GRADUATE EMPLOYABILITY IN BOTSWANA: CHALLENGES AND PROSPECTS

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Abstract

Concerns from employers that tertiary institutions fail to provide graduates with necessary skills have recently become a dominant issue particularly in developing economies. Although literature on the subject of employability and market competitiveness of graduates is abundant and continues to grow, particularly in developed or large European or Asian economies, scholarly works on emerging African economies in general and Botswana in particular remain scarce. This paper examines the challenges and dynamics of graduate unemployability in Botswana. It utilizes the Yorke and Knight (2003)'s USEM model of employability, which consists of four interrelated components: understanding, skills, efficacy beliefs and meta-cognition. Both qualitative and quantitative data were collected using Explanatory Sequential Mixed 'Methods' design. The paper argues that while factors influencing employability of youth particularly university graduates, were mainly structural and institutional, lack of practical skills and mismatch between degree programme content and job requirements led the list. There is not enough demand for knowledge and technology intensive jobs sufficient to absorb graduates from local institutions in Botswana. To enhance work-preparedness and job competencies, work-based learning and entrepreneurial education need to be integrated into the curriculum. University-industry interface that reflects knowledge-intensive collaborations need to be promoted to enhance employability.

1.0 Introduction

Concerns from employers that tertiary institutions failed to provide graduates with necessary skills have recently become a dominant issue particularly in developing economies. Although literature on the subject of employability and market competitiveness of graduates is abundant and continues to grow, it overly focuses on patterns and outcomes in developed or large European or Asian economies. The 2008 Tertiary Education Policy in Botswana points out that "Botswana's tertiary education system has a key responsibility for meeting the needs of an increasingly market-driven, diversified, globalised knowledge-based economy and this is where the pressures of growth and change are already being experienced"

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(Government of Botswana, 2008: 6). At the heart of this powerful statement is the question of employability among college graduates. According to Ndung'u (2014), the education programme in Botswana has been criticized as weak in terms of being 'less relevant for the labour market'. The Botswana National Development Plan (NDP10) identifies the challenge of training high quality graduates with skills relevant to the country's economic and social development and ability to compete in global labour markets.

Previous tracer studies in Botswana include one by Ama (2007) who surveyed the opinions of graduates from the Faculty of Social Sciences, University of Botswana on their job post-graduation experiences. This study established that "over 70% of the graduates found themselves in jobs that matched their level of education" (ibid, 2007: 273). Similar studies by the Department of Vocational Education and Training (DVET) and the Botswana Training Authority (BOTA in 2007 and 2010 respectively, concluded that nearly 50% of the graduate respondents are still unemployed or economically inactive, due to a mismatch between supply and demand (cited in Bolaane et al. 2010: 9). While these studies contributed to the understanding of graduates and employment, clearly they focus more on employability in the sense of "obtaining a job". What is lacking is a specific focus on the capability of graduates in tackling graduate jobs. Using University of Botswana (UB) and Boitekanelo College graduates as a case example, this study looks closely at the two related conceptions of employability, namely, the capability of handling graduate jobs and the opportunity to obtain a job. Unlike elsewhere in the world particularly in emerging economies such as Malaysia, where responsibility of employability of graduates is one of the key performance indicators of higher institutions (Bakar et al. 2013), in Botswana the responsibility lies with the graduate and government.

More generally, the main purpose of this paper is to examine the challenges and patterns of (un)employability of college and university graduates in Botswana. More specifically, it seeks to establish the factors influencing employability of graduates, job competency and competitiveness, assess graduate preparation or 'work-readiness' programmes, explore patterns of employability, and provide recommendations for the promotion of employability in Botswana.

2.0 Theoretical Framework

In the past few decades, employability has emerged as a strong theoretical concept to understand the link between higher education and the world of work. Knight and Yorke (2003) provide two conceptions of employability. The first conception views employability in relation to chances of obtaining and maintaining a job. Using this view, surveys often are interested in finding out the extent to which graduates secure a job after their graduation. The use of this conception can be seen in the way employability is defined as a person's capability for gaining and maintaining employment (Hillage & Pollard, 1998) or "relative chances of getting and maintaining different kinds of employment" (Brown & Hesketh, 2004: 25). Employability is about being capable of getting and keeping fulfilling work. More comprehensively employability is the capability to move self-sufficiently within the labour market to realise potential through sustainable employment (Hillage & Pollard, 1998: 2). This view generally classifies job seekers in two categories: winners for those who are able to get a job and losers for those who fail to secure a job. The second conception is deeper and more complex because it is educational. The educational conception views employability in terms of the capacity of a graduate to function in a job. One's capacity to function in a job enhances one's chances to maintain the job. Consequently, Yorke and Knight (2006: 5) define employability as "a set of achievements – skills, understandings and personal attributes – that make

graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy". In line with the human capital theory education increase individual's productivity by availing marketable skills and abilities relevant to the job performance. Thus 'employability' should refer 'to a graduate's achievements and his /her potential to obtain a graduate job and should not be confused with the actual acquisition of a graduate job' (ibid: .2).

