# **CARISCA** Centre for Applied Research and Innovation in Supply Chain – Africa



#### **TABLE OF CONTENTS**

Executive Summary	2
Key Findings: Alumni Outcomes	2
Survey Overview	3
Method	3
Respondent Demographics and Overview	4
Alumni Outcomes	4
Quantitative Responses	5
Alumni Work Experiences	5
Experiences at KNUST	12
Qualitative Responses	13
Suggestions for Improvement	15







## **Executive Summary**

To better understand the mid-to-long-term outcomes of KNUST's Supply Chain and Information Systems students in the Ghanaian workforce, as well as their job satisfaction, and opportunities for KNUST to improve the student experience, the Centre for Applied Research and Innovation in Supply Chain – Africa (CARISCA) administered its first Alumni Survey as part of activity 5.1.1.2.1 from the year two work plan. Seventy-six alumni completed the survey.

## Key Findings: Alumni Outcomes

- 69% work at least 31 hours per week and 88% are employed full-time (35 hours per week or more)
- 18% work more than one job
- 15% are self-employed or own their own business
- 78% of alumni say that their job is closely related to what they studied at KNUST, and
   19% said somewhat related
- 79% are in a leadership role
- 30% of those employed participated in an internship with their company
- 30% have been promoted since starting their job

#### **Positive Experiences at KNUST**

- 79% said their degree prepared them for their present job in the workforce
- Students enjoy working on projects with students from diverse fields of study (37%)
- When students get the opportunity to work with faculty on research projects, it is one of their most valuable experiences (31%)
- Job search support (21%)
- Presenting a paper, research, creative work (18%)
- Students believe the four most important skills and knowledge they learned at KSB are:
  - Critical thinking skills
  - Subject matter expertise
  - Ability to work in teams and independently
  - Leadership and management skills

#### **KNUST Opportunities**

- Two recurring themes from qualitative responses:
  - Alumni would like to see more hands-on supportive instruction and support, especially during student theses.
  - Alumni wish they would have had the opportunity for more hands-on learning including; internships, applied projects, field trips, better linkages to industry (less theory and more applied knowledge), and mentorship and networking opportunities.

## Survey Overview

Through follow-up surveys with employers and KNUST undergraduate, graduate, and Ph.D. students, CARISCA will quantify the mid-to-long-term outcomes of KNUST students in the Ghanaian workforce, as well as their job satisfaction.

CARISCA will administer an annual survey to KNUST's SCM alumni to evaluate student outcomes. This outreach will include alumni from CARISCA's new online curriculum and digital workshops and apps. Key questions will address students' self-perceptions of their: career success, pay, job satisfaction, geographic location of their work, their continued education after leaving KNUST, and their recommendations for improving KNUST's SCM experience and curriculum.

Basic demographic questions will include gender and income to help inform CARISCA staff on how effective CARISCA has been with incorporating recommendations done from the analysis that examines success factors for women in SCM and in the workforce. In addition to the survey instrument, the Gender Senior Technical Assistant will also include student and faculty testimonials to better understand individual qualitative experiences. The survey will be administered annually to all SCM graduates.

There is no additional funding needed for this activity as KNUST already uses Google Forms to send out their survey to students, and this method will be continued because it is easy for students to answer the questionnaire on their phones, hence improving survey response rates and the generalizability of the results.

## Method

The first alumni survey is a non-probability convenience sample that was sent to 186 graduates of KNUST's Supply Chain and Information Systems program by the Dean of KNUST's Business School. This survey was sent to both supply chain management and information systems students. There is a low response rate from undergraduate students. At KNUST, it is much harder to access undergraduate student information than post-graduate students. The survey was open from October through December and two reminder emails were sent to alumni. Seventy-six alumni completed the survey (41 percent response rate).

The link to the final survey instrument can be found here.

