Transforming Higher education for the future

New bridges between university, society and the world of work





Professor Romeela Mohee Education Specialist, Higher Education IAU 2019, 13-15 November 2019 Puebla, Mexico

OVERVIEW

- Challenges in higher education and the world of work
- COL's Employability Sub-Model
 - Institutional employability
 - Program competency mapping
 - Employability guidelines
 - Employability Research
- Lessons learned
 - University of Namibia- Law programme
 - Open University of Mauritius MSc ICT program



FUTURE OF WORK

The Fourth Industrial Revolution is causing a large-scale decline in some roles as they become redundant or automated. According to the 2018 Future of Jobs Report (https://www.weforum.org/reports/the-future-of-jobs-report-2018), 75 million jobs are expected to be displaced by 2022 in 20 major economies. At the same time, technological advances and new ways of working could also create 133 million new roles, driven by large-scale growth in new products and services that would allow people to work with machines and algorithms to meet the demands of demographic shifts and economic changes.

75 million jobs displaced by 2022

58%

of worldwide employers do not believe new graduates are adequately prepared for work

- Changing nature of work
- Two thirds of jobs (Amazon, UBER, Airbnb) did not exist 10 years ago)
- Skills Mismatch- advanced cognitive skills, adaptive skills



IN TODAY'S WORLD



Students need both **in-demand skills and knowledge AND transferable skills** and knowledge to be successful long-term.

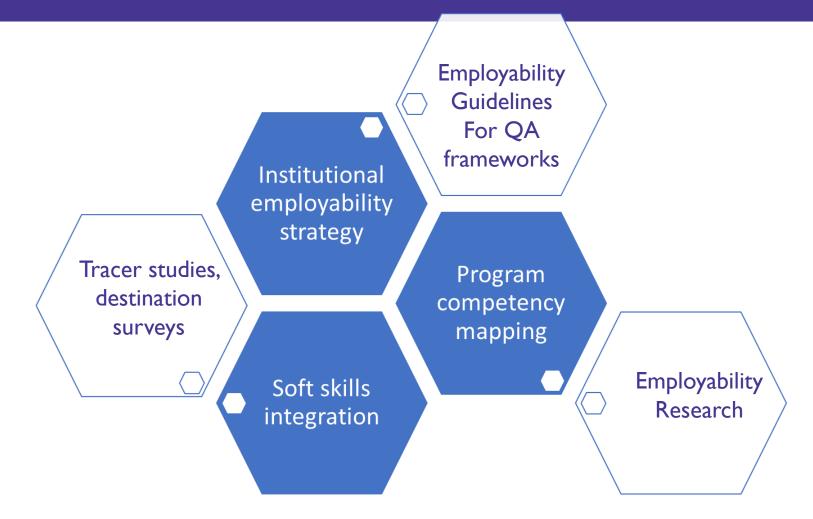
Universities need to know AND articulate how they add value to the investments of learners.



- I. How are Universities integrating the new trends?
- 2. What is the role of Universities in providing the skills?
- 3. How are institutional QA systems responding to these requirements?
- 4. How are QA national systems integrating the new requirements?

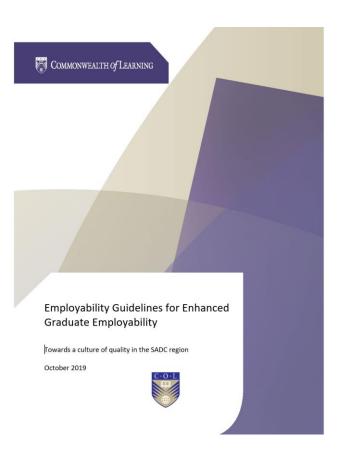


COL'S EMPLOYABILITY





EMPLOYABILITY GUIDELINES TO BE EMBEDDED IN QA



1. Creative Problem Solving

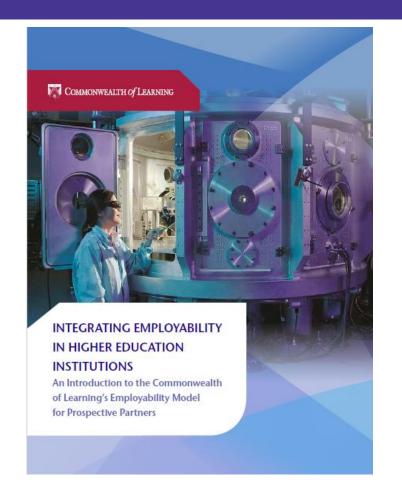
Curriculum is designed to promote the development of <u>problem solving</u> skills and creativity required in the world of work.

