability of Recommended Text Books (including Reference Materials).

On perception of staff regarding quality of training received by the students before they graduate, the survey revealed that;

i.   52.11% of the program staff involve theoretical training related to the occupation;

ii.   54.05% of the program staff acknowledge the involvement of students in Innovation, Symposium, Trade fair and Research;

iii.   48.61% of the program staff administer practical use of computers;

iv.   47.30% of the program staff were involved in practical use of workshop/laboratory tools;

v.   46.58% of the program staff were involved in practical use of machines and equipment;

vi.   52.70% of the program staff were involved in practical use of materials and parts;

vii.   62.50% of the program staff are involved in theory and practice of equipment maintenance/calibration;

viii.   50.00% of the program staff ensure that graduates understand and produce drawings;

ix.   51.35% of the program staff were involved in use of written instructions and working guides (manuals);

x.   53.42% of the program staff have diverse knowledge of the industry;

xi.   44.59% of the program staff were involved in discipline and adherence to work ethics;

xii.   42.47% of the program staff were involved in careers advice;

The program staff were of the opinion that follow-up of the graduate progress (34.6%), involvement of local employers (40%), industrial visits (35.62%), external assessor (29.17%), access to workshops/ seminars (40.79%) and study packs (38.57%) were used at the polytechnic to some extent.

In addition, industrial attachment (30.67%) and course curriculum (37.33%) were used as training aids in the polytechnic to a very high extent. The majority of the respondents thought that access to qualifications (30.26%), learner logbooks (25.00%), recommended text (32.47%), learner resource centre (30.67%) and tools and equipment (26.32%) were used to

moderate extent in the polytechnic. This implies that the polytechnic has not exhausted the training aids that can be used to enhance training.

Recommendations

Quality and relevance in TVET training foregrounds the importance of knowledge and skills acquisition at the Polytechnic. The polytechnic should continually undertake program review to determine their effectiveness, currency and viability both in terms of discipline-based knowledge and cross-cutting skills. The polytechnic should identify and encourage innovative programs that address the changing workforce needs in order to keep pace with the competitive and continually evolving global environment.

Changes recommended by Graduates to improve KCNP Training

Theoretical Learning;

i. Increase study time;
ii. Align theory classes to match practical classes;
iii. Improve on effective communication strategies;

Practical Study

i. Increase Practical Study time;
ii. Increase industry visits;
iii. Add more practice lessons;
iv. Equip workshops and laboratories;

Training and Reference Materials

i. Keep stock of training materials in the workshop;
ii. Make the reading materials available and accessible at all time;
iii. Revision materials should be increased;

Training Needs and Mode of training

i. Introduce School Based, Weekend and/or evening Training classes;
ii. Trainer Commitment is necessary;
iii. Employ new methods of content delivery;
iv. Increase the number of trainers;
v. Recruit marine trainers;
vi. Introduce STCW Courses;
vii. Introduce Swimming Skills;
viii. Introduce Higher Diploma Courses;
ix. Scrap long holidays for trainees since syllabus coverage needs time;
x. Incorporate Employability and Marketing Skills in Training;

xi. Ensure timely delivery of relevant skills;

xii. Possession of Driving licence should be a requirement for both trainee and trainer;

xiii. Introduce training on Indian and Mexican Meals;

xiv. Training durations should be reduced;

xv. Introduce modern programming languages for ICT and Engineering students;

xvi. Scrap Diploma in Accountancy and replace with CPA;

Graduate study completion and graduation

i. Procure decent gowns and mortarboard for graduates and match with programs;

ii. Organize graduations annually;

iii. Sensitize graduates on alumni procedures;

Infrastructure Needs

i. Library Space needs;

ii. Classroom Space needs;

iii. Workshop Space Needs;

iv. Marine Swimming Space;

v. LAN and Hardware needs;

vi. Classroom furniture;

Training areas for Improvement

Significant Proportion of training that deserves 100% Improvement

i. Improvement in Theory training, 26.96%

ii. Provision of instructional manuals, 21.03%

iii. Upgrading the teaching delivery methods, 20.00%

iv. Coverage of course content, 19.20%

v. Provision of relevant textbook, 18.92%

Significant Proportion of training that deserves 50% Improvement

i. Improving training on practical skills, 47.40%

ii. Beefing up workshop equipment, 46.36%

iii. Empowering Industrial Attachments, 41.50%

iv. Equipping trainers' laboratory skills, 40.58%

v. Improving trainers' practical skills, 40.27%

Significant Proportion of training that deserves 0% Improvement (no improvement)

i. Decrease Training duration, 29.89%

Changes recommended by the Program Staff

On Industrial Attachment;

- Trainers to be attached in the industry
- Signing of more MOUs with industries for internship
- Strengthen staff industrial attachment and extend the duration of the attachment

On Practical Training;

- Increase number of laboratories for practical assignments;
- Initiate dual training that involves equal time in the industry and in school;
- More hands-on activities and work closely with the professional bodies and employers;
- Use of current tools and equipment used in the market;
- More improvements in setting up a computer and Telecommunications laboratory in the Electrical department;
- Emphasis more on practice by acquiring the required training models and equipment especially in automotive engineering. Each enrolment should have a functional vehicle for practice;
- Improve the CNC machines and separate training workshops with production workshops.

