Kwame Nkrumah University of Science and Technology, Kumasi

Guidelines for The Conduct of Tracer Studies



GUIDELINES FOR THE CONDUCT OF TRACER STUDIES



KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI-GHANA QUALITY ASSURANCE AND PLANNING UNIT

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ISBN: 978-9988-2-8487-9

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FORWARD

The Kwame Nkrumah University of Science and Technology, Kumasi has a mission to advance knowledge in science and technology through creating an environment for undertaking relevant research, quality teaching, entrepreneurship training and community engagement to improve the quality of life. In order to achieve this mission, there is the need to have a Guidelines for the conduct of Tracer studies.

The rationale of this guideline is to assist to provide a framework to collect feedback from students for the improvement of academic programmes.

The University is grateful to all those who ensured the initiation, development and approval of this Policy.

PROFESSOR K. OBIRI-DANSO

VICE-CHANCELLOR

ACKNOWLEDGEMENT

As part of the strategic planning mandate of the Quality Assurance and Planning Unit (QAPU), university policies are initiated and proposed for approval by the Academic Board. The Unit initiated the Guidelines for the conduct of Tracer studies which was approved by the Academic Board.

The QAPU is grateful to the Prof. Forson's committee for the draft of the Guidelines for the Conduct of Tracer Studies and also the members of various committees that reviewed it. We are equally indebted to the staff of QAPU who facilitated the entire process.

Lastly, we wish to appreciate the contribution of all staff of this University who contributed in several ways towards the development and approval of this Policy.

PROF. CHRISTIAN AGYARE

HEAD, QAPU **AUGUST, 2018**

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INTRODUCTION 1

The Kwame Nkrumah University of Science and Technology (KNUST) in Kumasi is one of Ghana's foremost universities established in 1952. It has a vision "to build on its leadership as the premier science and technology university in Ghana and to be among the top ten Universities in Africa." Furthermore, KNUST seeks to be globally recognised as the premier centre of excellence in Africa for teaching in Science and Technology for development thereby producing high calibre graduates with knowledge and expertise to support the industrial and socio-economic development of Ghana and Africa. To achieve this, a comprehensive programme of Quality Assurance that includes Tracer Studies needs to be put in place. These guidelines are proposed to provide a practical guide on when and how to implement tracer studies at KNUST.

RATIONALE 2

Why carry out tracer studies?

Tracer studies seek to document changes in the lives of graduates of KNUST and determine the extent to which the training given during studies has contributed to the changes observed. It further influences the decision-making process or policy formulation through the provision of empirically driven feedback.

This guideline is aimed at providing a broad unified framework to guide tracer studies at specific units in the university.

STUDY AIMS/OBJECTIVES 3

The aims/objectives of conducting a tracer study in KNUST are as follows:

- To collect feedback that could be valuable for significant improvements at the KNUST;
- To determine the employment situation of graduates of KNUST by analysing the links between employment and education;
- To find explanations for professional success/employment outcomes: and
- To determine the impact of various features of education at KNUST so as to gain insight for improving the students' experience of education at KNUST.

4 METHODOLOGY

4.1 DESIGN

It is recommended that the survey follows a cross-sectional design where a population of participants are questioned at one-time point only. However, if a unit decides to conduct a panel or longitudinal study, the same persons will be questioned at different times based on the needs of the unit conducting the study.

4.2 ETHICAL CONSIDERATIONS

Ethical clearance for tracer studies should be obtained from the Committee on Human Research, Publications and Ethics (CHRPE) of the KNUST before initiation of the studies. If changes are made to the original study protocols submitted to the CHRPE, an amended clearance should be sought from the same review body.

Considerations that need to be made include the following:

4.2.1 Informed consent

Graduates have the right to decide whether they want be involved or not. Their decision to participate must be based on basic information about the study and how it will affect them. If participants decide not to participate, their motives should not be questioned.

4.2.2 Confidentiality and anonymity

The tracer study does not require names or recognizable personal data to obtain valid findings. The identities of graduates must be concealed especially in reports. This is to protect participants so that they cannot

be singled out at a later date, and also so that the information they provide cannot be used against them in an incriminating or negative manner. In addition, the identifying labels of participants can be changed. The information that the enumerators communicate to each potential tracer study participant must include the explanation that despite the fact that the enumerators are in possession of a list where the participants' names appear (as well as other data such as addresses) a particular name or profile will not appear in the results and reports. It should be explained to the participants in a simplified manner that once the information is fed to a computer, the data will be aggregated, and it is thus impossible for anybody to subsequently link the responses back to the participant.