## Respondent Demographics and Overview

- 76 responses
- 84% Male, 26% Female
- 87% graduated within the last three years
- 25% have an undergraduate degree from KNUST
- 91% have a master's degree from KNUST
- Graduates work in the following sectors:
  - 41% Private Sector
  - 23% Government Agency
  - 19% Educational Institution
  - 11% Medical Institution
  - 4% NGO
  - Oil and Gas (1%), and Mining (1%)

#### **Alumni Outcomes**

#### **Alumni Outcomes**

- 69% work at least 31 hours per week and 88% are employed full-time (35 hours per week or more)
- 18% work more than one job
- 15% are self-employed or own their own business
- 99% work in Ghana (1 respondent works in Zambia)
- 78% of alumni say that their job is closely related to what they studied at KNUST, and 19% said somewhat related
- 79% are in a leadership role
- 30% of those employed participated in an internship with their company
- 30% have been promoted since starting their job

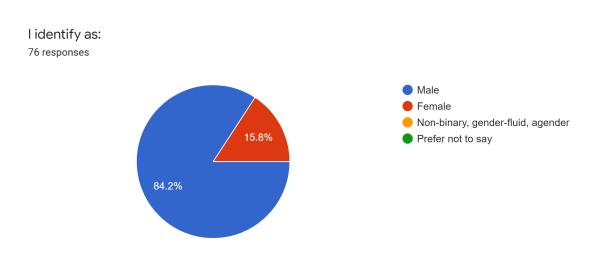
#### **Positive Experiences at KNUST**

- 79% said their degree prepared them for their present job in the workforce
- Students enjoy working on projects with students from diverse fields of study (37%)
- When students get the opportunity to work with faculty on research projects, it is one of their most valuable experiences (31%)
- Job search support (21%)
- Presenting a paper, research, creative work (18%)
- Students believe the four most important skills and knowledge they learned at KSB are:
  - Critical thinking skills
  - Subject matter expertise
  - Ability to work in teams and independently
  - Leadership and management skills

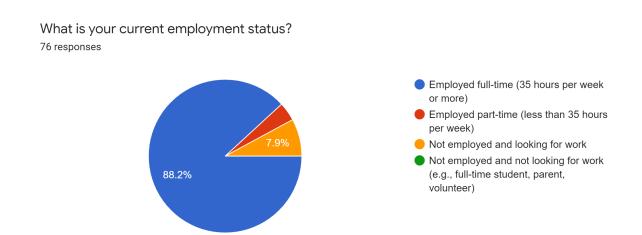
## **KNUST Opportunities**

- Two recurring themes from qualitative responses:
  - Alumni would like to see more hands-on supportive instruction and support, especially during student theses.
  - Alumni wish they would have had the opportunity for more hands-on learning including; internships, applied projects, field trips, better linkages to industry (less theory and more applied knowledge), and mentorship and networking opportunities.

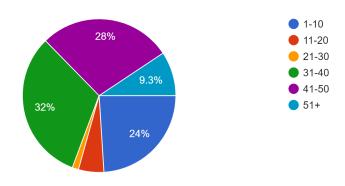
## **Quantitative Responses**



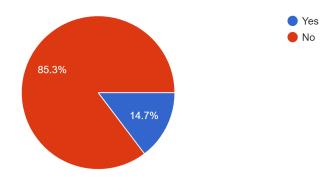
## Alumni Work Experiences



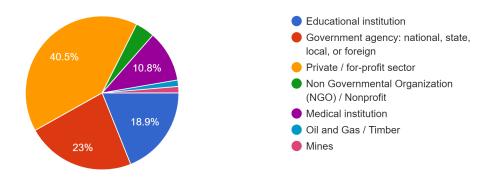
How many hours are you currently working per week at your PRIMARY job? 75 responses



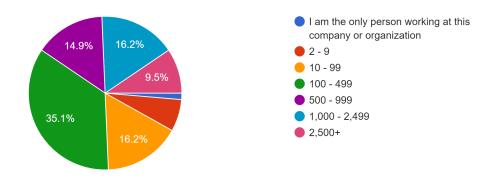
Are you self-employed, or do you own your own business? 75 responses