On Curriculum Review;

- The curriculum should be reviewed to suit the technological changes;
- Regular revision of the curriculum focusing on more practical aspects in teaching by providing materials as requested by trainers in their department;
- Should be competency-based and industry demands driven;

On Training and Delivery;

- Permanent recruitment of trainers;
- Motivation of staff in the course of training;
- Invite experts to assist in technical training;
- Capacity building for trainers;
- The management should ensure that there are enough learning materials for use by both trainers and trainees;
- Boost the resource centre with a variety of materials;
- Standardise the number of trainees per class to 30 in technical areas;

- Introduce more market-driven CBET courses that will enable graduates to easily secure jobs or be self-employed;
- Reduce course duration for CBET courses to churn out graduates quickly to the various industries;

On Research and Innovation;

- Exhibit the work done by the students, this will motivate learners and they will have the courage to even work harder in their field of study

Future Surveys Comments/Recommendations

- Use the trainees to trace their classmates;
- Include only relevant questions to the study;
- A special committee should be set up to handle a tracer study yearly;
- The report should be made available to key stakeholders in the education sector;
- Exclude confidential information e.g., designation, added responsibility to protect the respondents' responses;
- Study the conditions under which the trainer works and how it influences delivery;
- Conduct more surveys which should cover a wide spectrum of training aspects including the need for continuous professional development opportunities;
- Incorporate the challenges faced by the trainers during the training period. It influences the competencies imparted;

Employer Suggestions on how Training can be improved

Training Equipment

- Equip the institution with modern equipment

Industry Linkages

- Linking students with the industry
- TVET institute should involve the industry during training

Practical oriented training

- More emphasis should be placed on practical

Human resource

- Use of qualified professionals to implement a trade area of specialisation
- More trainers are needed to improve and train more trainees

Improved training

- Involve life skills training

8.   What was your Year of Graduation _____?
9.   What Level of Qualification did you attain at KCNP?
     Artisan
     Certificate
     Craft
     Diploma
10. Which course did you study at KCNP (for example, Diploma or Craft Electrical and Electronic Eng. Dip/Craft Business Management, etc.): --?
11. What were the reason(s) for taking or pursuing the course? You may check (√) more than one answer. (Multiple answers possible)
     High grades in the course or subject area(s) related to the course
     Good grades in high school
     Influence of parents or relatives
     Peer influence
     Inspired by a role model
     Strong passion for the profession
     Prospects for immediate employment
     Status or prestige of the profession
     Availability of the course at KCNP
     Prospects of career advancement
     Prospects of attractive compensation
     Opportunity for employment abroad
     No Particular choice or no better idea
     Others (Please specify)
12. Is there any other professional qualifications and/or certificate you acquired ---------------------------- --?
13. Did you take or are you taking further Training(s) / Advance studies attended after graduating from KCNP?
     Yes
     No
     No answer

SECTION III – JOB SEARCH, TRANSITION TO WORK AND EMPLOYMENT STATUS
14. Are you currently employed?
     Yes → Please continue with question 15
     No →Please continue with question 33
15. State your current employment status
     Employed on fulltime
     Employed on part-time
     Employed temporarily basis
     Unemployed and looking for employment

If employed
16. What is the name of your employer _____?
17. Where is the place of employment (e.g., Nairobi) _____?
18. Specify your type of employer?
     Public sector (national government, county government)
     Parastatal or semi-autonomous government agencies
     Private sector
     NGO
     Self-employed
     Other (please specify) _____
19. What are your present employment terms?
     Permanent
     Casual
     Part-Time

Self-employed

20. Is this your first job after college?

Yes

No

21. If Yes, proceed to Question 22. What is the reason(s) for staying on the job? (Multiple answers possible)

Salaries and benefits

Career challenge

Related to my special skill

Related to course or programs of study

Proximity to residence

Peer influence

Family influence

Other reason(s), please specify

22. In what sector/area of specialisation is your job? (Multiple answers possible)

Agriculture, forestry and fishing

Mining and quarrying

Manufacturing

Electricity, gas, steam and air conditioning supply

Water supply; sewerage, waste management and remediation activities

Construction

Wholesale and retail trade; repair of motor vehicles and motorcycles

Transportation and storage

Accommodation and food service activities

Information and communication

Financial and insurance activities

Real estate activities

Professional, scientific and technical activities

Administrative and support service activities

Public administration and defence; compulsory social security

Education

Human health and social work activities

Arts, entertainment and recreation

Other service activities

Other, please specify

23. How long did it take you to get a job after completing your training?

Less than 6 months

6 – 12 months

13-24 months

25-36 months

Over 3 years

24. How did you find your first job? (Multiple answers possible)

Response to an advertisement

Arranged by school job placement officer

As walk-in applicant

Door to door (job hunting)

Family business

Recommended by someone

Job Fair of Public Employment Service Office

Information from friends Office

Connections

Others (Please specify)

25. What is your title in the current job in your organisation _____?

26. What is your initial gross monthly earning in your first job after college?

Below Ksh. 15,000 PM

Ksh. 20,000-45,000 PM

Ksh. 50,000-75,000PM

Ksh. 80,000 and above

27. How many employers did you contact before getting your current job?

    0 - 5

    6 - 10

    11 - 20

    Over 20

28. How long have you been working for your current employer?

    Less than 6 months

    6 – 12 months

    13-24 months

    25-36 months

    Over 5 years

29. **If the current employer is not your first one,** why did you leave your previous employment?

    Sought improved wage

    Sought improved working conditions

    Needed to change environment

    Wanted a new challenge

    Retrenched

    Found employment in my area of specialisation.