4.2.3 Avoiding harm to participants

Researchers are responsible for protecting all research participants from any emotional, psychological or physical harm that might result from the research, and for protecting their rights and interests. Researchers need to judge and weigh the potential risks versus benefits for the participants. Every tracer study team will need to carefully think through the likely impacts that the study will have on the participants, as well as the impacts of the data collection methods.

4.2.4 Respectful treatment of participants in research

Respectful treatment includes an approach that is sensitive to the individual, as well as to the cultural traditions of the community. Respectful treatment of participants requires the research team to make the effort to learn beforehand the norms they should abide by and the most appropriate manner of dress, behaviour and language. This not only sends a signal of respect but also helps put participants at ease. In many societies, respectful behaviour includes investing a lot of time to talk about family matters, meetings, etc. All these must be taken into consideration.

For the purposes of other data acquisition methods (online), personalized communication needs to be considered. For example, instead of a salutation like "Dear study participant", a more personalized salutation would be 'Dear Mrs. '.

4.2.5 Incentives

No monetary incentive should be offered participants by any unit within KNUST. Their incentive should be the opportunity offered them through the study to make useful inputs into the design and delivery of courses/programmes in the department in particular and the university at large.

4.2.6 Enumerator training

A unit that intends to conduct a tracer study must organize a training session for those researchers who will have direct contact with the participants.

Some useful components to include in the training sessions are:

- Having a facilitator to introduce the topic of ethics;
- Presenting the context of the tracer study and opening for discussion the potential hazards and ethical risks;
- Drawing up a guide on how each enumerator will introduce himself or herself and discussing the most appropriate approach;
- Drafting the paragraphs for consent together. Remember to include: i. information about the tracer study; and ii. an explanation of their rights;
- Considering how confidentiality will be explained; and
- Including a session on respectful treatment of research participants. The notion of respect also includes an awareness of cultural norms, such as proper behaviour, dress and disposition.

4.2.7 Establish contingency plans for ethical dilemmas

It is recommended that teams incorporate time into the schedule, not only for eventualities of weather, bad roads, etc., but also for the possibility that ethical dilemmas may require redesigning and rethinking parts of the study. Contingencies for other forms of data acquisition such as online data gathering methods should be considered.

4.3 DATA COLLECTION ACTIVITIES

4.3.1 Preparatory activities

A team should be put in place comprising:

- A project coordinator (contact person);
- b. Team members (project management, IT, report writers, statistical analysts); and
- c. External partners.

Information on Department/Faculty teams such as Role, Name, Address, Phone number and e-mail address should be compiled and published on the KNUST website for tracer studies and on other information materials such as the Tracer Study fliers.

Personalised invitation letters for participation should be sent out including the web address for the survey and the individual's access code (PIN). Invitation letters should start as "Dear Mr". Letters should be signed by the Head of QAPU.

4.3.2 Tracer study webpage

A web page with a short and simple address should be provided for the tracer study for the purposes of:

- Providing information on the project;
- b. Clarifying questions; and

c. Directing graduates to the questionnaire (link to the online questionnaire).

Other functions of the web page should include:

- a. Providing information on tracer studies to staff and students of the KNUST:
- b. Providing information on tracer studies to external parties (parents, other institutions, government, mass media); and
- c. Disseminating the results of the study (when available).

The contents of the web page should be as follows:

- a. What are the objectives of the tracer study?
- b. Who are involved?
- c. Who are handling the studies?
- d. How does the survey data flow?
- e. Who are using the data?
- f. How is data protection achieved?
- g. What happens in the project? Is the survey finished? When are results available?

4.3.3 Training

Training shall be provided for staff with respect to:

- a. Study rationale
- b. Study conduct
- c. Data collection
- d. Data Analyses and interpretation of results
- e. Dissemination of the outcome

4.3.4 Helpdesk

During data collection, graduates with specific or general questions regarding the tracer study will be referred to an established Tracer Studies Helpdesk. The Helpdesk will also deal with technical problems relating to the online survey.