While we recognize the multiplicity of other employability frameworks or models in both scholarship and practice, for the purposes of this paper, Yorke and Knight (2003) USEM account of employability lays the primary basis of the analysis. This model consists of four interrelated components: understanding, skills, efficacy beliefs and meta-cognition. The understanding component refers how a graduate masters a specific subject study. Skills component refers to the practical experience a graduate has based on the understanding of a specific subject area. The aspect of belief about the self leads to formation of efficacy beliefs. This includes the personal commitment to achieve the learning goals. Meta-cognition includes elements of "learning how to learn". Normally meta-cognition is described as a capacity of self-regulation. Employability was seen as being influenced by these four broad and interrelated components. These components form a basis for analyzing various employability dimensions. The relationships among these components can be seen in the following figure (Fig. 1):

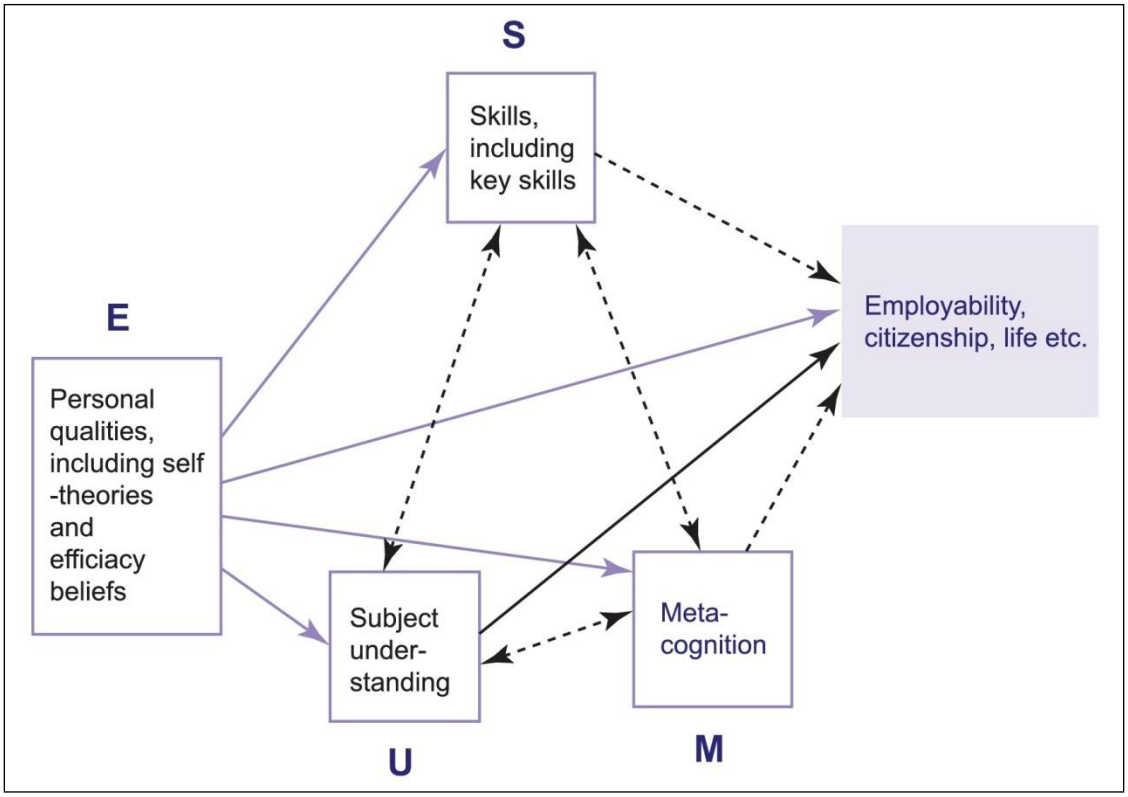


Fig. The USEM model (Yorke and Knight 2003)

While the USEM model provides an analytical tool to understand the capability of a graduate to function in a job, the question of skill mismatch often becomes a challenge as far as labour force is

concerned. However, one of its weaknesses is its lack of simplicity and clarity for non-expert audiences such as students and parents (Sumanasiri et al. 2015) and failure to recognize employability as an interactive behavior' (Forrier & Sels, 2003).

Recognizing that no single perspective can sufficiently explain complex phenomena such as employability, the study incorporates Holmes' (2013) '3P' constructs of employability; '*possessional', 'positioning' and 'processual'* to complement the USEM model. Graduate employability as a *possession* is a dominant approach that assumes that graduate skills and attributes are capable of being possessed and used. The *social positioning* approach may provide a better explanation to the patterns and outcomes of unemployability. Some employers also tend to select graduates basing on a hierarchy of universities. Thus notions of graduate employability relates strongly to issues of social positioning and societal reproduction. Graduates tended to experience some form of systemic exclusion from potential employers. Lastly the *processual* approach considers employability not as an end state but part of the whole system of creating an employable graduate. According to Knight and Yorke (2003) learning and employability appear to be highly related and complementary constructs. This is also reinforced by other models such as the 'course provision' model (Bennett et al. 1999), the *CareeEdge* or 'Key' to employability framework (Pool & Sewell 2007), the 'Learning and Employability framework' and Pellegrino and Hilton's (2012) 21st Century Skills framework.