    Other (please specify) _____

30. Are you still employed in your area of training?

    Yes

    No

    Don't know

31. (If No to question 30 above), why did you change your career?

    Lack of career progression

    Poor remuneration

    Poor working conditions

    Lack of job satisfaction

    Other (please specify) _____

32. What are the difficulties you encountered while looking for a job? (Multiple answers possible)

    Takes too long to find one

    Employers not interested in my level qualifications

    Employers not interested in my area of specialisation

    Lack of work experience

    Limited employment opportunities in my area

    Other (Please specify) _____

If not employed

33. If not employed, what describes your current situation? (Multiple answers possible)

    I continued studying / training

    I am busy with my family and/or children

    I am doing an internship

    I am currently looking for employment

    Other (please specify)

34. Please state the reason(s) why you are not yet employed. (Multiple answers possible)

    No job opportunity

    No connections

    Family concern

    No interest in getting in job

    Health-related reasons

    Lack of professional eligibility requirements

    Lack of work experience

    Starting pay is too low

    Engaged in further study

Have plans to seek job out of the country
Other reason(s), please specify _____

35. For which jobs have you been applying?
Jobs related to my profession/area of training
Jobs unrelated to my profession /rea of training

SECTION IV – SKILLS ACQUISITION, QUALITY AND RELEVANCE OF TRAINING AND EMPLOYER SATISFACTION (Work and Competencies, Relationships Between Study and Work)

36. Is your present work, or, in case you are employed, the last job you held since graduation, related to the course you followed at Kenya Coast National Polytechnic?
Yes
No

37. Compare the skills you acquired from your training and your ability to perform on your current or previous job), would you say your training was:
Very relevant
Adequate
Not relevant

38. Can you recommend the course you went through to a friend, colleagues or relative?
Yes
No

39. Using the percentages (%) indicated, rate the extent to which the following components used in Training at KCNP should be improved to prepare graduates for the job market. Use a tick (√)

Training component	Needs 100% improvement	Needs 75% Improvement	Needs 50% Improvement	Needs 25% Improvement	Needs 0% Improvement
Knowledge (Theory)					
Training in practical skills					
Industrial attachments					
Course content					
Instructional manuals					
Textbooks					
Workshop equipment					
Laboratory work					
Teaching and delivery methods					
Instructor's knowledge of theory					
Instructor's practical skills					
Increase duration of training					
Decrease duration of training					
Quality of Trainers/Lecturers					

What is your opinion with regard to the following statements on the adequacy of KCNP training, graduate employability and your ability to perform in your job? Using a scale of 1 – 5 below whereby; 1 = strongly disagree; 2 = disagree; 3 = not applicable; 4 = agree; 5= strongly agree. Use a tick (√)

	1	2	3	4	5
My training adequately prepared me for work					
My employer/former employer is/was satisfied with my level of knowledge and skill					
It was/is easy for me to get a job					

I can easily be trained to improve my level of skill				
I find myself to be very effective in my current/previous job				
I can easily change employers within my area of specialisation				
My training adequately prepared me for self-employment				

In your opinion, how important were the following aspects for your employment? Use the scale below;
1=Not at all important, 2=Not very important, 3=Somewhat important 4=Very important 5 = Don't know

	1	2	3	4	5
Matching professional qualification					
Reputation of TVET college that I graduated from					
The grades in my diploma					
Deficit of employees in my profession					
Social and individual competencies					
Relations/Connections					
Other, please specify					

To what extent did your Vocational Education and Training help you to develop the following competencies?
1=Not at all, 2=To a little extent, 3=To some extent, 4=To a great extent, 5=Don't know

	1	2	3	4	5
TVET helped me to acquire the theoretical knowledge that is required in my profession.					
TVET helped me to develop the practical skills that are required in my profession.					
TVET helped me to develop the social competencies and individual attitudes that are required in the world of work.					
TVET has laid the foundations that I could (potentially) become self-employed.					
TVET enabled me to get along independently in life.					
Considering all aspects of your time in TVET, how satisfied are you with the education and training you received?					

In your opinion, what was lacking in your education and training? (Multiple answers possible)
  i.   Training of practical skills
  ii.   Transfer of theoretical knowledge
  iii. Teaching/training methods
  iv.   Commitment of teaching / training staff
  v.   Training materials/equipment
  vi.   Other (please specify): ……………………………………

SECTION V - COMMENTS AND RECOMMENDATIONS
Are there any changes you would recommend for your TVET institution study/programme?
Please specify...
....
....
Do you have any comments/suggestions regarding this survey?
Please specify...
....
....

APPENDIX II: INDUSTRY/EMPLOYER TRACER STUDY QUESTIONNAIRE

EMPLOYER TRACER STUDY QUESTIONAIRE

Dear Sir/Madam

Background

Kenya Coast National Polytechnic was founded in 1950 as a Technical High School known as Coast Technical High School. In 1958, it was renamed Technical High School of Mombasa. In 1984, the institution was upgraded to a Technical Training Institute and renamed Mombasa Technical Training Institute. In 2016, the institution was elevated to a National Polytechnic and renamed Kenya Coast National Polytechnic. KCNP is ISO 9001:2015 certified.

The Polytechnic offers academic programmes spread across ten teaching departments. The polytechnic has state of the art equipment in the Engineering, Hospitality and Tourism Management Departments as well as an established training FM station, Mvita FM 106.2 Radio Station in collaboration with Mvita NG-CDF.