Contact details for the helpdesk staff will be provided in the

- Invitation letter:
- b. Flyer on tracer studies;
- c. Online questionnaire; and/or
- d. Paper questionnaire, if used.

The helpdesk is intended to provide staff and respondents with information, guidance, and should provide support in solving technical problems (troubleshooting). For example in the case of damaged paper questionnaires, or access problems to the online questionnaire.

4.4 STUDY POPULATION

4.4.1 Sample size

The survey should cover the entire cohort for the particular year under study. All interested individuals should be considered for inclusion in the study. Where this is not feasible a suitable sample size should be chosen. Invitation letters to participate should be sent to all graduates within the database. The sample size should be adequate to allow for generalization of findings. However, annual budget consideration and human resource availability for the survey should guide final sample size determination.

4.4.2 Deciding the sample size

In general, when choosing a sample size, you must determine a number of issues including the margin of error, the population size and response rate, among others. These pieces of information will allow you to statistically produce the required sample. To avoid statistical equations, it is easier to plug these numbers into an online 'sample size calculator'. Doubling of the calculated sample number is recommended. However, if a unit estimates that successful tracing of more than 50% of the sample will be achieved, it may not be necessary to double the sample.

4.5 SAMPLING APPROACH

- A tracer study that is statistically relevant requires that a minimum number of graduates be traced and interviewed. If the selection is carried out randomly then the sample will be representative of the target population.
- Stratified random sampling is advisable if: the target population falls into sub-groups (strata); the tracer study wants to deliberately compare; one or more of the sub-groups is too small, and a simple random sample would run the risk of selecting too few individuals from that sub-group.
- If these conditions are not present, then it is probably better to carry out a simple random sampling.

4.6 PARTICIPANTS OF THE SURVEY

For the purposes of accreditation, the following are recommended:

- Studies will be conducted on graduates of Bachelors' degree one year after National service. In the case of students that undertake the mandatory two-year National Service, this will normally be three years of completion. Those with higher degrees will also be sampled one year after graduation.
- All past students of KNUST who completed at least two years before the date of the survey should be considered for inclusion.

4.7 DATA COLLECTION QUESTIONNAIRE

A template for data collection (questionnaire) is provided as Appendix A.

4.8 TRACING TECHNIQUES/METHODS

A comprehensive address database has to be developed and number and validity of email addresses checked. The database should contain all information needed to contact the graduates. The database should be developed from the list of the names of all graduates belonging to the target population.

Information on participants may be obtained from

- Department files
- Use of class social media platforms
- Use of databases from the examination office
- Use of contact numbers and e-mail addresses at Dean's office
- KNUST Alumni database
- All available databases

Every graduate in that database should be assigned an individual access code (PIN) linking the address database with the survey database so that reminders can be sent to those who do not respond.

4.9 FREQUENCY OF STUDY

Every unit at the KNUST will conduct tracer studies according to the following:

- Annual (for different segments of students or cohorts)
- Every three years (for the same category/cohort panel)
- As and when necessary

4.10 PERIOD OF SURVEY

- The survey should be carried out in the lean period in the year when general activities in the University are quite slow. This is usually the first quarter of the calendar year.
- The study should be completed by the third guarter and before commencement of the next academic year. This should make it possible for recommendations to be factored into activities for the following academic year.
- The study may be carried out as and when necessary.

4.11 METHOD OF DATA COLLECTION

The following methods are suggested for data collection:

- Direct online capturing method will be preferred (google forms, survey monkey);
- Face-to-face interviews (using questionnaires uploaded on mobile tablets) will be used to supplement; and
- Mail survey.

4.12 PERIOD OF ANALYSES AND REPORTING

Data collected can be analysed during the 3rd quarter/long vacation. The report should be ready before the beginning of the new academic year.

4.13 THE RESEARCH TEAM

The research team in the respective units shall comprise

- A unit level tracer study team headed by a Senior Member with requisite research exposure;
- A College level tracer study coordinator and an assistant to coordinate all tracer studies in various departments within the College

- Senior members who shall act as research team leaders
- National service personnel or graduate students who will be engaged as enumerators
- A university level team in the Quality Assurance and Planning Unit that will set up a desk responsible for collating data and providing technical support.

