



# Mind the gap? Investigating the Curriculum-Labour Market Nexus in Tanzania

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Received: February 12, 2019; Accepted: June 25, 2019; Published: May 15, 2020

**Abstract:** Tanzanian higher education faces many challenges due to ongoing expansion and increased enrolment rates partly caused by increased number of universities and university colleges. This mass enrolment has affected the quality of graduates. Proposed solution to this challenge is a shift from knowledge to competency-based curriculum; which has the potential to link the theory with the practical experience. This paper explored the factors that shape the development of competency-based curricula. The study was conducted using a cross-sectional design and answered the following key questions: Through which processes, practices, and milieus are curricula developed at Tanzanian universities. What factors contribute to the development of competence-based curricula (internal and external)? What are the challenges in developing competence-based curricula? In this study, 160 graduates and 21 employers were sampled using conveniently; whereas, purposive sampling was applied in selecting university graduates, regions, and districts. Data were gathered using household surveys, key informants interviews and the documentary review. The findings show that resource constraints, insufficient competent staff, the lack of ownership of curricula development and bureaucratic decision-making processes are the main barriers towards developing of the true competency-based curriculum. It is recommended that Tanzanian Universities, Government and educationists should contextualized on the education landscape that fits Tanzanian environment if possible try to decolonize higher education in order to provide local solutions to local problems.

**Keywords:** Curriculum development, higher education, Universities, labour market, Tanzania

## 1. Introduction

In Tanzania, the government enshrined higher education in the country's *Vision 2025* (1999), with the overall development objective to be the production of the quantity and quality of workforce with the necessary knowledge and skills to address the challenges of underdevelopment. This entails the creation of an appropriate workforce to meet the demands of the labour market, which led to the establishment of even more universities. Indeed, there is mushrooming of higher education, mass enrolment, vocationalisation and remodelling of colleges into universities in Tanzania. For example, the Mbeya Institute of Technology was remodeled to be Mbeya University of Science and Technology, Cooperative College Moshi (Moshi Cooperative University) and Institute of Development Management (Mzumbe University)<sup>1</sup>. As a consequence, new entrants in the labour market are estimated to be between 800,000 to 1,000,000, which outstrips the demand by far (Katundu and Gabagambi, 2016). The United Republic of Tanzania's (URT) (2010) *National Strategy for Growth and Reduction of Poverty II* (NSGRP II) estimates annual new job vacancies from both public and private sectors to be 630,000 (Nangale, 2012).

While one could argue that the country does not have enough jobs for the graduates, it is often argued that even those entering the labour market are often poorly equipped for their new field of work. A recent survey released in 2014 by the Inter-University Council for East Africa found that between 51 per cent to 63 per cent of the graduates were 'half-baked', 'unfit for jobs', and 'lacking job market skills'. The worst records were in Uganda (63 per cent) and Tanzania (61 per cent)<sup>2</sup>.

To tackle the often-attested skills gap in the labour market, competence-based curricula have been proposed as a solution. Among others, this is reflected in the (in) famous Bologna declaration of 1999 (Jurše and Tominc, 2008). Tanzania has adopted this goal in the Tanzanian University Qualification Framework (UQF) (TCU, 2012), but despite this shift, many employers still feel that universities do not supply candidates with the right knowledge, and, more importantly, skills, amid mounting complaints on the knowledge and skills gaps of local university graduates. For instance, Onyango (2015) asserts that poor hands-on skills coupled with lack of innovation have been cited among the factors that contribute to the failure of some Tanzanian

<sup>1</sup> This has often impacted negatively on capacity of the Universities to deliver quality education and produce competent graduates.

<sup>2</sup> Mail and Guardian 2015. Graduating in Africa.pdf [https://mail-attachment.googleusercontent.com/attachment/u/0/?ui=2&ik=9101805]



graduates from higher learning institutions to fill job profiles in the local labour market. While it is expected that upon graduation one would be able to undertake tasks that pertain to the studies undertaken, the current practice in Tanzania seems to be that graduates require additional training to perform tasks even in areas assumed to have been studied at the university (Onyango, 2015). Frequently, foreigners from neighbouring Kenya, South Africa or other countries are employed to fill the existing skills gaps.

The skills labour market mismatch is generally considered at a macro level in terms of the shortage of available staff in certain professions or industries, such as education, business, finance, ICT, and similar Sciences. Often missing from this dialogue is the potential micro-level skills-gap, which relates to whether employees and recruits have the right mix of competences for today's workplace (Owusu et al., 2014). In a globalised economy, workplaces are not only shaped by changes in the socio-economic development of a specific country but also through the integration of places into global value chains<sup>3</sup>. Education, at various scales, needs to effectively respond to these changes. It is in light of these dynamics that the discourse on competence-based curricula has taken shape. These are said to have potential to link the theories with practices, thus meeting the demand for qualified labour: "To produce graduates with the appropriate skills and ways of thinking, they will have to change the way they see, design and assess learning" (Trudeau and Omu 2017). This paper explores and documents the causes of the mismatch between knowledge and skills acquired and the tasks required to be undertaken. This study explores the factors that shape the development of curricula that correspond to the demands of the Tanzanian labour market.