In 2018, KCNP was competitively selected by the Government of Kenya and the World Bank to be a Regional Flagship Marine Transport and Port Logistics Center under the East Africa Skills for Transformation and Regional Integration Project (EASTRIP). EASTRIP is funded by the World Bank, as a project designed to address challenges in skills shortage and mismatch in East Africa, by providing technical, financial and industry partnership to increase the access and improve the quality of training programs in selected Regional Flagship TVET Institutes. It's also meant to facilitate regional integration by providing a regional platform to promote exchanges of policies and practices, students and faculty mobility and harmonization of standards and qualifications.

You are kindly requested to spare some few minutes to help complete a survey regarding employment outcomes of TVET graduates. The data obtained will assist KCNP to effectively formulate and implement training plans and labor market strategies. All information obtained with utmost confidentiality.

(Note: Get the personal information only if the interviewee is willing to provide it)

Use a tick (√) to indicate your response where appropriate)

SECTION I: COMPANY PROFIE

1. Is the company/organization part of a (bigger) company or organization?

    i.   Yes,it is the head office/central unit of a company/organization   [   ]

    ii.   Yes,it is a branch of the company/organization   [   ]

    iii.   No   [   ]

2. How many people are employed by the company/organization?

    i.   Less than 50   [   ]

    ii.   50 to less than 100   [   ]

    iii.   100 to less than 250   [   ]

    iv.   250 to less than 500   [   ]

    v.   500 to less than 1000   [   ]

    vi.   More than 1000   [   ]

3. Please specify the field in which the company/organization can be best classified.
(Please tick one item only.)

    i.   griculture, Forestry, Fishing, Mining   [   ]

    ii.   Construction   [   ]

    iii.   Manufacturing   [   ]

    iv. Transportation, Communications, Electric, Gas and Sanitary   [   ]

      service Wholesale Trade

    v.Retail Trade   [   ]

    vi.Finance, Insurance and Rea Estate Services   [   ]

    iv.   Public Administration   [   ]

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4. To which of the following Economic sectors does the company/organization belong? Please tick one item only.

i.	Private sector	[ ]
ii.	Parastatal/public enterprise	[ ]
iii.	Public Sector/local or Central government	[ ]
iv.	Non-Governmental Organisation	[ ]
v.	Other (please specify)	[ ]

5. Where is your company located (Town/County)?

_____

_____

_____

_____

SECTION II: NUMBER OF TVET GRADUATES WORKING FOR THE COMPANY/ORGANIZATION

6. Do you employ TVET Graduates?

i.	Yes (go to 7)	[ ]
ii.	No (go to 9)	[ ]

7. How many TVET graduates are employed in the company/organization?

i.	Less than 5	[ ]
ii.	5 to less than 10	[ ]
iii.	10 to less than 25	[ ]
iv.	25 to less than 50	[ ]
v.	50 to less than 100	[ ]
vi.	More than 100	[ ]

8. How many female TVET graduates are employed in the company/organization?

i.	Less than 5	[ ]
ii.	5 to less than 10	[ ]
iii.	10 to less than 25	[ ]
iv.	25 to less than 50	[ ]
v.	50 to less than 100	[ ]
vi.	More than 100	[ ]

9. a). How many KCNP TVET graduates have you employed in the company/organization?

i.	None (Please continue with question 9 b)	[ ]
ii.	Less than 5	[ ]
iii.	5 to less than 10	[ ]
iv.	10 to less than 25	[ ]
v.	25 to less than 50	[ ]
vi.	50 to less than 100	[ ]
vii.	More than 100	[ ]

9 b). If not, what are the decisive reasons for not Employing Graduates of the KCNP?

_____

_____

_____

_____

_____

SECTION III: RECRUITMENT PROCEDURES AND SELECTION CRITERIA

10. How does the company/organization recruit TVET graduates?(Multiple answers possible.)

i.	Advertisement Of Vacancies in Newspapers (daily papers, special periodicals, etc.) Advertisements in the Internet	[ ]
ii.	Internal advertisements of vacancies	[ ]
iii.	Direct application by graduates	[ ]
iv.	Career advisory agency at the TVET Institute	[ ]
v.	Other contacts to the TVET Institute	[ ]
vi.	Personal contacts to graduates	[ ]
vii.	Manpower allocation	[ ]
viii.	Contacting the Institutional Career Services and Placement offices	[ ]
ix.	Private employment agencies	[ ]
x.	Binding students by scholarships Other (please Specify)	[ ]

11. Does the company/organization support the recruitment of female TVET Graduates?

i.	Yes	[ ]
ii.	No	[ ]

12. How important in general are the following aspects for the recruitment of TVET Graduates? Please respond to each factor on the five-point scale, as shown below1 = Not important, 2= slightly important, 3 = fairly important, 4=important, 5=very important (Tick appropriately)

	1	2	3	4	5
i. Field of study					
ii. Main focus off subject area/ specialisation					
iii Fiinal examination (subject/form)					
iv. Grades off examiinations at the TVET institute					
v. Practical experience acquired during course of study					
vi. Reputation of the TVET Institute					
vii. Experience abroad					
Viii. Recommendations/references from third person					
ix. Results of recruitments tests					
x. Behaviour during interview					
xi TVET/KNEC Certificate					

SECTION IV: INITIAL TRAINING FOR GRADUATES SECTION

13. Do you provide any on the job training for TVET Trained graduates?

Mark only one oval.

     i. YES (if YES why? ....   [ ]

    ii. NO   [ ]

14. In your opinion, how long does it take before newly employed TVET graduates who have just finished their TVET Institute studies are able to carry out professional tasks properly?