4.14 DATA MANAGEMENT

4.14.1 Software

Appropriate statistical software such as SPSS, R and STATA are the recommended software for statistical data analysis.

4.14.2 Data Cleaning and Error Estimation

Every unit must put in measures to ensure that data collected is properly cleaned. Field supervisors should ensure that the data collected is cleaned before incorporation into the data pool. Software may be used to assist with the process of data refining.

Where paper questionnaires are used, a random selection of about 10% should be carefully checked. The captured data should be compared with the entry in the questionnaire. All differences should be noted. The different kinds of errors should be analysed and the margin of errors should be determined. In general, a margin of error of 2-3 percent is acceptable.

4.14.3 Backup and download of online data

To avoid loss of data, backup of the online questionnaire system should be done on a daily basis. The installation of the questionnaire and the database with responses should be downloaded from the server of the tracer study and stored on a local computer.

Regular backups should be made on storage devices (e.g. USB stick or external drives) and stored in a safe place separate from the computer room.

Paper based questionnaire should be kept in a secure place for at least 5 years following completion of the study.

The UITS should create space on the KNUST server for the purposes of storing the data generated.

4.14.4 Data analyses

At least two levels of analyses should be carried out.

The first step in the actual data analysis is to carry out descriptive statistics of all variables.

Inferential statistical analyses such as cross tabulations and correlations may also be conducted.

4.15 REPORTING

When writing the tracer study report it is useful to keep a few general pointers in mind:

- Who is your audience?
- Who will be reading the report and for what purpose?
- Will it be an international audience or a national one?
- Will the audience want or require technical detail or a summary of results?
 - It is possible that you will need to write multiple reports presenting the results at different levels of detail for different audiences.
- All detailed information can be put into annexes.
- Conclusions and recommendations should be supported by research results.

- Do not exaggerate or sensationalize the findings to make them seem more compelling.
- Use simple, direct, jargon-free language and clear, practical recommendations following logically from the research results and conclusions.
- All tracer studies must include a section on the ethical issues that were encountered and how they were resolved.

A Reporting Template has been provided as Appendix B to guide the reporting of results.

Discussion/Conclusion 5

A discussion will be provided based on the findings of the study.

6 RECOMMENDATIONS

All tracer studies should come up with a set of recommendations to serve as a guide for the improvement of KNUST.

DISSEMINATION 7

- Results of tracer studies must be disseminated through the following means:
 - Oral presentation to senior members at the units;
 - Oral presentation of the aggregate report (from all units) at the college level;
 - Hard copies of departmental and college tracer study reports lodged at departmental and college libraries; and
 - Annual publications in a 'KNUST Tracer Study Bulletin' by the university (QAPU) with clearly established policy actions based on the findings.

8 **BUDGET**

- A dedicated source of funding should be established to provide financial resources for tracer studies (up to 15% of AFUF could be set aside for this purpose).
- Annual departmental budget should have a line item for tracer studies.

A tracer study budget template is provided as Appendix C to serve as a guide.

APPENDICES

APPENDIX A: TEMPLATE FOR CONDUCTING TRACER STUDIES

Kwame Nkrumah University of Science and Technology (KNUST), Kumasi

Office of the Vice Chancellor

Quality Assurance and Planning Unit

Introduction

This questionnaire is meant to gather information from graduates of KNUST. Its primary purpose is to obtain feedback on their experience at KNUST and to determine how that experience has had a bearing on their careers. Information gathered with this questionnaire will be used to improve the curriculum and other services that are given to the current students of the university. All information provided will be treated with the utmost confidentiality and sensitivity.

Section A: General Information

Name (optional)

- Sex 1.
 - Male [] a.
 - b. Female []
- Which department did you belong to during your studies?