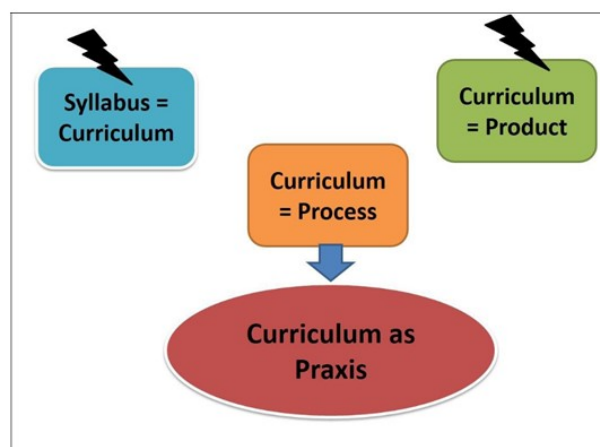
## **2. Theoretical and Conceptual Framework: Curriculum Development Theory**

There are multiplicities of curriculum theories (Gibbons, 2002; Leydesdorff, 2005, Swanson, 2001), some very explicit, some implicit, all with their disciples. A curriculum can be understood as a mere technical artifact of knowledge – a syllabus. This can be contrasted from theories that treat a curriculum. Another way of looking at curriculum theory and practice is via the notion of process. In this view, curriculum development and implementation is an interactive process that involves feedback loops between the teaching situation and the stage of developing the curriculum. Stenhouse (1975) produced one of the best-known explorations of a process model of curriculum theory and practice. He defined curriculum tentatively: "A curriculum is an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice". This does not mean that the curriculum as such is the process. The term rather shifts focus to the means by which the experience of attempting to put an educational proposal into practice is made available (Smith 2000).

The curriculum as praxis perspective, the one favored in this report, can be considered a

development of the process model. It builds on a critical pedagogy that takes the experiences of both the learner and the teacher seriously and, through dialogue and negotiation, recognises them both as potentially problematic. In the words of one of the approach's leading proponent, "the curriculum is not simply a set of plans to be implemented, but rather is constituted through an active process in which planning, acting and evaluating are all reciprocally related and integrated into the process" (Grundy 1987: 115). From this perspective, curriculum development cannot and should not be just equated with having or producing a syllabus. Rather, it is a social process that is grounded in concrete practices situated within the concrete cultural and social milieu of a particular university. More specifically, a curriculum as praxis perspective suggests that curriculum development is not a one-off exercise and that it is not a mere technical process, but a social process. It is interactive, even though there are different kinds of interactions possible leading to different implications for knowledge and skills transfer and/or acquisition. At best, curriculum development has a visionary, productive, implementation, reflective, evaluative, and reproductive (revision of curriculum) dimension, even though it cannot be assumed that all these dimensions play out well during the praxis of curriculum development. Importantly, a curriculum as praxis perspective suggests that the implementation (including teaching strategies) and evaluation of curricula are part and parcel of curriculum development. For instance, one could encounter a curriculum that is nicely tailored to many demands of employers, but the teaching strategy at the university does not nurture generic skills such as autonomous working skills, creativity, or problem-orientation. The best curriculum cannot do much if it is taught in a particular way.

<sup>3</sup> <http://www.oecd.org/edu/oecd-skills-outlook-2017-9789264273351-en.htm>



**Figure 1:** Theoretical framework as modified from Smith (2000).

### 3. Methodology

The study applied a cross-sectional design to capture fully the context, processes, and practices in which curricula is developed in Tanzanian universities. This design is appropriate in comparing different study groups (e.g. public and private universities) at a single point in time (a snapshot). Equally important was the nature of the study, because it did not require the researcher to study changes over time.

The use of a mixed approach was critical in this study because the study demanded both qualitative and quantitative information. Mixed methods research is a methodology for conducting research that involves collecting, analysing, and integrating quantitative methods such as surveys and qualitative methods such as focus groups and interviews. This approach to research was favoured because this integration provided a better understanding of the research problem than either of each method alone. By using a mixed approach the two designs complemented each other (Mayring, 2007) and helped to reduce the limitations associated with quantitative or qualitative research, bearing in mind that every method has its limitations and that if not addressed, the limitations could have reduced the quality of the information gathered. This study was conducted in Dar-es-salaam, Mwanza, Arusha, and Dodoma regions. The four administrative regions were selected for study because they possessed a reputation of having many employers and universities with diverse ownership and disciplines; they are regions with a good mix of both private and public-oriented employers.

The sampling population involved all employers, graduates, and universities in the selected regions. Individual employers, graduates, and universities were study units. In this study, 160 graduates and 21 employers were sampled. This sample size was conveniently determined. Firstly, four regions were selected purposively based on the number of employers available in the regions. From each of the selected regions, two districts were chosen purposively based on the number of employers present in the district. From each of the sampled districts, four categories of employers (see Table 1) were selected and five graduates sampled from each employer.

**Table 1: Category of Employers Sampled**

| Employer                                       | Category of Employer |         |                    |     |
|------------------------------------------------|----------------------|---------|--------------------|-----|
|                                                | Government           | Private | Government-Private | NGO |
| Kenya Commercial Bank - Samora Avenue          |                      | X       |                    |     |
| Bakhresa Group of Companies Ltd                |                      | X       |                    |     |
| Tanzania Gender Network Programme              |                      |         |                    | X   |
| Morogoro District Council                      | X                    |         |                    |     |
| Tanzania Breweries Ltd                         |                      |         | X                  |     |
| World Vision Tanzania                          |                      |         |                    | X   |
| Arusha City Council                            | X                    |         |                    |     |
| CRDB Bank Plc                                  |                      |         | X                  |     |
| Tanganyika Arms Co. Ltd                        | X                    |         |                    |     |
| Tanzania Electricity Supply Company            | X                    |         |                    |     |
| Tanzania Cotton Board                          | X                    |         |                    |     |
| Local Government Authorities Pension Fund      | X                    |         |                    |     |
| Regional Administrative Secretariat – Morogoro | X                    |         |                    |     |
| Ilemela Municipal Council                      | X                    |         |                    |     |
| SNV (Netherlands Development Organisation)     |                      |         |                    | X   |
| Tanzania National Social Security Fund         | X                    |         |                    |     |
| Tanzania Posts Corporation                     | X                    |         |                    |     |
| Standard Chartered Bank                        |                      | X       |                    |     |
| Childreach Tanzania                            |                      |         |                    | X   |
| Meru District Council                          | X                    |         |                    |     |

In practice, employers were identified first, and graduates employed in the respective organisation interviewed before universities were consulted. Therefore, the names of universities to be included in this study were known only after graduates had been interviewed. Graduates were asked to name the universities where they studied for their first degree, information which the research team used to trace back the institutions and interview officials responsible for curriculum development and where possible deans of faculties of the responsible programmes. Purposive sampling was applied in selecting university graduates, regions, and districts. The sampling of graduates took into consideration their disciplines and included social sciences and humanities (SSH). Cluster sampling technique was used to select employers and universities, which were arranged into two clusters, namely the public and private. The sampling procedure is detailed in Fig.2.