Mark only one oval.

i.	Less than 3 months	[ ]
ii.	3 months to less than 6 months	[ ]
iii.	6 months to less than 9 months	[ ]
iv.	9 months to less than 12 months	[ ]
v.	12 months or more	[ ]

15. If different duration are required by graduates from different TVET Institutes, in your opinion what are the decisive reasons for this?

_____

_____

_____

_____

_____

16. How would you describe the initial training period of TVET Institute graduates in the company/organization? (Please tick one item only.)

    i.   Immediate assumption of normal tasks without any support   [ ]

    ii.   Advice/help from experienced colleagues   [ ]

    iii.   Advice/help from superiors   [ ]

    iv.   Participation in an extensive formal trainee programme/training course   [ ]

    v.   Other (please specify)   [ ]

17. What kind of knowledge and abilities are usually acquired during the training period? (Multiple answers possible)

    i.   Knowledge of the organizational structure of the enterprise or of single section   [ ]

    ii.   Workplace-orientation technical knowledge   [ ]

    iii.   Knowledge/capability in the field of personnel management Knowledge/   [ ]

    iv.   capability in the field of financial management Interpersonal skills   [ ]

    v.   Other (please specify)   [ ]

18. Are TVET Graduates prepared for assumption of future management posts when they start to work in the company/organization?

    i.   Yes   [ ]
    ii.   No   [ ]

19. Would you employ graduates trained in a different field other than the primary business of your company/institution?

    i.   Yes (Go to 20)   [ ]

    ii.   No (Go to 21)   [ ]

20. What level of competence would you often employ such graduates?

    i.   Skilled level   [ ]

    ii.   Semi – skilled level Labourers   [ ]

    iii.   Assistant Trainees   [ ]

    iv.   Other (please specify)   [ ]

21. Why don't you employ graduates trained in a different field other than the primary business of your company/institution?

    i.   We need people with relevant skills only   [ ]

    ii.   We don't want to waste time in training them in the required skills   [ ]

    iii.   Other (Please specify) .... [ ]

22. How would you rate the level of competence of TVET Graduates in performing their assigned responsibilities?

    i.   High   [ ]

    ii.   Fair   [ ]

    iii.   Low   [ ]

    iv.   Poor   [ ]

23. I am satisfied with our employees who graduated from TVET Training Institutions.

    i.   Strongy agree   [ ]

    ii.   Agree   [ ]

    iii.   Unsure   [ ]

    iv.   Disagree   [ ]

    v.   Strongly disagree   [ ]

24. Do you feel TVET graduates are trainable and adaptable?

    i.   Strongly agree   [ ]

    ii.   Agree   [ ]

    iii.   Unsure   [ ]

    iv.   Disagree   [ ]

    v.   Strongly disagree   [ ]

25.a). Do you employ graduates of TVET institutions from outside Kenya?

    i.   Yes (go to 25b)   [   ]

    ii.   No   [   ]

25 b). If you employ graduates of TVET institutions from outside Kenya

comment on their work performance compared with those trained in Kenya?

    i.   They are better They are the same   [   ]

    ii.   They are less competent   [   ]

    iii. They have specialized training   [   ]

    vi Other:(Please specify)………………………………………………… [   ]

26. How important in general are the following aspects for the recruitment of TVET Graduates? Please respond to each factor on the five-point scale, as shown below1 = Not important, 2= slightly important, 3 = fairly important, 4=important, 5=very important

		1	2	3	4	5
i.	Willingness to learn					
ii.	Ability to solve problems					
iii.	Ability to reflect upon one's own conduct					
iv.	Ability to express oneself in writing					
v.	Unconventional thinking					
vi.	Willingness to perform/commitment					
vii.	Ability to coordinate					
viii.	Ability to improvise					
	Ability to work under pressure Innovativeness creativity Independent					

27. Do you have any suggestions on how TVET Training can be improved?

....

....

....

....

APPENDIX III: EMPLOYER/INDUSTRY DATA COLLECTION SCHEDULE

It is planned that the industry tracer study will take place as follows from 15th Jan. to 15th Feb. 2022; -

S/No.	Name of DAC/ILO	Department	Industry/Employer	Contact of the employer	Telephone Contact of former student	Email address of contact person
1.	Lena Sauthi and Dr. Lucky Mulwa	Applied Sciences	Pwani Oil Products		0711447392	pascal.mbithi@pwani.net pascalmax28@gmail.com
2.			Osho Chemical Industries Ltd	oshochem@oshochem.com	71754199	corneliusmbevo@yahoo.com
3.			Pwani University	j. mwafaida@pu.ac.ke 0711779024	706659897	mwakioJ79@gmail.com
4.			Manyattta Youth Entertainment Cbo	Songoranicholas@gmail.com 0712576871	712576871	emanyatta2007@hotmail.com
5.			Pwani University	j. mwafaida@pu.ac.ke 0711779024	706659897	mwakioj79@gmail.com
6.			Kiuuku Secondary	0727 860357	712127475	mathekacatherine@gmail.com
7.			Diamond Industries Limited		700722643	Jeremymars443@gmail.com
8.			Regional Mariakani Veterinary Investigation Laboratories	0720716758 email: rvilmariakani1@gmail.com	794780912	Thadeasinyamai@gmail.com
9.			Kenya Coast National Polytechnic	81220-80100	723825497	mulicharles024@gmail.com
10.			Livestock Training Institute-Wajir		0706659897	mwakioj79@gmail.com
11.			Corrugated Sheet Limited Pickling Division		0745964427	Odhiambodavid515@gmail.com
12.			Mgas Limited		0704874532	themanueluhuru6@gmail.com
13.			East African Sea Food		0729718024	ochiengkennedy404@gmail.com
14.			Self Employed		0718528641	amandastephanie146@gmail.com
15.			Diamond Industries Ltd-Mombasa		0700722643	Jeremymars443@gmail.com
16.			Gold Crown Foods		0743551476	clarismkala@gmail.com
17.			Lukore Sec. School			
18.			Mariakani Secondary			
19.			Perfect Fruits and Nuts			
20.			Amurt			
21.			Kenya Marine and Fisheries Research Institute			
22.			Ncpb			