Section B: Pre-University Education

- What was your entry qualification when you entered KNUST?
 - SSSCE/WASSCE[] a.
 - b. O levels/A levels []
 - c. Mature []
 - Diploma [] d.
 - e. Masters []

	f.	Doctorate []
	g.	Others (please specify)
4.		en did you get your entry qualification? Please indicate the year ertification.
5.		en did you gain admission to start your studies at KNUST? Please cate only the year.
6.		en did you complete your studies at KNUST? Please indicate only the of certification.
7.	Whi	e a student of KNUST, what was your status?
	a.	Full time – Regular []
	b.	Full time – Parallel []
	c.	Full time – Fee Paying []
	d.	Part time – Regular []
	e.	Part time – Parallel []
	f.	Part time – Fee Paying []
	g.	Distance []
	h.	Affiliate: Indicate particulars of Affiliate Institution
8.	Wer	e you a beneficiary of the students from less endowed schools scheme?
	a.	Yes []
	b.	No []
9.		ch Senior High School (Secondary School) did you attend? Kindly cate the full name and location of the institution.
	a.	Name of school:
	b.	Region where school is located
	c.	Name of town where school is located
10.	Why	did you choose to study at KNUST?
	a.	Proximity []
	b.	It was the only institution that offered the programme I intended to study [] $$
	c.	It was recommended by a family member []
	d.	It was recommended/inspired by an alumnus []
	e.	I read about KNUST on the internet []
	f.	KNUST is a prestigious institution []
	g.	Others (Please specify)

Section C: Course of Study

- What programme did you read while in the university? 12. Why did you read the programme indicated in 11 above? It was what I wanted to read [] a. It was what I was offered even though I did not choose it [] h It was what a family member recommended [] c. It was recommended by a professional who read the same/similar d. programme [] Others (Please specify) e. 13. What kind of certification did you earn after completing your studies? Certificate [] a. b. Diploma [] Bachelor's degree [] c. d. Postgraduate certificate [] e. Master's degree [] f. Doctorate [] Postdoctoral certificate/diploma [] g. h. Others (Please specify) 14. Did you undertake any internship while reading a programme at KNUST? Yes [] a. b. No [] Section D: Transition from Education to Work 15. When did you start looking for a job? Within a year after graduation [] a. h. While in school [] Within a year after National Service [] d.
 - A year and more after graduation []
 - A year and more after National Service [] e.
 - f. I have not started looking for a job yet (Please indicate why)
 - 16. Are you employed?
 - a. Yes []
 - b. No []
 - 17. If you are employed, how did you find your first job after graduation?

	e.	I am self-employed []								
	f.	Other (Please	specify)							
18.	How many employers did you contact (by e.g. letter/e-mail) before you took up your first job after graduation?									
	a.	1-5 []								
	b.	6-10 []								
	c.	10-15 []								
	d.	more than 15 []							
19.	How I	ong did it take	you to find a	a job?						
	a.	. Within a month								
	b.	Within six mo	nths							
	c.	Between six months and a year or a year and half								
	d.	Two years								
	e.	More than two years (Please specify)								
20.	How i	mportant, acco	ording to you	ır perception,	were the follow	ving factors/				
	aspec	ts to your emp	loyer when y	ou were bein	g recruited?					
Aspect/	factor	Very important	Important	Fairly important	Unimportant	Undecided/ Not sure				
Grades i specific in unive	courses									
Academic background										
GPA/CWA made/ Class		/								
What m	,									

I came on study leave to KNUST []

I saw an advert in the newspapers [] A friend/relative recommended the job []

My academic advisor recommended the job []

a. b.

c.

d.

Family background

Aspect/factor	Very important	Important	Fairly important	Unimportant	Undecided/ Not sure
Gender					
Ethnicity					
Ability to think critically					
Proficiency in English language					
Proficiency in any other language					
Marital status					
Programme of study					
Appearance					
Ability to improvise					
Internship Experience					
Willingness to take orders					

Which industry does your current employment belong to?

- agriculture a.
- manufacturing b.
- trading/commerce c.
- construction d.

ρ	hea	lth

- f. Hospitality industry
- art and architecture g.
- Other (specify _____) h.
- 21. At what level of responsibility would you rate your current job position?
 - a. Director
 - b. Manager
 - c. Supervisor
 - d. Team Leader
 - **Entry Level** e.
- 22. To what extent do you consider the following competencies to be important for your current job?