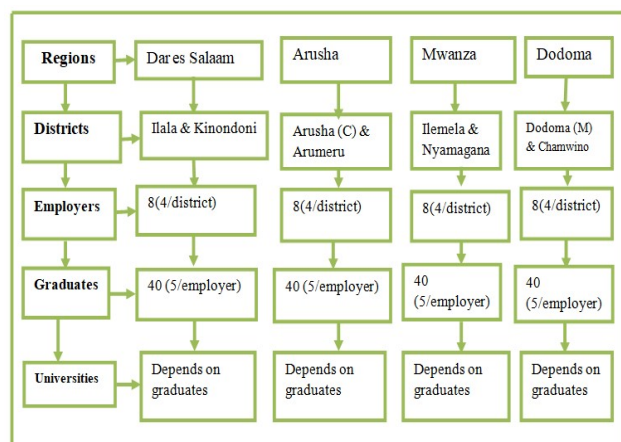


Figure 2: Sampling procedures

The Survey was the main techniques of data gathering. It was intended especially to be used on gathering quantitative data related to approaches to and determinants of curricula development. This technique was complemented by two other methods, namely the key informants' interviews and the documentary review. Key Informants interviews were used to gather qualitative information on approaches to and determinants of curricula development, policies, regulations, guidelines, frameworks as well as quality control mechanisms. The documentary review was used to examine existing universities' curricula, higher education policy, universities' Act, guidelines of TCU and regulatory bodies in other countries, existing curricula of universities in other countries,. Tanzanian universities sampled are listed in Table 2.

Table 2: Ownership Status of Universities Sampled

| University                                          | Ownership Status |         |
|-----------------------------------------------------|------------------|---------|
|                                                     | Government       | Private |
| St. Augustine University of Tanzania                |                  | X       |
| Open University of Tanzania                         | X                |         |
| Kampala International University College (KIUC)     |                  | X       |
| College of Business Education (CBE) - Dar Es Salaam | X                |         |
| University of Dar Es Salaam                         | X                |         |
| Mzumbe University (MU)                              | X                |         |
| Moshi Co-operative University (MoCU)                | X                |         |
| Stephano Moshi Memorial University (SMMUCo)         |                  | X       |
| Makumira University                                 |                  | X       |

During the survey, a semi-structured questionnaire was used. The questionnaire was used to capture the number of students enrolled, the number of graduates for the past five years, and approaches to and determinants of curricula development. An interview guide was also employed to collect qualitative information on approaches to and determinants of curricula development, policies, regulations, guidelines, frameworks, and quality control mechanisms. A checklist for documentary review was applied to assess the type of curricula, year developed, content, strengths, and

The qualitative information collected using interviews and documentary reviews was analysed using Content Analysis specifically to determine approaches, contents, strengths and weaknesses of the existing curricula. Quantitative data were analysed using descriptive statistics and inferential statistics such as factor analysis. Descriptive analysis was applied to determine the profile of the universities, students' enrolled, graduates, and types of curricula while factor analysis was used to determine factors that influence the design of market-responsive curricula.

## 4. Results and Discussion

### 4.1 Socio-demographic Characteristics of Interviewed Graduates

Most of the graduates ranged between 31 to 40 years followed by 20 to 30 years indicating that they are employed in their youth age (Table 1). The fact that this study managed to get many graduates who were aged between 31 and 40 years old, suggests that most of them may have been exposed to competence-based curricula. It is important to note that the surveyed universities indicated that, the transformation from knowledge to competence-based programmes started in the early 2000s and is still continuing. Since the interviewed graduates included both those who were exposed to knowledge and competence-based programmes, it is believed that the sampled graduates constituted an appropriate cohort for the study.

Table 1: Age Group of graduates (n=135)

| Age group    | Frequency  | Percent    |
|--------------|------------|------------|
| 20-30        | 44         | 33         |
| 31-40        | 60         | 44         |
| 41-50        | 21         | 16         |
| 50 >         | 10         | 7          |
| <b>Total</b> | <b>135</b> | <b>100</b> |

Qualifications of the graduates interviewed are presented in Table 2. Most of the graduates had only first degree (61%) followed by those with master degrees (18%) and professional qualifications (9%). From the findings, it can be deduced that undergraduates who felt their studies could not meet the skills required opted to undergo further studies. However, those who went for further studies accounted for almost 32% of the respondents, implying that most graduates may have been satisfied with the skills acquired.