23.			Kenya Agricultural & Livestock Research Institute	0704619877, puntymasai9@gmail.com		
24.			Mwananchi Bakery Ltd	0707956949, ochiengd2014@gmail.com		
25.			Italian Gelati	0716060322, lydiahwanjiku100@gmail.com		
26.			Polucon Services Ltd	0726281749, aluochwinnie8@gmail.com		
27.			Bidco Africa	0729862638, austin.ak58@gmail.com		
28.	David Mjomba	Building and Civil Engineering	Golden Link Homes Ltd	721882313	727780725	stanleysimiyu87@gmail.com
29.			Kenya Coast National Polytechnic		714887179	vincentmanza17@gmail.com
30.			Bungoma	798853820	742495464	ochenane9@gmail.com
31.			County Government of Tana River		0712 678532	Husseinramji95@gmail.com
32.			Bamburi	706900927	706900927	Arondodominic411@gmail.com
33.			Toyo Construction		717046437	nyakwarokere@gmail.com
34.			Self-Employment	713777919	713777919	Kevinotangah@gmail.com
35.			Kajiado County		0702903255	josephatkilanka92@gmail.com
36.			Sgs		0729018934	Oboreelvis8@gmail.com
37.			Bamburi		0710529958	nancyachieng07@gmail.com
38.			Cd Donda & Co. Ltd			
39.			Godoma Technical Training Institute			
40.			Riocraft Construction Limited			
41.			County Government of Tana River			
42.			University of Nairobi	0720713717, owiti.mathew@gmail.com		
43.	Benard Mavui	Business and Media Studies	MEWA	701797841	701797841	alhajjuma068@gmail.com
44.			KAPS	732146000	729939919	apiyoloiceinno@gmail.com
45.			Bamburi	themanueluhuru6@gmail.com	704874532	themanueluhuru6@gmail.com
46.			None		724937346	manuenatty@gmail.com
47.			Jiffy Pictures Ltd Company	N/A	412240804	johnmaximiliano@gmail.com
48.			Musoni Microfinance	mombasa@musoni.co.ke	704154990	pamelawanja19@gmail.com
49.			Non	Non	717093533	listeramani4@gmail.com
50.			Non	Non	717093533	listeramani4@gmail.com
51.					715043613	mokhokosi@gmail.com

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52.			Nill	josephinekarhayu23@gmail.com	723513584	josephinekarhayu23@gmail.com
53.			Mombasa Cement	733773049	0724565621/0732917130	newtonbaraka@gmail.com
54.			Yehu Microfinance		Na	danielmusyoki48@gmail.com
55.			Kenya Coast National Polytechnic	info@kenyacoastpoly.ac.ke	708587627	gabrielcngy@gmail.com
56.			None	Yet not employed	723819528	Ismaizerismail@gmail.xom
57.					708470874	Fathiyahassan254@gmail.com
58.			Junic Logistics	Junic.logistics@yahoo.com/0772171388	700363213	ambroseokiya@gmail.com
59.			Interior		711755317	mohammedhadji63@gmail.com
60.			Kenya Community Support Centre		0711576895	zullypurity@gmail.com
61.			Mombasa Cement Limited		0724565621	newtonbaraka@gmail.com
62.			Jiffy Pictures Limited		0713017099	johnmaximiliano@gmail.com
63.			Vickers Security Limited		0707708077	mosesoduorotieno@gmail.com
64.			Hatari Security Limited			
65.			Shaffi Hussein Ali			
66.			KISM			
67.			Kuku Foods			
68.			KRA			
69.			Palo Bikes			
70.			Chandarana Supermarkets Ltd			
71.			Sonlink Motorbikes Company			
72.			NAVISAT TELEMATICS	0705266435 - danielgot963@gmail.com		
73.			Taita Sisal Estate	0703704028 - mbalafaith16@gmail.com		
74.			Musoni Microfinace	0704154990 - pamelawanja19@gmail.com		
75.			Yehu Micro finance bank	0790577246, julianakateeti@gmail.com		
76.			Ministry of Interior And Coordination of National Government	0722125454 - adanzarah@yahoo.com		
77.			KENFRI SACCO	0707914763 - evahmutava@gmail.com		
78.			NCPB	0704545604, marysikomurre@gmail.com		