Competency/skill	Very important	Important	Fairly Important	Unimportant	Undecided/ Not sure
Broad general knowledge					
Cross disciplinary thinking					
Field specific theoretical knowledge					
Field specific knowledge of methods					
Foreign language proficiency					
English language proficiency					
Basic Computer skills (including using Ms packages)					

Competency/skill	Very important	Important	Fairly Important	Unimportant	Undecided/ Not sure
Skills for complex econometric/ mathematical modelling/analysis					
Skills for computer/ mathematical programming					
Understanding complex social, organisational and technical systems					
Planning, coordinating and organising					
Applying rules and regulations					
Economic reasoning					
Documenting ideas and information					
Problem solving ability					
Analytical competencies					
Learning abilities					
Reflective thinking; analysing your own work					
Creativity					
Working under pressure					
Accuracy, attention to detail					
Time management					
Negotiation skills					
Fitness for work					
Manual skills					

Competency/skill	Very important	Important	Fairly Important	Unimportant	Undecided/ Not sure
Working independently					
Working in a team					
Initiative					
Adaptability					
Assertiveness, decisiveness, persistence					
Power of concentration					
Getting personally involved					
Loyalty, integrity					
Critical thinking					
Oral communication skills					
Oral presentation skills					
Writing skills (including report writing)					
Tolerance, appreciation for different views					
Leadership					
Taking responsibilities, decision making					
Practical Skills					

To what extent are the knowledge and skills you acquired during your study utilised in your current job?

Very high extent	high extent	Medium	Low	Very low

23. To what extent did your study at KNUST equip you with the following competencies:

Competency	Very high	high	medium	low	Very low
Broad general knowledge					
Cross disciplinary thinking					
Field specific theoretical knowledge					
Field specific knowledge of methods					
Foreign language proficiency					
English language proficiency					
Basic computer skills (including using Ms packages)					
Skills for complex econometric/ mathematical modelling/ analysis					
Skills for computer/ mathematical programming					
Understanding complex social, organisational and technical systems					
Planning, coordinating and organising					
Applying rules and regulations					
Economic reasoning					
Documenting ideas and information					
Problem solving ability					
Analytical competencies					

Competency	Very high	high	medium	low	Very low
Learning abilities					
Reflective thinking; analysing your own work					
Creativity					
Working under pressure					
Accuracy, attention to detail					
Time management					
Negotiation skills					
Fitness for work					
Manual skills					
Working independently					
Working in a team					
Initiative					
Adaptability					
Assertiveness, decisiveness, persistence					
Power of concentration					
Getting personally involved					
Loyalty, integrity					
Critical thinking					
Oral communication skills					
Oral presentation skills					
Writing skills (including report writing)					
Tolerance, appreciation for different views					
Leadership					
Taking responsibilities, decision making					

Competency	Very high	high	medium	low	Very low
Practical Skills					

- 24. Is your current job closely related to the programme you read at KNUST?
 - a. Yes []
 - No[] b.
- 25. If your current job is not closely related to the programme you read at KNUST, why did you choose this job?

Not applicable, my job is closely related to the programme I studied	
My current job is only a temporal stepping stone, I am still searching for my professional orientation	
I have not found an appropriate job (yet)	
I receive a higher salary in my current job	
My current job offers more security	
My career interests have changed	
My current job allows a flexible time schedule	
My current job allows me to work in a favourable geographical place	
My current job allows me to take into consideration the interests of my family/children	
Other (please specify)	
I don't like the programme I studied	
family/children Other (please specify)	

How did you get employed at your current place of work?

- a. I applied and passed a qualifying interview
- b. I was connected by a friend/family member
- c. I was poached by the organization
- d. It is my own/family business
- e. other (specify.....)
- 26. Overall, how do you rate the usefulness of your studies in respect of the following areas:

	Very useful	Useful	Slightly/quite Useful	Slightly useless	completely useless
Finding an adequate job after finishing your studies					
For fulfilling your present professional tasks (if applicable)					
For your future professional development (career)					
For the development of your personality					
For the economic development of your country					

Have you started a further or another course of study after the study at KNUST?

Yes, I have completed it successfully []

Yes, I am still studying []

Yes, but I have stopped my further course of studies []

No, I have not started a further course of studies []

27. To what extent do the following reasons for further studies apply to you?

Reason	Very high extent	High extent	Medium	Low extent	Very low extent
Wish to achieve a higher or professional degree					
Improve chances of finding a job					
Personal interest in a particular subject area					
Demanded by employer					
Wish to improve my promotion prospects					
The training is important for the development of my country/community					
Increase my income					

Reason	Very high extent	High extent	Medium	Low extent	Very low extent
I have nothing else to do					
Other (please specify)					

Cumulatively, how long did it take you to complete the programme you are pursuing for further education?