3.0 Methodology

This study adopted the *Explanatory Sequential Mixed 'Methods'* design. Data collection methods were primarily structured survey questionnaires and telephone interviews, followed by focus group discussions to provide further detail to the survey responses. The survey questionnaires were pre-tested in a pilot study conducted on 5 November 2014 at the University of Botswana. The quantitative results typically informed the types of participants to be purposefully selected for the qualitative phase (Creswell, 2014). A questionnaire was designed based on employability descriptors as reflected in the USEM model suggested by Knight and Forke (2006). For the first method (survey of students), participants were selected randomly from the current student database of the University of Botswana, and Boitekanelo College using the formula proposed by Yamane (1967); $n = \frac{N}{1+N(e)^2}$. A total of 197 students responded to the questionnaire, with 67.5 % from UB and 32.5% from Boitekanelo College. For the second method, the telephone interview of graduates, the sample was distributed as follows; 91 (54.5%) from UB and 76 (45.5%) Boitekanelo College, comprising a total of 66 (39.5%) males and 101 (60.5%) females. Due to unavailability of data base of graduates, participants for telephone interviews were selected using the Respondent-driven sampling (RDS) technique. This is similar to peer or chain referral (snow-balling) sampling technique that is used to access hidden or hard to reach populations thus relying on social networks (Heckathorn, 1997; Frost et al. 2006; Wejnert et al. 2012). The initial contacts or subjects were selected through key informant sampling (Deaux & Callagan, 1985) and target sampling (Watters & Biernacki, 1989). Each contact was asked to provide a number of additional names and their telephone contacts. Those selected by this technique made up the data base from which systematic random sampling was applied to select the telephone interviewees. For the third method, one Focus Group Discussion session to deal more qualitative issues that arose from quantitative data collection was conducted, comprising eight participants (4 students and 4 graduates) and co-facilitated by two principal researchers**.** Participants were purposively selected from those who had participated in the survey.

Following the completion of data coding, simple descriptive statistics were calculated to describe the main features of the information collected. This exercise includes designing and presenting summary tables, frequency distribution tables and estimating percentage distribution. Qualitative data from focus group discussions was thematically analyzed by a combination of both *pattern matching and illustrative methods.*

The study was ethically informed, emphasizing the protection of participants. The investigators who were supported by well-trained research assistants ensured *subjects were protected from possible risk of harm, discomfort, or inconvenience.* Prior to commencing the study, ethical approval was sought through the University of Botswana Institutional Review Board (UB IRB). A Research Permit number DPRS 7/1/5 XV (22) of 16 October 2014 to conduct the study was granted by the Ministry of Education and Skills Development in Botswana. Identities of survey and telephone interviews remained anonymous.

4.0 Results

4.1 *Quantitative Data*

4.1.1 *Graduate Preparation or 'Work –readiness'*

Using a scale of 1 (least/very poor) to 5 (best/very good); the following elements of preparing students and graduates for job competency were identified; college modules, work related learning practice, graduates internship, job competency of graduates, community service and induction programmes to job competency of graduates. As depicted in Table1, work related learning practice was rated as the best contributor to job competency and subsequently job employability, with a mean score of 4.0482 and standard deviation (SD) of 1.00186.

Table 1 Preparation for Job Competency

Descriptive Statistics					
Using a scale of 1 (least) to 5 (best) indicate the contribution of the following to job competency of graduates.	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
College modules to job competency of graduates	166	1.00	5.00	3.6747	1.00434
Work related learning practice to job competency of graduates	166	1.00	5.00	4.0482	1.00186
Internship to job competency of graduates	166	1.00	5.00	3.7651	1.11148
Community service to job competency of graduates	166	1.00	5.00	3.7771	1.06956
Induction programmes to job competency of graduates	166	1.00	5.00	3.8133	1.07650

5.0 Factors Influencing Employability

There is a marginal difference between students and graduates' ratings of factors influencing employability. Using a scale of 1 (least) to 5 (best) (as shown in Table 2) students recognized these in the following descending order; practical experience, (54%), intellectual ability, (36%), capacity to learn (33%), mastering specific subject matter (22.2%), and self-belief and values (18%).

Table 2. Factors Influencing Graduate Employability in Botswana

Descriptive Statistics					
The following are possible factors influencing graduate employability in Botswana. Rate them on scale of 1 (lowest) to 5 (highest):	**N**	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Practical Experience	164	1.00	5.00	4.1159	1.06477
Mastering specific subject matter	164	1.00	5.00	3.4695	1.04748
Self-belief and values	164	1.00	5.00	3.7195	1.12173
Capacity to learn	164	1.00	5.00	3.9268	1.05993
Intellectual ability	164	1.00	5.00	3.8841	1.00550