Table 2: Qualification of graduates (n=?)

| Qualification                | Frequency | Percent      |
|------------------------------|-----------|--------------|
| Bachelor                     | 129       | 61.1         |
| Non-Professional Certificate | 1         | 0.5          |
| Diploma                      | 14        | 6.6          |
| Professional qualifications  | 18        | 8.5          |
| Postgraduate diploma         | 12        | 5.7          |
| Master degree                | 37        | 17.5         |
| <b>Total</b>                 |           | <b>100.0</b> |

Graduates' work experience is presented in Table 3, where most of them had an experience of 1-5 years (48%) and 6-10 years (29%) respectively. Graduates with one to five years'

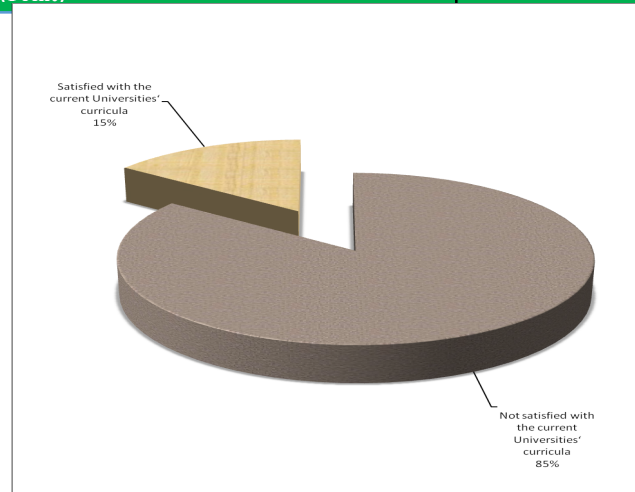
experience are presumed to be able to compare knowledge and skills acquired at the university and those required to perform their functions. Higher experiences (six years and above) may have acquired necessary skills through practice and therefore may not see the gap.

**Table 3: Graduates' Work Experience (n=135)**

| Experience   | Frequency  | Percent      |
|--------------|------------|--------------|
| 1-5          | 65         | 48.1         |
| 6-10         | 39         | 28.9         |
| 11-15        | 10         | 7.4          |
| 16-20        | 11         | 8.1          |
| 21 >         | 10         | 7.4          |
| <b>Total</b> | <b>135</b> | <b>100.0</b> |

#### 4.2 The nature of the curriculum-skills gap in the Tanzanian labour market

There is a general perception among Tanzanians that the quality of education generally and higher education specifically is low, that there is a huge gap between what is being taught at the university and what the labour market wants, that many graduates do not perform as expected. It is often argued that the gap is mainly manifested in terms of increased graduate unemployment and is caused by several factors, which includes a transition from state-owned and managed higher education to liberal/free market economy where government and private organisations were allowed to establish higher education institutions, resulting in the mushrooming of the higher education institutions in the country and the increased enrolment rate among higher education institutions (Rovira, Canals and Villar, 2010). The mushrooming of the higher education institutions has also resulted into an increased competition (in terms of increased enrolment rate and development of curricula) among the higher learning institutions hence, compromising the quality of higher education in the country. It is not surprising that the findings of this study indicated that most graduates interviewed were not satisfied with the current curricula as shown in Figure 3. This may be due to the fact that graduates have the perception that universities as higher learning institutions are required to offer all the skills that are required by the labour market.



**Figure 3: Perception of graduates on the curriculum development process**

In Table 4, 53 percent of the graduates were not satisfied with the curricula because it is too much theory-oriented, followed by 33.3% who observed that too many courses are taught at a short time. This may reflect that universities are not using problem-based learning approaches that take into consideration the ever-changing dynamics of the labour market caused by socio-economic conditions.

**Table 4: Reasons for graduates not been satisfied with curricula**

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| Reasons for not been satisfied          | Percentage |
|-----------------------------------------|------------|
| Theory oriented curricula               | 53.4       |
| Too many courses taught in a short time | 33.3       |
| Lack of learning facilities             | 13.3       |
| <b>Total</b>                            | <b>100</b> |

Most of the graduates indicated the need for practical training (53.8%), which may imply field training and the teaching of problem-solving techniques in the classroom. This reveals that the existing curricula are not demand-driven, or it may be taught in a way that does not equip students with important practical skills such as creativity or autonomous problem-solving capacities. Furthermore, it also reveals that the still overwhelming outcome-based approach currently used in developing curricula needs a critical assessment. Even though some employees are considered competent at their respective workplaces, they still lack appropriate skills that could have enabled them to perform better and compete effectively in the labour market. More details are presented in Table 5.



**Table 5: Critical factors to be considered in curriculum development**

| Critical issues                               | Percentage |
|-----------------------------------------------|------------|
| Consider employers' qualification requirement | 27.0       |
| Reduce the number of irrelevant courses       | 19.2       |
| Practical training                            | 53.8       |
| <b>Total</b>                                  | <b>100</b> |

The graduates were requested to indicate other issues to be considered in curriculum development as shown in Table 6. Most of them (30%) indicated the need for demand- driven curricula followed by consideration of the labour market (26%). This indicates the need for a student cum labour market-centered curriculum. In addition, this also implies that curriculum development must be regarded as a continuous process that will take into consideration changes in socio-economic development.

*Table 6: Other factors to be considered in curriculum development*

| Other Issues to be considered                        | Frequency | Percentage |
|------------------------------------------------------|-----------|------------|
| Demand-driven curricula                              | 59        | 30         |
| Consideration of labour market demand                | 51        | 26         |
| Participation of employers in curricular development | 22        | 11         |
| Stakeholders participation                           | 34        | 17         |
| Communication through group email of alumnae         | 1         | 1          |
| Entrepreneurship skills should be added              | 3         | 2          |
| Consider solving community problems                  | 12        | 6          |
| Enough time for fieldwork                            | 2         | 1          |
| Competence-based                                     | 15        | 8          |
| <b>Total</b>                                         |           | <b>100</b> |

The skills required by graduates from various institutions were categorized into four categories that include technical work-related skills, information communication technology, communication skills, and problem-solving skills as presented in Table 7. As indicated in Table 15, the issue of technical work-related skills, training on human resource management (18.5%) was leading followed by training in agriculture (10.8%). The issue of special training related to ICT (19.5%) was leading in the ICT category followed by special training on accounting packages (8.2%). In problem-solving category, most of the graduates required skills on community mobilization (7.3%), followed by operational skills (6.0%), while 11.6% of the respondents required communication skills. Probably these findings reflect that universities may not be able to review the curriculum continuously to cope with the changes in the labour market, despite their stated ambition to be competence-oriented. Also, maybe the universities cannot provide all the necessary skills required due to resource or teaching method constraints, and therefore the employer or the employee has a role to seek for additional skills.