- c. 1-3 months []
- d. 3-6 months []
- 6-12 months [] e.
- f. More than a year []
- 28. Please list some of the major courses you have/are taking in your further education
- 29. Taking all aspects into account, to what extent does your current work situation meet the expectations you had when you started your studies at KNUST?
 - Expectations not met at all [] g.
 - Expectations slightly met [] h.
 - i. Expectations somewhat met []
 - Expectations largely met [] j.
 - k. Expectations fully met []
- 30. To what extent are you satisfied with your current work?
 - I. Fully dissatisfied []
 - Dissatisfied [] m.
 - Indifferent/neutral [] n.
 - Satisfied [] 0.
 - Fully satisfied [] p.

Section E: Improving the Programme's Curriculum at KNUST

- 31. What were some of the challenges you encountered when pursuing your programme in KNUST with regards to the following areas?
 - a. Teaching quality
 - b. **Facilities**
 - Student workload c.
 - d. Teaching and learning materials
 - Industry linkages e.
 - f Learner support

- Other (please specify) g.
- 32. Were there specific courses that you took that you consider to be irrelevant based on your current experience? Please, list if you answer in the affirmative
- 33. Based on your current experience, are there courses you consider to be very important to be incorporated in the current curriculum of the programme you studied at KNUST? Please, provide a list.
- 34. Would you recommend the program you studied to someone?
 - a. Yes []
 - b. No [] why?
- 35. Would you choose the same course you studied at KNUST if you had a second chance?
 - Yes a.
 - No Give reasons b.
- 36. Describe what you miss most about your years in KNUST.
- 37. Would you recommend KNUST to someone?
 - Yes a.
 - No Why? b.
- 38. Would you choose KNUST again if you were to start all over again?
 - a. Yes
 - b. No

THANKS FOR YOUR TIME AND RESPONSES

APPENDIX B: TEMPLATE FOR REPORTING

The report to be generated at the end of the field survey should consist of the methods used for the study as well as the results of the survey. The following is the proposed structure of the report:

Acknowledgements

List of Acronyms

Executive Summary

Table of Contents

Introduction

Background of Study

Objectives of tracer study

Methodology

Tracer study preparation

Description of survey instruments

Target population

Quality and quantity of addresses

Update procedures for addresses

Survey Implementation

Timing of survey

Reminder actions

Response statistics and representativeness

Data analysis

Data entry and coding procedures

Data checks and cleaning

Data analysis procedures (software and procedures used)

Reliability and validity of data

Results

Description of sample characteristics (Gender, age, year of graduation, certification, etc.)

Studies undertaken

Studies prior to KNUST

KNUST as a choice for higher education

Satisfaction with course of study at KNUST

Further studies undertaken by Graduates

Employment

Employment status of Graduates (whether employed or not, type of employment, under-employed)

Efforts made at getting a job

Period after graduation/national service before first employment,

Influencing factors for obtaining employment

Satisfaction with employment/suitability of current job, etc.

Suitability for current job

Level of responsibility

Current employment type versus course of study

Usefulness of studies undertaken at KNUST

Utilisation of undergraduate/postgraduate training for current job

Assessment of KNUST curricula

Suitability of curricula for job market

Recommendations for curriculum review

Conclusions

Appendices

Team Members

APPENDIX C: TEMPLATE FOR TRACER **STUDIES BUDGET**

Updating addresses	Basic costs	Minutes	Participants	Costs ¢
Phone call				
Staff costs (assistants)				
Total				
Staff Costs	Costs per month	Months		Costs ¢
Researcher				
Administrative staff				
Total				
Other (optional)				
Computer				
Phone, headset				
Desk chair				
Mobile tablets				
Total				
Conducting the study with paper questionnaires (Three reminders) (optional)				
Printing of questionnaires				
Paper, pencil etc. (per month)				
Postage (three contacts)				
Return postage				
Reminder by phone (e.g. 500 participants)				
Data entry of paper questionnaires				
Total				

Conducting the study with mobile tablets (optional)	Costs per month	Months	Costs ¢
Fuel or travel costs			
Accommodation (per month)			
Subsistence (per month)			
Total			
Grand Total			

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