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79.			Boss Freight	0743158761, gladysboke36@gmail.com		
80.			Universal Traders Sacco - WOTE	0798623512 - jacintam19@gmail.com		
81.	Benedict Mwinga	Electrical and Electronic Engineering	Et-Elastotech		721169880	kelvin.suchi@gmail.com
82.			Oman Muscat	Nil	96894663493	ahshikely01@gmail.com
83.			Red Flames	723112211	714109108	okaaloracheal@gmail.com
84.			Machiri Limited Company	Idreesywueh2@gmail.com 0703960361	703960361	Idreesywueh2@gmail.com
85.			Jumbo Steel Mill, Rabai		702411028	kitukicalvince@gmail.com
86.			Unemployed		703856543	Anumary1995@gmail.com
87.			Kora Media		0713528527	jnyamwaya88@gmail.com
88.			Self		0796342808	kimondioboniface60@gmail.com
89.			Redflames Enterprise		0714109108	okaaloracheal@gmail.com
90.			Work		0708223023	Reubenkioma62@gmail.com
91.			Pwani Oil Company		0710970863	mwawanajames91@gmail.com
92.			Kbc		0714619922	Mutumaian98@gmail.com
93.			Brinks Security Service			
94.			Kbc			
95.			Sanergy			
96.			Hosada Investment Ltd Company			
97.			MRM			
98.			KPLC			
99.			Agakhan Academies			
100.			Mombasa Apparel Unit 3			
101.			Kensalt Ltd			
102.			Kisauni Vocational Training Centre			
103.			Christian Industrial Training Collage			
104.			Switch Gear Company			
105.			Transtrailers Ltd			
106.			Nyayo Tea Zones			
107.			KPLC			
108.			MCL			
109.			MCC			
110.			Mombasa Apparel			
111.	Rose Nyawanda		Hela Intimates Epz(A) Ltd	254733411055	700808279	edwinwachira987@gmail.com
112.			Epz			

113.		Fashion Design and Cosmetology	Kenya Coast National Polytechnic			
114.			Maga Couture Clothing Industry			
115.			Rose Warombo			
116.			Kikifi County			
117.			Holy Ghost Fathers Technical Training Institute			
118.			Ruruma Vocational Training Center			
119.			National Youth Service			
120.			NYS(TGTI)			
121.			County Government of Mombasa			
122.			Cafe Mocha			
123.			Imani Collection			
124.	Nelly Awuor	Hospitality and Tourism	KCNP	KCNP	0727470578/0789008505	ngokajames423@gmail.com
125.			Kenya Coast National Polytechnic	info@kenyacoast.ac.ke	0714204475/ 0739078156	cliftononyango2030@gmail.com
126.			Nairobi	703516554	799386296	waciradancun07@gmail.com
127.			Kenya Coast National Polytechnic	0712725554 info@kenyacoastpoly.ac.ke 81220mombasa	710596965	beatricealoo4@gmail.com
128.			Kenya Coast National Polytechnic		724800517	Nellieopili@gmail.com
129.			Kenya Coast National Polytechnic	81220	729787178	kwambysarah@gmail.com
130.			Fairmont Bab Al Bahr	Mohamed.Ismail@fairmont.com	971527915906 /971555241282	royrigs@gmail.com /righar@yahoo.com
131.			Likoni TVC		0724800517	nellieopili@gmail.com
132.			Likoni Breeze Restaurant Opposite BAT Industrial Area Nairobi		0719592649	peterkadenge2@gmail.com
133.			Tana River. Nys		0714204475	Cliftononyango2030@gmail.com
134.			Hospitality		0719591701	peterkadenge2@gmail.com
135.			Kenya Coast National Polytechnic		0713845902	meja1997too@gmail.com
136.			Carrefour		0791278460	Koechdave8@gmail.com
137.			Mombasa Sports Club		0705615214	lunyolowanjala@gmail.com
138.			Watamu Treehouse Hotel		0704478514	paulineojwang@yahoo.com

139.			Kenya Coast National Polytechnic		0705798795	giftnadzuwa@gmail.com
140.			Mwanainchi Bakers&Confectioners Ltd		0727792573	Pauline.karanja@mwanainchibakery.co.ke
141.			Office Of The Deputy President-Nairobi		0724769895/0784925420	sanganyamoses@gmail.com.com
142.			Kenya Coast National Polytechnic		0710596965	beatricealoo4@gmail.com
143.			Kcnp		0729787178	kwambysarah@gmail.com
144.			Mika			
145.			Mombasa Dolphin Hotel Shanzu			
146.			Baabob Beach Resort And Spa			
147.			Qwetu Beach Resort			
148.			PSS Company In Qatar			
149.			Mombasa Maize Millers			
150.			HFG			
151.			Faith Ventures Christian Academy			
152.			National Youth Service			
153.			Gold Crown Foods EPZ			
154.			Liz Chinese Restaurant			
155.			Cafesseria	0718255263, getrudemkandoe@gmail.com		
156.			Pinewood Beach Resort and SPA	0799798774, biryajunior22@gmail.com		
157.			Mombasa Continental Resort	0718663180, mwashejustine@gmail.com		
158.				791605018		
159.			Sun africa Resort	0715588965,		
160.				715360342		
161.			Pride Inn	0708868250, ogutunorah4@gmail.com		
162.			Supply organisation	0715612498, pkabucho@gmail.com		
163.				0720553247,		
164.				714202953		
165.				0706457134,		
166.			workshop	0745233897, dorismwinzi@gmail.com		