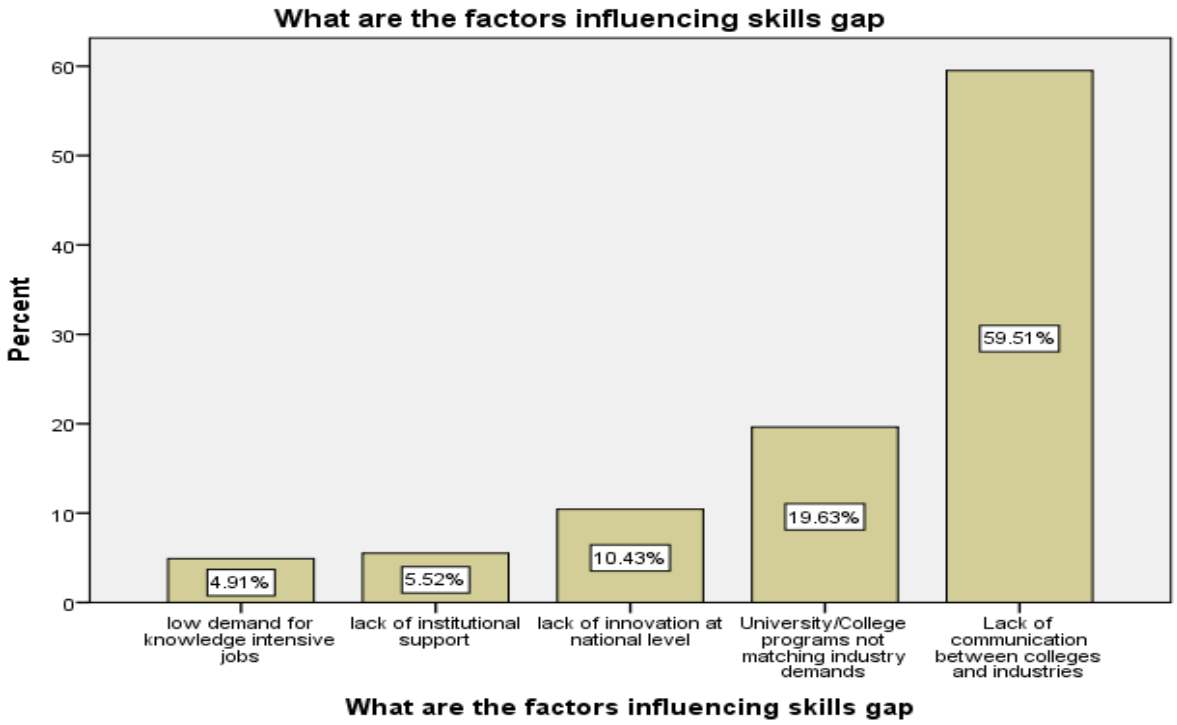
Graduates also rated 'practical experience,' the strongest factor and both 'mastering specific subject matter' and 'self-belief and values' as the least significant factors. Furthermore, as represented in Fig. 4, graduates viewed the lack of industrial growth in Botswana (69%) and lack of experience (58.9%) as the leading reasons for graduate unemployment in Botswana with only 19% agreeing that all the factors were significant. Lack of technical skills and personal attributes were considered insignificant.

Table 3: Reasons for Graduate Unemployment

In your opinion what are the main reasons for graduate unemployment in Botswana?	**frequency**	**percent**
Lack of industrial growth	113	69.3
Qualifications not matching industry demands	84	51.9
Lack of technical skills	80	49.1
Lack of experience	96	58.9
Personal qualities	50	30.7
All the above	31	19

6.0 Factors Influencing Skills-gap

Lack of communication between colleges and industries (59.51%) was cited as the main factor influencing skills-gap among graduates from the two selected colleges. a pictorial representation is provided in the next figure (fig. 2 - Skills-gap).



7.0 Job Competency and Graduate Competitiveness

Both students and graduates from the two institutions indicated their job competencies and competiveness were better than that of non-graduates (53.2%) and other institutions (43.2%) as represented by Tables 4 and 5. However, students rated their chances more than graduates with an overall rating of 69% compared to 50% for graduates. Majority of graduates were either interns or unemployed and their assessment appeared more realistic than that of students. Although graduates indicated that they compared better than those from other institutions they showed that the current job market tended to find them less competitive compared to those institutions outside Botswana.

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Table 4: Job Competency Relative to Non-Graduates

How would you rate your job competency relative to non-graduates?	**Frequency**	**Percent**
much better	30	31.9
better	50	53.2
the same	8	8.5
worse	3	3.2
much worse	3	3.2
Total	94	100.0

The study further found out that 50% of the students rated **'***Taking professional courses together with your program,***'** as the most effective way to improve one's competitiveness in the job market. While graduates indicated that all the options suggested for improving one's competiveness were key they rated '*taking post graduate courses'* and '*learning other international languages'* as the most effective. Most UB graduates had registered for post graduate diplomas as a way of improving their job market competiveness.

Table 5. Job Competency Relative to Graduates from Other Institutions

How would you rate your job competency relative to graduates from other institutions?	Frequency	Percent
much better	29	30.5
Better	41	43.2
the same	18	18.9
worse	7	7.4
Total	95	100.0

When asked about the job transferable attributes or skills that enhanced graduate competiveness both students and graduates strongly agreed on at least top and bottom five selected skills or attributes from a possible 14, as shown in the tables below (Tables 6 and 7).