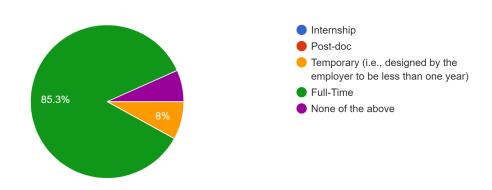
How would you categorize the company or organization in which you are working? <sup>74</sup> responses



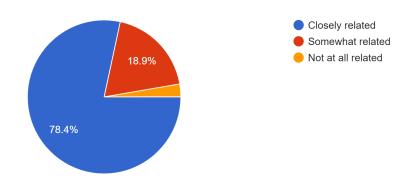
Approximately how many employees work at this company or organization? 74 responses



My current position is an ... 75 responses

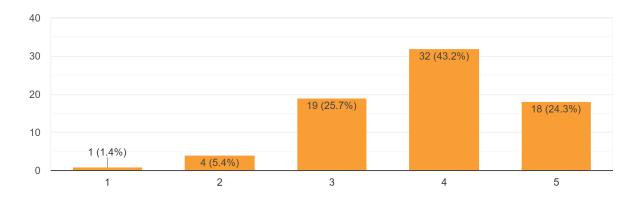


How closely is this job related to the graduate field you studied at KNUST? 74 responses



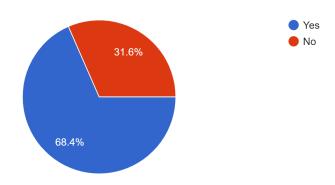
How satisfied are you with your job?

74 responses

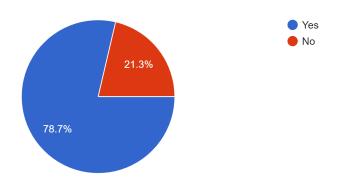


#### Are you actively looking for another job?

76 responses

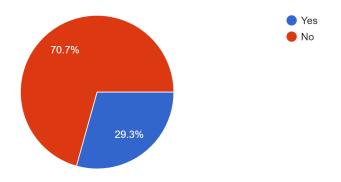


Are you in a leadership position in your current job(s) (e.g., supervising projects or staff)? 75 responses



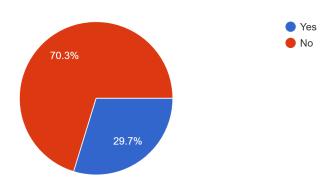
#### Did you participate in an internship with this company or organization?

75 responses

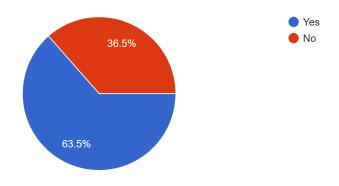


Since graduating, have you received a promotion of increased technical, supervisory, or managerial responsibility at your current job(s)?

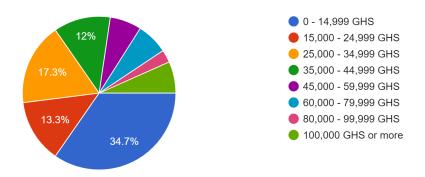
74 responses



Have you participated in professional development offered through your current employer? 74 responses

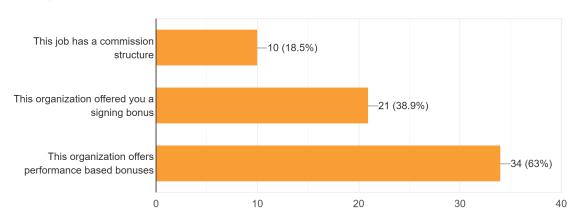


Kindly indicate your gross annual salary, excluding bonuses, for your all of your work: 75 responses



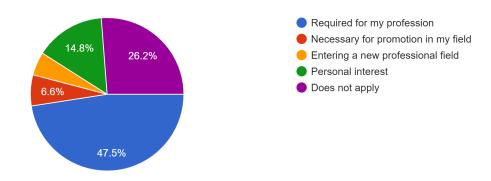
#### Please select all that apply:

54 responses



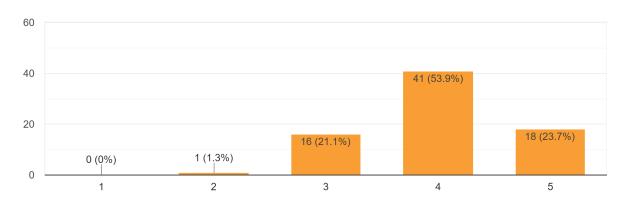
If you have enrolled in or completed a license or certificate program, why did you pursue these courses?