**Table 7: Skills required by graduates**

| Category of skills required                        | Type of Skills Required                          | F          | %    |
|----------------------------------------------------|--------------------------------------------------|------------|------|
| <b>Technical work-related skills</b>               | Special training on communicable diseases        | 8          | 3.5  |
|                                                    | Training on human resources management           | 43         | 18.5 |
|                                                    | Special course in artificial insemination        | 2          | 0.9  |
|                                                    | Professional development training in Agriculture | 25         | 10.8 |
|                                                    | Monitoring and evaluation                        | 3          | 1.3  |
|                                                    | Risk Management in Banks                         | 3          | 1.3  |
|                                                    | Cooperative law                                  | 2          | 0.9  |
|                                                    | Agronomic skills                                 | 1          | 0.4  |
|                                                    | Special training on ICT                          | 45         | 19.5 |
|                                                    | Special Training on computer accounting packages | 19         | 8.2  |
| <b>Information Communication Technology</b>        | HR Information system                            | 1          | 0.4  |
|                                                    | GIS and remote sensing                           | 1          | 0.4  |
|                                                    | Communication skills                             | 27         | 11.6 |
| <b>Communication Skills Problem Solving Skills</b> | Community mobilisation and sensitization         | 17         | 7.3  |
|                                                    | Research skills                                  | 8          | 3.4  |
|                                                    | Operational skills                               | 14         | 6.0  |
|                                                    | Income-generating project skills                 | 1          | 0.4  |
|                                                    | Customer complaint handling                      | 6          | 2.6  |
| <b>Total</b>                                       |                                                  | <b>100</b> |      |

Skills required by employers to improve performance at workplace are categorized in Table 10. Most of the employers required additional technical skills on humanity related skills (48.6%), followed by skills in finance and economics (24.3%). Generally, it is revealed that there is a mismatch between curricula and professional skills required at workplace as shown in Tables 7 and 8. However, this mismatch raises several questions to be further investigated in the future, e.g. whether there a continuous process of consultation between employers and employees to discuss on the actual skills required at the workplace.

**Table 8: Skills required by employers**

| Skills                 | Type of skills                                                                                                | Frequency  | Percent % |
|------------------------|---------------------------------------------------------------------------------------------------------------|------------|-----------|
| Technical skills       | Humanities Law, Accounting, Finance, Marketing, Human Resource, IT                                            | 18         | 48.6      |
|                        | Finance and Economics Record Keeping, Microfinance, Portfolio Investment Management                           | 9          | 24.3      |
|                        | Science-related technical skills Chemical, Industrial and Civil Engineering, Gunsmith skills, Food processing | 6          | 16.3      |
| Problem-solving skills | Social and generic skills Research, advocacy, Consulting, Gender, Sociology, Community Development            | 4          | 10.8      |
| <b>Total</b>           |                                                                                                               | <b>100</b> |           |

This disparity raises concerns on the need to investigate the process and practices of curriculum development in Tanzanian Universities. The team took a closer look at how the globally promoted shift to a competence-based curriculum, as reflected in the visions of the Tanzanian Universities, to which we traced back our graduate interviewees. This allowed the research team to compare the experiences, expectations, and perceptions of the graduates with the views of the staff involved in curriculum development at the respective universities.



*The transformation from knowledge to competence-based curricula in Tanzanian universities*

Tanzanian universities were established to enhance knowledge acquisition and production of graduates suitable for white-collar jobs. Skills development was not a priority. As of late, however, labour market requirements have increased the demand for competency-based programmes. As a result, universities are anticipated to provide education whose objective includes development, processing, storage, and dissemination of knowledge for the benefit of humanity and the harnessing of knowledge for the production of usable goods and services (The Universities Act, 2005). In this context, universities in Tanzania express their objects as “advancement of knowledge, wisdom, and understanding through research, extension services and consultancy” (The Sokoine University of Agriculture Charter, 2007: 10). They do also express their role in influencing the corporate life and the community (Sokoine University Charter, 2007, Moshi Cooperative University Charter, 2014 and St. Augustine University Charter, 2010). However, universities’ objectives suggest that shaping the world of corporate firms, social organizations, and communities cannot be executed through knowledge-based curricula alone. They often espouse a shift to competence-based curricula.

Relating to the arguments provided in section 2, it can be stated that the shift from knowledge to competence-based curricula may be a challenge to some universities because competence and knowledge do have few similarities.

Incorporating these insights into its study design, the survey conducted has revealed that Universities in Tanzania develop curricula for specific purposes based on their philosophy and goals. Curricula developed and executed could be pure knowledge or competence or a combination of both. Since the university goals are key directives in the design of curricula it was important to understand the goals of curricula designed. Findings show that all universities have almost similar goals even if they expressed differently. Similarities were recorded with regard to the following aspects:

- (i) The need to meet labour market needs;
- (ii) Creation of experts suitable to participate in the shaping of national and global challenges such as globalization, information and communication changes, shifting market demands and knowledge-based economy needs which require new and skills unrelated to current demands; and
- (iii) Meeting national requirements in specific academic and professional fields, including adhering to academic programmes quality standards and institutional benchmarks.

The need to meet the labour markets though expressed by all universities is based on the institutions’ desire to continue to be relevant in the market. Focus group discussions excerpts from five universities/higher learning are cited below:

- (i) Mzumbe University asserts that “there is stiff competition from both public as well as private universities, and to be able to compete we have to develop programmes which produce graduates who can add value to organizations”.