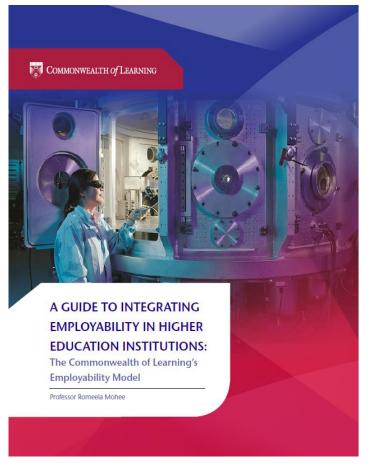
Criterion	Evidence	Rating
There are clearly stated programme Learning Outcomes (LOs) that encourage development of problem solving skills required in the job market. There are clearly stated programme LOs that	 Learning outcomes (curriculum and module descriptors). Teaching and learning policy/strategy. Course outlines. 	
encourage development of creativity skills in learners required in the job market.	Assessment strategies/policy.Sample of students' work	
Students engage in activities and other learning experiences that equip them with research/project skills and competencies required to solve work-based problems.	Examiners/Moderators reportsAssessment Criteria	
Diversified assessment strategies take into account the need for students to master problem solving skills and competencies required in the changing work environment.		
Students are assessed on their ability to analyse information, synthesize views, make connections where appropriate, and propose creative solutions.		



INSTITUTIONAL EMPLOYABILITY READINESS

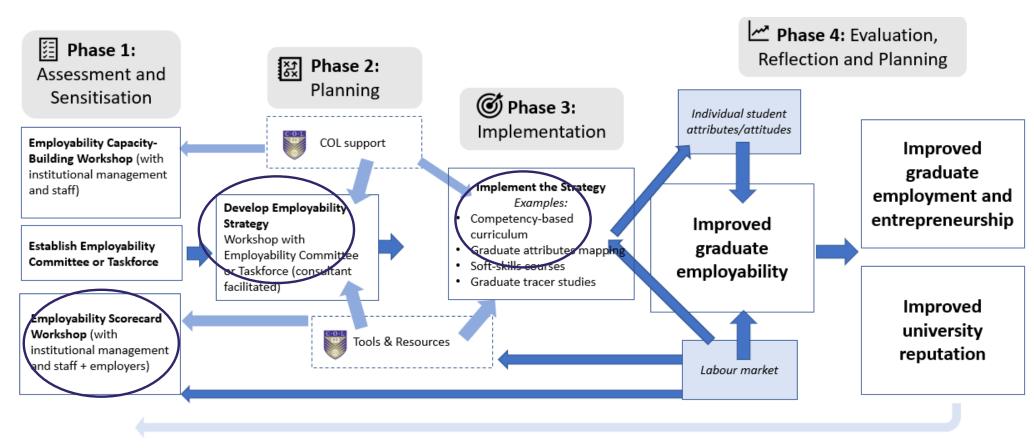








EMPLOYABILITY MODEL FOR HEIS





EMPLOYABILITY INSTITUTIONAL READINESS

University of Namibia

LLB programme

Open University of Mauritius

ICT programme

2018-2019

2019-2020

Bangladesh
Open
University
Business

Botswana Open University

Science Education

Moi University. Kenya

Entrepreneurship

Copperbelt
University,
Zambia

University of Rwanda Computing



INSTITUTIONAL EMPLOYABILITY

nsitisation & Career Awareness

Website Blog Posts.

Baseline Survey &

Categorised Group

Social Media Publicity

STAGE 2:

After Induction

Before Induction

students about career choices and align each

student's choice with

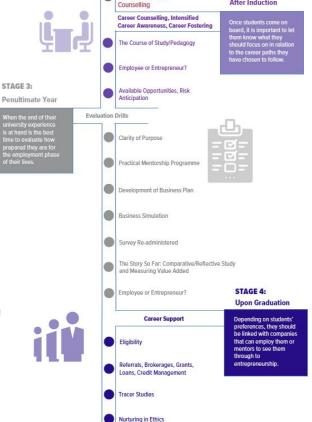
their abilities, interests

Beginning of year I

After induction

Penultimate year

Before graduation



ACTIVITY 1: Establish Employability Committee

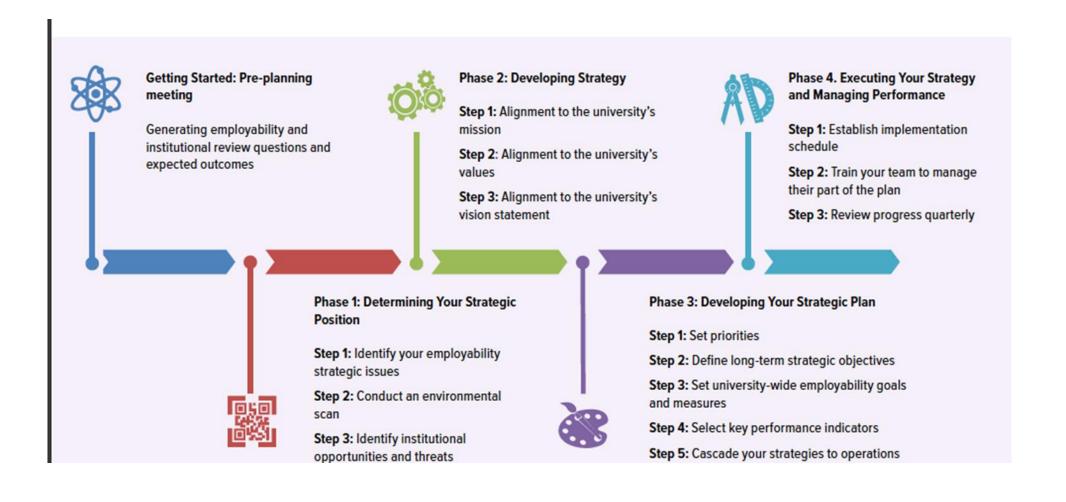
An Employability Committee/Taskforce is established, comprised of key individuals who will lead the institutional change-management processes related to the employability model. COL supports this process with input to the terms of reference and guiding documents for the group.

ACTIVITY 2: Capacity-Building and Employability Scorecard **Exercise**

In a three-day workshop, institutions will undergo sensitisation/capacity building in employability, supported by COL. This activity is intended to support change management by creating common understanding and buy-in from staff and faculty. It will outline why employability is an important concern,



DEVELOPING THE EMPLOYABILITY STRATEGY



OUM EMPLOYABILITY SCORECARD AND STRATEGY

Table 2: Excerpt from the Open University of Mauritius' scorecard to identify strengths and weaknesses

Item	Standard	Total Obtainable Score	Minimum Obtainable Score	Actual Score	Remarks
	Stage 1 – Year 1: Sensitisation a				
1	Baseline survey (induction sessions)	3	1.5	1	No surveys
2	Categorised counselling	3	1.5	2	Induction sessions prior to the intake of new students (either Jan. or Aug. at OU)
3	Career awareness methods	3	1.5	1	No website blogs/ discussion forums and no workshops on career awareness
4	Pedagogy allows for opportunity to explore different disciplines in the first year	3	1.5	1	No interdisciplinary modules in year 1 programmes
	SUBTOTAL, Stage 1	12	6	5	

Stage 1 - Year 1: Sensitisation and Career Awareness

Main remarks and findings: Stage 1

induction session and through the university's website.

The university holds two induction sessions every year for new students to gather information on courses on offer for the new academic year. These induction sessions are held prior to the January/August intake. In addition, the students have the opportunity to interact with academic staff and discuss possible career prospects for the different programmes on offer. However, once the students are enrolled, there are no formal workshops being conducted for first-year students on career awareness. In addition, there are no formal surveys to track the professional goals of these students.

Year 1 – Stage 1: Strategy During Induction: Sensitisation and Career Awareness

Objectives/Actions	Responsible Parties	Time Frame for Implementation
To provide a clear journey map for each programme to help students better understand available opportunities supporting their personal and professional development during the induction session.	Head of Department	Medium Term
To provide details online about the type of potential employment opportunities for graduates of the programmes.	Academic Staff	Medium Term
To include details on the employability skills that a student will gain from each programme.	Programme Manager Marketing	Short Term
To highlight employability and use successful alumni profiles during the	Department	Short Term



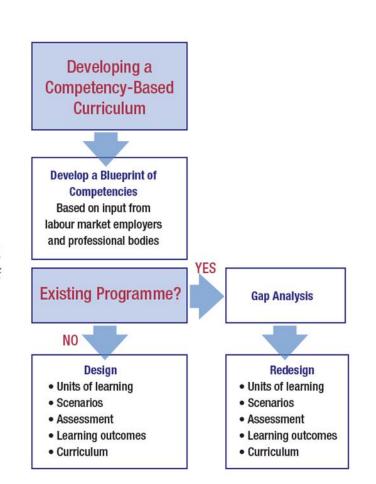


PROGRAMME COMPETENCY-BASED MAPPING

PROJECT 1:

Competency-Based Programmes: Linking to Labour Market Needs

Competency-based learning moves beyond traditional assessment of knowledge and ties education to the achievement of career-related aptitudes, aligning learning outcomes to the needs and expectations of the labour market and professional bodies. With the Open University of Mauritius, COL has piloted a toolkit, outlining a six-stage process to assess the relevance of current programmes vis-à-vis labour market needs, and transition to a competency-based approach.