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167.			Big Squre Restaurant, Nyali Cinemax	0703490929, bensonchikati@gmail.com		
168.	Sylvester Katana	ICT	Vipingo Ridge	728238804	0111527904	awestyrita@gmail.com
169.			Communication Work		0712248564	Annnjoka@gmail.com
170.			Kilifi County Government			
171.			Safepack Limited			
172.			Polucon Services Kenya Limited			
173.			High Flyers Academy			
174.			MFI Document Solutions			
175.			Coast General Teaching and Referral Hospital			
176.			Jirani Smart			
177.			Tsebo			
178.			Jirani Smart Limited			
179.			Vendani Kids Centre			
180.			Sherwinassessors		0723407519	Samsicha@gmail.com
181.			Mabati Rolling Mills Ltd		0748449483	jumapeter3@gmail.com
182.			Kaloleni Technical Vocational College		0713110744	cwambui926@gmail.com
183.			Rojon Africa Limited	0726605800 - cyprianodulo89@gmail.com		
184.	Dr. Lucky Mulwa	Medical Sciences	Community Pharmacy		0727231978	kelvinmuange3@gmail.com
185.			Mama Lucy Hospital		0708629996	erickhareck@gmail.com
186.			Chamianess Pharma Ltd		0720603302	brivianogollah94@gmail.com
187.			Bayleaf Hospital		0797690339	omewohdelight@gmail.com
188.			Afristar Railway Operation Company		0722631789	hillarybuyela@gmail.com
189.			Mvita Oils Limited			
190.			Mariakani Community			
191.			Sayyida Fatimah Hospital			
192.			Asfali Pharmacy			
193.			Goodlife Pharmacy Limited			
194.			Harleys Ltd			
195.			County Government of Kwale.			
196.			Kwale County			
197.			Gulprit Singh			
198.	Sylvester Katana	Secretarial and Liberal Studies	Musinga & Company Advocates	info@musingaadvocates.co.ke 0775364188	725501654	bkalela@yahoo.com
199.			Du Telecom- UAE		0768131525	Edina.nyagitari@gmail.com

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APPENDIX IV: TRACER STUDY IMPLEMEMTATION MATRIX

S/No.	TASK	Specific Deliverables	Responsible personnel	Execution venue	Time frame
1.	Development of data collection tools	Develop database of graduates that would enable KCNP to annually make follow ups on graduates and their occupational movements in the labour market; Develop standard set of data collection tools for Graduates, Industry and Staff; Compilation of Tracer Study programmes to be tracked.	Tracer Study Team	Conference or Seminar	5 days
2.	Collection of secondary data	Review relevant literature, TVET Documents, baseline surveys and studies and reports;	Chair, RIAC CL, EASTRIP M&E, EASTRIP	Workshop	3 days
3.	Compilation of introductory pages	Fixing institutional logo, designing cover page and back page, introduction, background of study, study objectives, methodology and review of lessons learnt from previous tracer studies. Analysis of the EASTRIP project achievements.	Chair, RIAC Two members of the tracer study team	Workshop	3 days

4.	Piloting of data Collection and Data collection	Data collection from Graduates, Industry and Staff to: -
		  i. Establish occupation of TVET graduates in relation to their field of training;
		
		  ii. Determine the means by which graduates acquire employment;
		
		  iii. Determine the extent of occupational mobility of the KCNP TVET graduates;
		
		  iv. Establish employment opportunities for KCNP TVET graduates;
		
		  v. Establish employment rates of KCNP graduates;
		
		  vi. Establish the difficulties encountered by those graduates that have not been able to find relevant employment
		
		  vii. Establish waiting times for first employment and associated reasons;
		
		  viii. Establish the level of employer satisfaction with regard to TVET Training graduate employee's skills and level of performance;
		
		  ix. Provide comprehensive information on labour market
		  x. outcome of the graduates;
			Tracer Study Team	Field visits, calls, emails and face to face	30 days

		xi. Review the relevance and effectiveness of learning in TVET in relation to employability (Skills Mismatch)			
5.	Data cleaning and coding	1. Identification of incomplete questionnaires; 2. Separation of mixed-up questionnaires; 3. Numbering or coding of questionnaires per cluster; 4. Developing data entry templates in excel and SPSS;	Chair RIAC Two members of the tracer study team	Workshop	3 days
6.	Data Entry	Entry of the collected data set in SPSS or Excel from; i. Graduates ii. Staff iii. Employers	Chair RIAC Tracer Study Team	Workshop	10 days
7.	Data Analysis and Interpretation	1. Export data to Excel from SPSS for cleaning, entry and analysis; 2. Post data entry cleaning before any further analysis is conducted; 3. Frequencies and cross tabs run and compared with baseline figures; where available for comparison and checking on changes made by the programme; 4. Confidence intervals calculated for the indicators for comparison with baseline in order to check any significant change in the indicators. If the intervals overlap then we will conclude that there was no significant change on the indicator and vice versa 5. Graphical interpretations of the data analysed	Chair RIAC Two members of the tracer study team	Workshop	4 days
8.	Compilation of first draft report	Report writing	Chair RIAC Two members of the tracer study team	Workshop	5 days
9.	Validation workshop	Discussion and Validation of draft report with key staffs and stakeholders (partners and beneficiaries)	Tracer study team and interested parties	Conference	1 day
10.	Compilation of final report	Revision of draft report to final copy; production and submission of final report to KCNP management	Tracer study team	Workshop	2 days
11.		**TOTAL**			**66 days**

APPENDIX V: TRACER STUDY WORKSHOP GALLERY

Participants during development of standard set of data collection tools and Graduate Database at North Coast Beach Hotel, 26th - 29th January 2022

Data analysis team consulting at a past retreat

Technical and Review team during the Development of first draft report at North Coast Beach Hotel

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