- (ii) Moshi Cooperative University (MoCU) intends “to create competent personnel and thinkers who can meet employers’ expectations”.
- (iii) Stefano Moshi Memorial University College (SIMMUCO)’s “goals in the curriculum development process are to prepare demand-driven curriculum that can suffice required qualities in the existing labour market”
- (iv) St. Augustine University of Tanzania (SAUT)’s “curriculum development goals are guided by the University vision, mission, and goals. Apart from the vision and mission, the university is guided requirement of its stakeholders in particular students and employers. Parents/guardians, as well as bodies that regulate some professions, have to have their interest taken aboard in curricular development”
- (v) College of Business Studies (CBE): “The college goals in the curriculum development are to train highly competent and practice-oriented professionals in Business Administration, Accountancy, Marketing, Procurement and Supply, ICT, Legal and Industrial Metrology and related fields”

Evidently from discussions held in the five institutions confirm that most higher learning institutions in the country aspire to meet labour market requirements. It was also noted that not all universities subscribe to this main analogy directly as some do not have explicit curricula goals even though their explanations, visions, and missions have an implicit agreement with the attainment of labour market personnel needs. Findings show that two major universities in the country, the University of Dar-es-Salaam (UD) and the Open University of Tanzania (OUT), do not have explicit curricula goals.

The University of Dar-es-Salaam appears to have a general outlook, which targets the curriculum development process rather than individual programs. The University’s curriculum development process is to, “ensure wide participation of internal and external stakeholders, compliance with Government policies, laws, and other directives, compliance with internal University policies and procedures, development of relevant programs and involvement of experts”. This might be construed differently by different parties involved in the curricula development process. However, the wide participation and relevance of programs may also imply the adoption of market-oriented courses, which entail compliance with labour market requirements. The University of Dar-es-salaam does also consider its programmes to be vehicles for enabling graduates to reach the pinnacle of their profession: “Our programmes will enable you to rise to the top of your chosen profession”<sup>4</sup>. Similar findings were noted with the Open University of Tanzania.

The Open University of Tanzania (OUT) does not have specific curricula goals. Discussions held to show that it does not have “explicitly defined goals in so far as the curriculum development process is concerned”. In essence, this does not mean OUT is not subscribing to the labour market

1) <sup>4</sup> Cited from [University of Dar es Salaam](https://www.udsm.ac.tz/) visited on 8<sup>th</sup> March, 2018



requirements. One of its functions, as elucidated in its strategic plan, is to, “promote the educational wellbeing of the Tanzania community by offering demand-driven courses”<sup>5</sup>. Thus, the OUT and UD expressions, even though somewhat dissimilar to other universities, do want to respond to labour market requirements. Being labour market-sensitive has, however, to be supported by labour market responsive curricular.

Universities’ overwhelming expression of their inclination to meet market requirements has to be discussed in the context of the current curricula. Programs extended by all eight universities involved in this study have contents, which capture both knowledge and competence. The universities could not express the weight of knowledge or competence. Clear demarcation between knowledge and skill acquisition is not explicit. Graduates are thus expected to have a high understanding of subject matter relevant to the areas studied as well as have skills pertinent to the profession taken. MoCU and Mzumbe University, for example, feel that their inclusion of field attachments strengthens the competence part of the study by linking theory and practice. This is the main concern of the classification of curricula to be either competence or knowledge-based. Lack of clear guidelines on courses that are pure competent or pure knowledge was noted to be the major challenge in universities around the world. UNESCO (2017) argued that lack of guidelines could lead to static and unstable curricula, thus making learners to learn past competences whose relevance has expired. Expiration of competences may indeed turn them into knowledge rather than enabling the learner to adapt to the current requirements<sup>6</sup>. All universities visited lacked specific guidelines for the development of competence-based curricula. This was also complicated by the time it takes to review curricula and the long process and amount of resources involved in curriculum development. While visions are on things; the real processes and praxis of social organization underpinning a specific phenomenon may be a different thing altogether. Both need to be situated into the concrete social milieu of the University, both as a place-based, locally embedded institution and as one embedded into a higher national system of education and culture of education.

## *The processes, practices, and milieus of curricula development at Tanzanian universities*

Most university staff we interviewed reported that their universities had a formal and clear process of curriculum development. The process starts at the department level and involves both the internal and external stakeholders, mainly identified by the head of department. During an interview, a head of the department from the Open University of Tanzania (OUT) had this opinion:

*“At OUT the curriculum development process is uniform across departments; they follow the same procedures with some minor variations depending on the nature of the field in question. Most of the*

*curriculum development work is done at the department level. The practice is for department members (and members from other departments whose courses will feature in the curriculum) to prepare the required content and submit it to the faculty board. The department may decide to consult stakeholders, but it is not a mandatory requirement. The proposed curriculum would then be submitted to the relevant faculty board, Senate, and finally the Tanzania Commission for Universities (TCU) for approval. Internally the participants in the process are departmental members, faculty members. University administrative officers (Vice Chancellor, Deputy Vice Chancellor etc.) participate at the Senate level.”*

The process at OUT does not differ with other universities involved in the study, who were aware of the importance of a Training Needs Assessment (TNA). A TNA is a process of gathering opinions from the stakeholders including present and potential employers and alumnae. It is a comprehensive analysis on stakeholders’ opinions. A TNA helps a university to develop plans to incorporate stakeholders’ comments. It is useful as well for the quality control process. Stakeholders’ involvement is a prerequisite of the TCU to monitor quality assurance and ensure that the curricula meet the demand of the labour market. However, due to competition, increased enrolment and increased costs in conducting TNA, not all universities do meet this requirement all the time. As a result, the skills of graduates may not meet match the demands of the employers. These findings are supported by the findings from the graduates we interviewed. Most of the graduates (80%) who graduated within the past 10 years reported that they have not been involved in the curriculum development process (Table 9).