61 responses

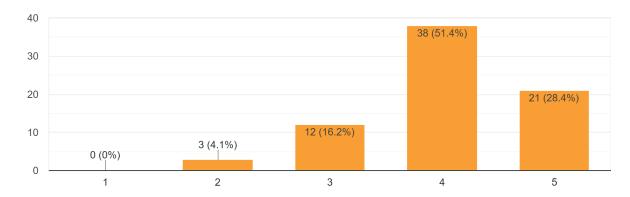


## Experiences at KNUST

How would you rate your overall experience at KNUST? 76 responses

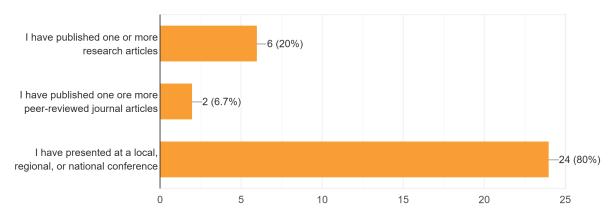


How well did your studies at KNUST prepare you for your current job/the workforce? <sup>74</sup> responses



#### Please select all that apply since graduating from KNUST:

30 responses



## Qualitative Responses

#### **Role at Organization**

- Officer/Manager/Supervisor 35
- Clerical/Assistant (store assistant, etc.) 7
- Coordinator 4
- Analyst/Planner 3
- CEO 3
- University Role 2
- IT Support/Technician 2
- HR 2
- Principal Store Superintendent 1
- Controller 1
- Trainee -1
- Specialist 1
- Underwriter 1

#### Certificates that Alumni attained post-KNUST graduation

- MCIPS 5
- CIPS 6
- CILT 3
- BSc. Mechanical Engineering
- MSC procurement and supply chain management
- Huawei Routing and Switching, Cybrary Identity Access Management in AWS
- Certificate in Business strategy
- Continuous professional development certificate in occupational safety, health & environment

- Fixed Asset management training
- Supply chain management/Problem Solving, fleet management
- Occupational Safety and Health Training
- Advance Diploma in International Logistics and Transport (ADILT)
- Advance Diploma in Shipping (Port Agency and Shipping Business). This is stage 2 towards the award of membership status for the Institute of Chartered Shipbrokers (ICS), UK.
- Non-Certificate Continuing Education
  - o Ph.D. in Logistics and Supply Chain Management
  - o MSc. Procurement and Supply Chain Management
  - MSc Logistics and supply chain mgt
  - Mphil Logistics and Supply Chain Management
  - MSc. planning Monitoring & Evaluation
  - o HND, BSc
  - Master of Science (Procurement and Supply Chain Management)
  - o Master of Science in procurement and supply chain management
  - BA Art In Integrated Business Studies
  - o MPhil Logistics and supply chain management

#### **KNUST Experience**

Please describe any particular skills or areas of knowledge that were NOT covered in your graduate program that you think should have been covered.

- None/Satisfied with the knowledge gained 4
- Can't remember/ NA 2
- Subject Matter Expertise
  - o Academic 2
    - Teaching data analysis to enable all students to do proper data analysis of their research.
    - How to teach graduates to publish articles
  - o Software 2
    - Software for supply chain management
    - How to work with key software in organizations for instance SAP, Bamboo HR, Sage, etc
  - Specific to career. Like supply chain for health
  - Works Procurement
  - Sales and operations management
  - Sap technology
  - Course in corporate governance
  - Technically understanding
  - Contract Administrations
  - Shipment tracking system
  - Compliance and work ethics
  - Shipping- Incoterms used, Integrated Customs Management System (ICUMS)