Table 6. Top 5 Skills/Attributes that Enhance Competitiveness of Graduates

	Students		**Graduates**	
What are the key skills/attributes necessary to enhance competitiveness of graduates?	**Frequency**	**%**	**Frequency**	**%**
Written communication	85	43.8	84	50.9
Oral communication	108	56	109	66.1
Application and use of technology	126	65.3	83	50.3
Problem solving	123	63.7	81	49.1
Work experience	118	61.1	64	38.8

Table 7. Bottom 5 Skills/Attributes that Enhance Competitiveness of Graduates

What are the key skills/attributes necessary to enhance competitiveness of graduates?		**Frequency**	**Percent**
Decision making		64	38.8
Emotional intelligence		39	23.6
Lifelong learning		45	27.4
Entrepreneurial intensity		27	16.4
Craft literacy		23	13.9

9.0 Study Programme Content and Delivery

Both students and graduates agreed that there was strong relationship between content and delivery of degree/diploma programme and job competencies. 86.8% of the students, particularly those from Boitekanelo college, found the content of their programmes relevant (19.3% *strongly relevant* and 67.55 *relevan*t), while 90.2% of graduates found the programmes *'strongly relevant'* (31.1 %) and 59.1% considered them relevant to industry needs. Both students and graduates rated the conventional type of degree program delivery as the best in preparing learners for employment (fig. 3).

10.0 Patterns of Employability

One of the main findings of the study was that patterns of employability varied not only by graduate educational background but awarding institution. It is clear from Fig 3 that Boitekanelo graduates were likely to be more gainfully employed than most UB graduates particularly those in Social Sciences and Humanities. One of the explanations for current pattern of unemployment is the issue of post-college destination preferences. Given that the government sector particularly the internship programme was the least preferred destination and ironically the biggest employer in the market, this could explain that those not yet engaged could be also those shunning this sector.

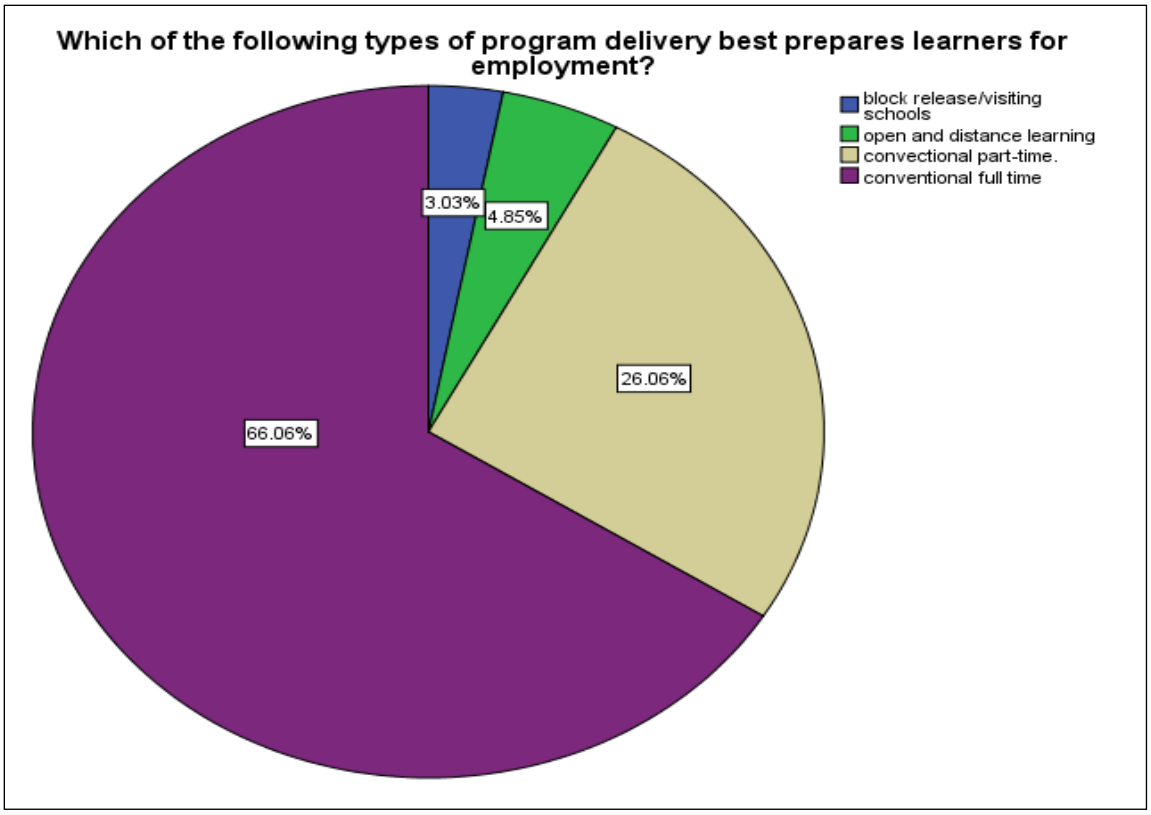

Fig 3. Program Delivery Type

Thus government departments (51.4 %.) and statutory bodies (75.0%) are the most popular destinations for 'attachment' or 'internship' but the least in terms of 'gainful employment' with 35.2% and 16.7% respectively.