Table 9: Participation in curriculum development

| Years since completed undergraduate studies | Percentage of responses                        |                                                   |
|---------------------------------------------|------------------------------------------------|---------------------------------------------------|
|                                             | Percentage of respondents who had participated | Percentage of respondents who did not participate |
| 1-5                                         | 42.1                                           | 30.0                                              |
| 6-10                                        | 7.9                                            | 50.0                                              |
| 11-15                                       | 13.2                                           | 10.0                                              |
| 16-20                                       | 10.5                                           | 3.3                                               |
| 21>                                         | 26.3                                           | 6.7                                               |
| Total                                       | 100                                            | 100                                               |

With regard to internal factors that influence curriculum development, it was further revealed that universities are constrained with funds, lack of adequate staff (with requisite capacities and qualifications) to deal with curriculum development and facilities. A head of department at Stephano Mushi Memorial University College (SMMUCo), a private University indicated that:

*“The process of curriculum development at the University is influenced by various factors; internal (increasing number of students, gaps established, source of funds and awareness and competence)”.*

The head of the department interviewed at the University of Dar-es-salaam, a public University, reported that:

*“Internal factors that influence the development of curricula are the University mandate and availability of staff and facilities”.*

<sup>5</sup> Cited from Open University of Tanzania <https://www.out.ac.tz/page.php?m=343> about OUT – University Functions visited on 8<sup>th</sup> March, 2018

<sup>6</sup> MmantsetsaMarope / Patrick Griffin / Carmel GallagherFuture Competences and the Future of Curriculum- A Global Reference for CurriculaTransformation at <https://en.unesco.org/.../future-competences-and-future-curriculum>



Another interviewee noted that lecturers, as well as students, should be prepared psychologically to master the shift to a competence-based curriculum as

*“might think being competence-based is to vocationalize the university and many may not want to see that happened. Awareness creation is needed to both lecturers, students and all stakeholders as competence-based may mean different things to different people”*

The view attested here by the interviewee to colleagues in the academic is consistent with authors such as Chachage (2006), Shivj (2006) or Mamdani (2007), who have warned us about the dangers of an uncritical shift towards market-based and market-oriented forms of higher education.

It is important to note that there are also external factors, which may influence the process of curriculum development in the country. The existing curriculum in universities bears the legacies of colonialism, and influence by client needs, donors, and international agencies as well. The changes that have been taking place globally, keeping pace with development and technological changes, also do shape curriculum over time. However, to harmonize and monitor the quality of curriculum developed, regulatory authorities on higher education (TCU and National Council for Technical Education-NACTE) have been established. Furthermore, professional bodies that are focused on specific disciplines such as accountancy, law, and procurement influence curriculum development. Interviewees from all the universities claimed that:

*“The development of curriculum has to meet the requirements of Tanzania Commission for Universities (TCU), National Council for Technical Education (NACTE and Professional Bodies such the National Board for Accountants and Auditors”.*

Universities are required to produce graduates, who will either be employed or self-employed in the dynamic technological driven labour market. The curriculum developed has to meet the needs of the labour market; otherwise, the enrolment rate will be affected adversely. An interviewee from Arusha University said that:

*“The development of the curriculum in our University is influenced by the demands of the labour market. Every time the market is changing its preferences therefore the University is required to keep pace with the changing environment”.*

Concerning graduates who participated in the curriculum development process, most of them indicated that they were involved through stakeholders' workshops (40.8%), training needs assessment (22.3%) and sharing through group email of graduates (13%). Table 10 presents the various methods that were identified by graduates to be used in curriculum development.

**Table 10: Methods in which graduates participated in curriculum development**

| Participation methods          | Frequency | Percentage of responses (%) |
|--------------------------------|-----------|-----------------------------|
| Forums in social media         | 1         | 8.0                         |
| Stakeholders workshop          | 9         | 40.8                        |
| Tracer study                   | 3         | 8.4                         |
| Formal Training needs          | 5         | 22.3                        |
| Sharing during convocation     | 1         | 7.6                         |
| Sharing through group email of | 2         | 13.0                        |
| <b>Total</b>                   | <b>2</b>  | <b>100</b>                  |

Graduates opinions did not differ much with that of employers as presented in Table 11. This could mean that universities in Tanzania are still relying on conventional methods (which are expensive, do not cover a large population and do not offer continuous feedback, hence not sustainable) to gather stakeholders' opinion.

**Table 11: Ways in which employers participate in curricula development**

| Participation methods   | Frequency | Percentage of responses (%) |
|-------------------------|-----------|-----------------------------|
| Stakeholders workshop   | 17        | 71.8                        |
| Formal Training needs   | 17        | 30.9                        |
| Tracer study            | 11        | 20.0                        |
| Career day for students | 7         | 12.7                        |
| University employer     | 2         | 10.9                        |
| Business incubators     | 6         | 3.6                         |
| <b>Total</b>            | <b>55</b> | <b>100</b>                  |

### *Challenges in Developing Competence Based Curricula in Tanzania*

Literature on competence inculcation unto a student does show that approaches to recognition of competences are varied. According to Prifti *et al.* (2017), three main approaches have been in use by researchers in the field. The approaches are: behavioral approach, functional approach and the holistic approach. The behavioral approach recognizes personal traits to competence; the functional approach is more focused on capacity or skills required to accomplish a task and the holistic approach put emphasis on individual and institutional requirements for a specific activity (Prifti *et al.*, 2017). The varied approaches pose the critical challenge to adoption of competence based for universities that had philosophized themselves as knowledge extenders. This study compiled challenges that were identified through group discussions held in the eight universities. The challenges mentioned included the following:

- (i) Cost of developing a curriculum;
- (ii) Competent personnel: In most universities, development of programmes requires internal expertise. All universities expressed limited expertise in the development of competence based curricula;
- (iii) Frequent market transformation and changes in technology and different professions and the need to strike a balance amongst the many priorities that the universities have – for example preserving existing knowledge and developing new ones, meeting community expectations, university mission and clients' expectations. Universities felt that it is not possible for them to always keep pace with the dynamics in the labour market;
- (iv) Policy and legal changes: TCU qualification framework, National Board of Accountants and Auditors (NBAA), Tanzania Institute of Bankers (TIOB), Procurement and Supplies Professionals and Technicians Board (PSPTB);
- (v) The decision-making processes at universities. Universities' decision making processes for curricula development and review requires that the processes are initiated at the departmental level and then channelled through decision making bodies in particular faculty/school/college and then the Senate



for approval before submission to the Tanzania Commission for Universities. Respondents were of the view that the long trek introduces new areas and drops some aspects, which were deemed necessary at lower stages. It does as well imply that some issues in the curricula may be obsolete even before the curricula are implemented;

- (vi) Infrastructural challenges: most universities lack learning infrastructure conducive to competence learning;
- (vii) Internal policies and focus-visions and goals that do not explicitly favour competence based curricula; and
- (viii) Academic staff inclination to knowledge instead of competence teaching methodology. This is most universities call for re-training and recruiting.

The findings show that even if all of the eight universities involved in the study “own” their curricula, universities have different views on ownership of the curricula. Universities are sole owners through departments, faculties/institutes/colleges and the senate. One university – Stefano Mushi Memorial University College (SMMUCO) – had the additional and unique answer that it feels despite the ownership to be seemingly in hands of universities, the Tanzania Commission for Universities (TCU) does “de facto” own the programmes in totality, probably reflecting the strong centralization of the Tanzanian state bureaucracy – a relic from the state socialist period. SIMMUCO’s assertion is based on the process that requires universities to have their curricula vetted and evaluated and finally approved by TCU rendering university Senates virtually toothless!

Ownership was also discussed by universities in the context of its significance in shaping the curricula structure, content, and delivery. All eight universities had similar views that curricula owners can review it as and when they deem fit. St. Augustine University’s quality assurance staff had a view that ownership enables curricula linkage to market, thus, the university departments have the capacity to link programmes to the markets. In response to whether curricula ownership is linked to the labour market, the staff had this to say:

*“Yes it is! As a university, we believe the department is the most suited focal point for curricula, as they (departments) are manned by staff with specializations demanded by the programme. We feel this way the linkage with the market can be easy”*

Ownership remains a sticky point in accepting changes from the market. In the face of the current practices, it means the labour market has no direct influence on the curricula unless departments seek their views. Curricula development processes are critical avenues for the inclusion of their views.

Curricula development processes in Tanzanian universities are in all cases determined and prescribed by individual universities. The TCU is mandated to authorise a programme before it is finally offered and executed. TCU in 2017 issued a Curriculum Framework, which spells amongst others the manner for which a curriculum would be developed, format and learning environment supporting it. One of the key ingredients prescribed by TCU in the framework requires a university to provide a rationale for a programme developed.

The justification would cover amongst others, survey of the market needs, analysis of the demand gap and stakeholders’ participation and consultation. Universities surveyed expressed their own processes that show adherence to the TCU requirement and internal goals, visions and philosophy.

The universities however expressed challenges in development of programmes due to costs involved. In some cases, they feel the internal processes capture labour market requirements particularly when the external evaluation processes involve professional bodies such as the National Board of Accountants and Auditors (NBAA), the Tanzania Law Society (TLS), the Tanzania Institute of Bankers (TIOB) and the Procurement and Supplies Professionals and Technicians Board (PSPTB). Limited involvement of stakeholders is specifically significant for acceptability and inclusion of market requirements. Some of the curricula might thus not be market responsive. Furthermore, universities were required to express their description of a market responsive curriculum. All eight universities involved in the study had a similar view that:

*“a market responsive curriculum is demand driven and that it is developed through participation of stakeholders and final consumers of university graduates”.*

Challenges identified in the study are not unique to Tanzanian universities. Chacko (2014) for instance identified challenges to include benchmarking of assessment for competence based programs, resources to develop and execute the programs, infrastructural development, philosophical and methodological changes encompassing both teacher/lecturer and student/learner practices and attitude.

## 5. Conclusion and Recommendations

This paper examined how the globally promoted shift from a knowledge to a competence-based curriculum articulates itself in the context of Tanzania. First the paper unpacked how employers and graduates assess the skills and competences the latter have acquired at universities, and established that many graduates still perceive higher education to be too theory oriented, with too little practical experiences or labour market focused competences being conveyed. This can be contrasted with the official script that many universities promote, which suggests that the country’s higher education institutions are part of the ‘competence revolution’. A closer view at the processes, practices and milieus of curriculum development at Tanzanian universities, however, reveals that resource constraints, insufficient competency among staff, bureaucratic decision-making processes involving the approval of new curricula, limited infrastructure, the lack of ownership of curricula development, long established routines grounded in knowledge instead of competence oriented teaching methodologies, little interaction with employers, poor implementation of various decisions at the university level and a general lack of philosophy are the main barriers towards developing of curricula that respond to the practical needs of the Tanzanian economy.

It is recommended that if a competence-based curriculum is to be developed and implemented among Tanzanian Universities these barriers need to be solved. Governments



and educationists in Tanzania should ask themselves how the education landscape should look like, and how a competence-based model could be promoted in a contextualized, locally adapted manner. This would also include serious attempts to decolonize higher education in order to provide local solutions to local problems, reflecting the specific needs that societies such as Tanzania encounter.

#### Acknowledgments:

We acknowledge financial support from the Council for the Development of Social Science Research in Africa (CODESRIA). We also acknowledge the Management of the Moshi Cooperative University for their kind support, the employers we interviewed, graduates and their respective university managements for providing us the information we required for this study.

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