FINDINGS- UNIVERSITY OF NAMIBIA: LLB PROGRAMME

Disconnect between what a student learns at university and what he needs to do at the work place

Update on learning outcomes for the whole program to recognize the attributes

- General employability attributes
- Critical thinking, independent learners, a sense of values and ethics
- LLB specific attributes
- Problem solving
- Teamwork
- Environmental awareness and social responsibility skills
- Effective oral and written communication skills
- Research skills

To integrate

- Perform online research (finding acts of parliament....)
- Writing skills for legal drafting (draft a plea of guilt)
- Closer relationship/interactions between justice training centre and UNAM Law department
- Observation in court
- Set up/simulate moot courts

Assessment:

 Mix of assessment; Module assessment mapping Test, quiz, journal entries, assignment, moot court simulation, presentation, legal clinic participation, dissertation



EXAMPLE: OUM MSC APPLIED COMPUTING COURSE

Module	M odule Title		now Inde				Sub	ject S and I					ual	Tra	nsfe	rabl	e ar	nd Generic Skills	Subject specific practical skills
Code		ΑI	A 2	A 3	A 4	A5	ВІ	B2	B 3	B 4	B 5	B6	B7	CI		C 3		C5	DI
OUpm017 213	Mobile Application Development	•	•	•			•	•							•		•		•



COMPLETE COMPETENCY MAP FOR MSC APPLIED COMPUTING

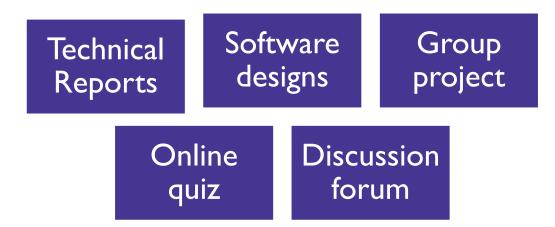
	Kno	wledge	and Un	derstan	ding			Cogni	tive Ski	ills		Trans	Practical skills								
Module title	Code	Туре	Mode	K1	K2	К3	K4	K5	C1	C2	C3	C4	C5	C6	C7	T1	T2	T3	T4	T5	P1
Year 1 NQ-MQA Level 9																					
Service-Oriented Architecture and Web Services	OUpm017111	С	BL	•	•	•			•	•							•	•			•
Cloud Computing Applications	OUpm017112	С	BL	•	•	•			•	•						•	•	•		•	•
Web Engineering & Analytics	OUpm017113	С	BL	•	•	•			•	•							•	•			•
Cyber Security and Cyber Law	OUpm017114	С	BL		•									•			•	•	•		
Business IT	OUpm017121	С	BL					•			•					•	•		•	•	
Wireless Sensors and Embedded Systems	OUpm017122	С	BL	•	•	•			•	•							•	•			•
Machine Learning and Artificial Intelligence	OUpm017123	С	BL	•	•	•			•	•							•	•			•
Big Data Theory and Practice	OUpm017124	С	BL	•	•									•			•	•	•	•	
Year 2 NQ-MQA lev	vel 9																				
IT Project Management	OUpm017211	С	BL				•				•						•		•	•	
Research Methods	OUpm017212	С	BL					•				•	•		•	•	•		•	•	
Mobile Application Development	OUpm017213	С	BL	•	•	•			•	•							•		•		•
Appled Project	OUpm017221	С	BL	Subject to the topic, various combinations of the knowledge and understanding learning outcomes will be demonstrated				•	•	•	•	•	•	•	•	•		•	•	•	



ASSESSMENT STRATEGY FOR OUM MSC COURSE

- Devise an assessment strategy that will include specific assessment criteria aligned to the learning outcomes of the module being assessed.
- A range of formative and summative assessment exercises are designed to enable learners to demonstrate and apply knowledge and understanding. Most modules consist of a Tutor Marked Assessment (TMA) component and an examination.

Mix of assessments supporting LEARNING OUTCOMES





CONCLUSION

- In both cases; transformative process- as compared to previous curriculum
- Employability guidelines to be integrated in institutional Quality frameworks
- It is our responsibility to ensure that the graduate are work ready and well equipped for the world of work