- o Practical knowledge in ABC, power BI, XYZ in inventory management analysis.
- Understanding and implementation of Public Procurement Act
- Working on public sector tender documents
- Computer skill development
- Critical Thinking Skills 2
- Applied Learning Opportunities / Practical knowledge
  - o Field Trip / Internship / Fieldwork 4
    - Industrial practice coaching. Field Trip study.
  - Networking with professionals 2
  - Practical link of theories to practice
  - Mentorship

### Student Suggestions for Improvement

#### **Student-led Experience**

• Give students the opportunity to have control like a sense of control

#### **Quality of Instruction**

- I suggest the part-time lecturers should be given more attention.
- Experienced lecturers are needed to lecture students
- Assign students to serious thesis supervisors
- Tutors should create an enabling environment for students to feel at home and learn
- They should try to deepen the teacher and student relationship at the school of business. and also give opportunities to alumni when the person wants to do further studies in school.
- Thesis supervisors must not leave their students stranded.
- Time with supervisors at the early hours
- They have to do something about supervision when it comes to the thesis because some lecturers will not attend you until the deadline and you will hear from them
- Key attention must be given to IDL students on access to information and assistance on academic-related challenges. E.g., students struggling to know the outcome or result of their resit papers.
- Lecturers should contact students through emails on thesis supervision matters instead
  of making students travel long distances just to see supervisors to glance through their
  thesis work.
- Lecturers should be open more to students for idea sharing and networking.
- Effective and prompt communication during the thesis between students and supervisors to be greatly improved. It's a disaster at the moment.
- Proper materials for research and good supervisors for students to avoid student intimidation so that various students can also bring out their creative mind and bring out their best to enhance the knowledge of the institution's agenda forward.
- I suggest that KNUST should support students in thesis and research activities

 Research Supervisors should be based in the region of IDL program for effective interactions

#### **Links to Industry**

- The graduate program should be practically tailored to the industry and employers' needs
- Link students to the job market
- A drive for professional development
- Teaching should be more practical. addition of more practical visuals could be helpful
- Industrial or Field Trips and More Research works that address current sustainability issues in the country.
- Make it more practical and interactive
- New skills and ideas implementation to improve students' knowledge.
- More practical based lessons.
- The programs should be aligned to jobs
- Reduce classroom interaction and make it more practical, field trips, research presentation, publishing and tailor made to suit specific jobs.
- KNUST should form alliance with companies in other to create avenue for these
  graduate to have a job related internship to have a feel of what they should expect at the
  job market and build their confidence in the practical world aside from the theory been
  taught in various institution
- Organizing of seminars for students
- More practical work and field observation experiences during the study
- Field trip and practicum should be incorporated into the programme to boost the practical experience of the supply chain management programmes
- Going on course-related trips and workshops
- Courses with specific industry topics should be taught by industry players (guest lecturers). i.e., under transportation, an expert in INCOTERMS should be invited to take the class through that topic.
- there should be more industrial visits by graduate students
- Increase internship programs
- Students should be given more projects to investigate and research on industries
- More of the courses taught should have practicals on the field for students.
- Practical knowledge needs to be introduced
- Organize practical workshop programs for students
- They should be made more practical
- Industrial attachment

#### **KNUST Facilities**

- There should be libraries at all KNUST Centres/Campuses where students can read and research
- Attention should be given to the distance campus. (koforidua)
- Good lecture halls

#### **Subject Matter and Research Expertise**

- Focus on Al impacts on business
- Help students to acquire skills in the publication of articles
- Detailed explanation on Public Procurement Act
- How to write an article for publication

#### **Positive Feedback**

- Keep on with the good work
- We will forever be the best
- Keep up with what you are doing, especially with research such as this.

#### **General Comments**

- The amount for the professional certificate should be added to school fees so that students can graduate with a dual certificate.
- There should be a platform in various schools and departments so that alumni and lecturers can interact and have discussions, share ideas and network also.
- Quality and not quantity
- Other policies to improve programs