Table 7. Current Employment Status

Current Employment Status: Gainfully employed * Awarding Institution					
			*Awarding Institution		
			University of Botswana	Boitekanelo College	Total
Current Employment Status: Gainfully employed	Yes	Count	35	19	54
		% within Current Employment Status: Gainfully employed	64.8%	35.2%	100.0%
		% within Awarding Institution	38.9%	25.0%	32.5%
	No	Count	55	57	112
		% within Current Employment Status: Gainfully employed	49.1%	50.9%	100.0%
		% within Awarding Institution	61.1%	75.0%	67.5%
Total		Count	90	76	166
		% within Current Employment Status: Gainfully employed	54.2%	45.8%	100.0%
		% within Awarding Institution	100.0%	100.0%	100.0%

This is in sharp contrast to the graduates and students' preferences for foreign multinational corporations which stand at 85.7% and local private sector at 66.7% respectively.

11.0 Qualitative Data

11.1 *Skills-gap in the Market*

Both graduates and students concurred that there was very weak university-industry interface. The sectors were not communicating on their respective expectations. Generally, the education system in Botswana only orient learners for white collar /office jobs. In particular, UB curriculum especially in Social Sciences and Humanities was too broad and rigid to fulfill the needs of the learners in terms of the individual's career planning. As one graduate interviewee indicated, ''*when I came to UB as a First Year, I was forced to register for a course against my own passion. What I graduated with is not what I really planned to do in life''.* As a result of this most graduates are employed in sectors where they are performing jobs in which they have no passion or interest. This effectively reduced their employability and market competitiveness levels. Furthermore, one of the factors influencing skills-gap was the incongruences between university programmes and technological development in the market. ' *''There is vast of courses on offer but one doesn't know which one would be useful or needed by the market''*. Universities needed to co-evolve with the market. However, participants from Boitekanelo said that courses offered at their college met the expectations of the current market as the programmes provided an opportunity for practical or work related learning in public health institutions.

12.0 Internship Programme*: 'You are still learning or …. not ready for the job….'*

While the participants acknowledged that the internship in some way assisted in reducing skills-gap and subsequently promoting employability, they agreed that the system did not address the real problem. Private sector is comfortable with the systems as it significantly reduced labor costs since the full cost of internship was solely government responsibility. Graduates are deployed to any sectors regardless of their degree programmes and this reduces graduate's job competency and competitiveness. There were cases of graduates from non-teaching degrees such as Psychology, Sociology, library information, who were deployed to schools as teachers. There were no proper job descriptions and monitoring system to curtail potential abuse of the system. The participants also noted the programme tended to portray that current graduates were not adequately prepared for the job market. Most worrying was the arrangement which excluded certificate and diploma holders. This created a crisis in the market because most private firms in Botswana now prefer to engage non-graduates on permanent or contract basis at the expense of degree holders who would remain unemployed or 'perpetual interns'.

13.0 Expatriate Employment

Graduates who participated in FGDs and telephone interviews concurred that the recruitment of expatriates or non-citizens across all sectors of the economy was steadily increasing in spite of the large numbers of local college and university graduates seeking employment. While this allowed competitiveness and productivity, the situation suggests lack of market confidence in the local college product. The recent mushrooming of 'profit maximizing educational institutions' at all levels has worsened the situation. They

observed that most the large private firms were foreign owned and tended to be naturally attracted to foreign labour. For example, expatriates particularly from Zambia and Zimbabwe were perceived to be relatively better skilled given that were products of stronger education systems. Although most of the institutions are legally accredited, their questionable credibility has tended to force employers to opt for expatriates.

14.0 Discussion

14.1 *Factors Influencing Employability*

The underlying factors of employability are diverse and complementary. The study indicates that both students and graduates' rated 'practical experience' as the strongest factor and 'mastering specific subject matter' and 'self-belief and values' the least significant. Graduates with work experience are more likely to obtain employment than graduates without experience (Copps & Plimmer, 2013; Sumanasiri et al. 2015). Boitekanelo graduates were more likely to get employment since their curriculum has work–related attachment which employers consider as work experience. Although this corroborates with the USEM account of employability, it still shows that subject-specific knowledge is not the primary determinant of suitability for employment (Harvey, 2000). As Pool and Sewell (2007; 281) put it, providing students and graduates with the opportunities to gain the necessary skills, knowledge, understanding and attributes is obviously important but so too is providing opportunities for reflection on and evaluation of the learning experiences. Even though the subject-specific knowledge, understanding and skills are still extremely important in many cases, these alone are unlikely to secure them occupations in which they can be satisfied and successful.

14.2 *Skills Gap*

Skills gap in the labour market was observed as one of the major challenges of employability particularly among graduates. This is consistent with observations from previous studies elsewhere (Robnison, 2000; Andrews & Wooten, 2005; Robinson & Garton, 2008), Unlike Boitekanelo, which specializes in public health education, University of Botswana was blamed for producing graduates deficient in skills necessary for job competency and competiveness. Our findings confirm results of previous studies elsewhere, (Crammer, 2006; Jackson, 2009; Storen & Aamodt, 2010; Chan, 2012) in observing the importance of accessing appropriately skilled graduates as a major challenge for most prospective employers.

This persistent skills-gap was attributed to the lack of communication between colleges and industry which results in university programs not matching industry needs or demands. This finding supports previous studies (Rahm et al. 2000; Murmann, 2003, 2012; Jiang et al 2006; Shiralashetti & Hugar, 2008). The abilities of universities and their industrial partners to establish successful collaborations depend on the forms of linkage mechanisms and communication channels established (Stewart & Gibson, 1990 cited in Rahm, et al 2000: 12). The lack of sufficient communication or dialogue between industry and universities is not a first in the history of the debate around the contribution of industry-university collaboration or linkages (Rahm et al. 2000; Murmann, 2003, 2012; Jiang et al. 2006; Shiralashetti & Hugar, 2008). The other major reason was the limited industrial growth and economic diversification which have reduced the demand for knowledge and technology intensive jobs. Apart from mining and construction jobs, most of the jobs created were suited for low-skill workers mostly in retail merchandise and security services. Such imbalances or 'misfits' in the economy (McQuaid & Lindsay, 2005), limit the youth's

chances of being hired. The recent phenomenal growth in tertiary institutions and particularly private college offering certificate and diploma programs has created an 'over-educated' citizenry. Our study findings correspond with what Chan's (2012) and Zhang (2008) observed in a Chinese study, which found out that employability did not necessarily lead to competitiveness. A graduate can obtain a job and do it competently but still remain uncompetitive on the market. Local graduates faced competition from internationally trained graduates and artisans, thus required to look more beyond their borders for job opportunities than before.

14.3 *Patterns of Graduate Employability*

The finding that patterns of employability and unemployability in Botswana varied according to graduate educational background and awarding institution is consistent with previous observations (Chan, 2012; Holmes, 2013). Boitekanelo graduates were more likely to be gainfully employed than most UB graduates particularly those in Social Sciences and Humanities. FGD participants agreed that across UB departments and faculties, Law, Education, Engineering and IT graduates were more employable than those from Humanities, Social sciences and Business. One of the explanations for current pattern of unemployment is the issue of post-college destination preferences. The government sector particularly the internship programme was the least preferred destination and as the biggest employer in the market, this could explain that those not yet engaged could be also those shunning this sector. However, it is observed that while graduates' sector choices could determine their fate, the *social positioning approach* (Holmes, 2013) may provide a better explanation to the patterns and outcomes of employability. While it is true that lack of personal skills determine the fate of graduates, it is graduates experienced some form of systemic exclusion from potential employers. Harvey (2000) observes that more and more graduates, for their first job, are likely to be in 'non-traditional' areas of work that may not be even at 'graduate levels'. Examples include UB graduates in Social Sciences and Engineering taking up primary school teaching posts. Some employers tended to prefer college certificate or diploma holders to UB graduates because they would be paid less and are unlikely to leave their jobs due to lack of job market competitiveness. Our findings show that although the USEM model receive support from other frameworks such as the 21st Century Skills framework (Pellegrino & Hilton, 2012), 'Key' to Employability or *CareeEdge* framework (Pool & Sewell, 2007) in providing a strong base for determining essential components of employability, one of its main weaknesses is the failure to recognize that employability as an interactive behavior'. As Forrier and Sels (2003) argued enhancing employability is a matter of shared responsibility and action of organizations and employees.

14.4 *Graduate preparation or 'work-readiness'*

While both survey respondents and FGD participants strongly agreed that current education system did not sufficiently prepare graduates for the labor market there is no conclusive evidence yet from this and other previous studies that support the view that even if the skills and attributes demanded by market were embedded in the curriculum, employability would be enhanced. As earlier on observed by the *processual approach* to employability (Holmes, 2013), and supported by our findings, graduate preparation is taken by both individuals and employers as an end state of higher education, (p.548). This is because employability is strongly linked to learning outcomes of university and degree programs (Finch et al.2013). According to Knight and Yorke (2003) learning and employability complement each other. Consistent with the USEM model, skills and attributes were taken as a possession of individuals and not as a process to full

employability. Thus skills in each domain support, enhance or impinge upon skills in the other domains (Collet et al. 2015; Pellegrino & Hilton, 2012). The connections between skills need to be drawn to understand the drivers that create the functional graduate as a whole. For example, while both students and graduates indicate the 'E' element of USEM model (self-efficacy, self-beliefs) as of little significance for employability with a very low mean score of 3.7195 (Fig. 3), it greatly enhances one's perception of employability and capacity to learn. Good curriculum designs will continue to help learners to construct understandings (U) of the subject matter and maintain the more recent in developing a range of skilful practices or skills (S). However, they will also show care for the development of efficacy beliefs (E) and meta-cognition (M) and other complex achievements that employers value. Employability is a construct that goes well beyond the boundaries of person–centric 'skills'. Lists remain just lists until the relationships between items are established (Pellegrino & Hilton, 2012).

According to FGD discussion participants, most students at the University of Botswana are aware of the skills that could make them more employable and competitive, but the problem was with the quality of tertiary education received. Most undergraduate programmes follow conventional full-time approaches with no opportunity for work–related learning or practical experience. As Storen and Aamodt (2010), observed, employability, as an aspect of quality of higher education, referred to the benefit and usefulness of the study programme for career and work tasks. There is very little correspondence between the qualification level the job requires and the qualification level the employee has acquired through higher education (vertical mismatch). Consistent with Odora (2011)'s findings in an earlier study, the level of most work related skills were still below the employers' expectations. In Botswana, government funded initiatives such as the graduate internship program which were designed to support graduates in their transitional stage to employment were structurally flawed and often abused by employers who were not creating any new vacancies to absorb the interns on permanent basis. Private employers were not contributing to the cost of the programme as the allowances were all paid by the government. While such programmes are well-intended, they are accompanied by mixed outcomes (Cranmer, 2006). The tertiary education sector did not do enough to promote and embed greater entrepreneurial skills among graduates. The study also found out that employability could be enhanced through the integration of work-based learning and 'graduate attributes into the curriculum' (Harvey & Bowers-Brown, 2004). The growth and development of industrial and service sectors depend on the quality of commerce education (Yusuf & Nabeshima, 2007; Shiralashetti & Hugar, 2008). While conventional wisdom dictates that universities prepare graduates for immediate employment our study findings appear to show the reverse.

15.0 Conclusions and Recommendations

The paper highlighted that the factors influencing employability were multi-dimensional and interwoven and thus requiring multi-sectoral interventions. Although the Yorke and Knight (2003) USEM framework applied in the analysis puts the graduate attributes and skills at the centre of employability conceptualization, structural and institutional factors beyond both the graduate and the university, require consideration. Employability is an interactive process involving a shared responsibility and action of both organizations and employees. For example, while it is acknowledged that graduates may fail to obtain a job due to the quality of higher education received, the respective industry needs and expectations were critical. As illustrated by Holmes' (2013) construct of social positioning, the paper observed that employers make their selection decisions not only on capability but on 'acceptability' (p: 547). Furthermore, the lack of knowledge-intensive jobs in the market limits the prospects and opportunities for employment. The drive

to diversify the economy should be matched by corresponding initiatives in the education system. One of the main conclusions of this study is that linking of educational outcomes and graduate employability in the development of college curricula remain a challenge. Thus the internship programme although confronted by numerous structural challenges, has been adopted as one way of reducing vertical mismatch. The paper also concludes that prospects of employability could be increased through collaboration among government, industry and university in the development and review of higher education curricula. Although literature is replete with models and studies placing degree-subject knowledge, understanding and skills at the centre of graduate employability, this paper shows that practical experience has significant effects on success in the workplace. Work-based learning and entrepreneurial education experience should be integrated into college curricula. This would make graduates prepared to work in many different jobs and industries through multi-skilling and learning of new technologies (Harvey, 2000; Morshidi et al. 2009). To deal with the problem of limited 'work-readiness', universities and industry sectors should intensify teaching and research collaborations. This would make degree programmes serve as *boundary spanners* between university and industry (Comacchio et al. 2012). However, this may occur when Universities begin to function as industry incubators for both job employment and entrepreneurship.

16.0 Limitations and direction for further research

One of the limitations of this study was the absence of a systematic analysis of the different employers' interpretations of employability 'skills' and their perceptions and expectations of graduate competencies across individual firms and industry sectors. Employers and universities views, experiences and perceptions of employability and their relationship to learning engender a paradigm shift from a rigid rational dualistic and systemized view to a more interactive and constructivist one. The value of this paper may be extended through content analysis of college curricula in order to establish the relationship between graduate 'work-readiness' or preparation programmes and labor market expectations. Furthermore, while the use of the 'respondent driven sampling' (RDS) strategy in selecting telephone interview participants was an effective alternative to the unavailability of graduate destination data bases particularly at UB, our conclusions on 'patterns of employability' require some caution. Although the combination of the constructs of USEM and Holmes's '3 P' models of employability provide a useful framework for understanding the challenges and patterns of employability, it fails to provide an agreed framework for future policymaking. One of the limitations, which also befell most previous models, is the lack of clarity on concepts such as 'gainfully employed' or ''entrepreneurial intensity', 'employability' and 'employment'.

Like most 'skills frameworks' the USEM model overly relies on generic skills which are difficult to measure across a range of careers. Perhaps there is need for longitudinal study to establish if those found as 'employed' now would be experiencing both satisfaction and success on the same or different job in future. There is a possibility that those 'employed' at the time of this study may have 'reduced' their qualifications at the time of job application after realizing that employers in Botswana were shunning graduates. The multidimensional character of employability requires future research to draw insights from a combination multiple models in order to extend knowledge on the subject and influence policy changes.

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