



Assessment of Strategies for Preparing Graduates for the Disruptive Workplace: Evidence from Nigeria and South Africa

Oluyomi Susan Pitan^{1,2} and Colette Muller²

Corresponding author: Oluyomi Susan Pitan (pitan.oluyomi@lcu.edu.ng)

¹ Department of Arts & Social Science Education, Faculty of Education, Lead City University, Ibadan, Nigeria

² School Accounting, Economics and Finance, College of Law and Management Studies, University of KwaZulu-Natal, Durban, South Africa

Abstract

This study examined the extent to which experiential learning and career guidance activities, as strategies for equipping students with transferable skills, are used by Higher Education (HE) in two African countries, Nigeria and South Africa to prepare students for the volatile labour market. The contributions of the two strategies to students' preparedness for work, after controlling for the possible effects of gender and type of university, were also determined. Perceptions of students (n=865) from six universities in the two countries, on their level of exposure to the two strategies, were analysed. Hierarchical regression was used to control for the influence of gender and type of university, while findings from the two countries were compared using Mann–Whitney U tests. Students from both countries agreed that the two strategies jointly and individually have significant positive influences on their preparedness for work. However, the students alleged that their universities are not exposing them adequately to these strategies. Students from Nigeria believed they are exposed adequately only to experiential learning, while those from South Africa demonstrated inadequate exposure to both strategies. The effects of gender and type of university on students' responses were significant only among South African students. This study has highlighted the extent to which sampled universities adopt the two strategies in preparing their students for work and has offered suggestions on how to address the identified inadequacies in students' exposure to the strategies. Also, results of the differences in students' perceptions have established the role of dominant contextual differences in employability development, which should be acknowledged when making quantitative comparisons in Higher Education between countries.

Keywords

Career guidance activities, Employability, Experiential Learning, Gender, Hierarchical regression, Higher Education, Mann–Whitney U tests of comparisons, Transferable skills; Type of university attended

Introduction

Faced with continued economic uncertainty and the imminent and inevitable challenges of a disrupted workplace, designing and implementing strategies that equip students with relevant skills to navigate the future world of work are imperative to Higher Education (HE) providers worldwide. According to Christensen (1997, 2006 as cited in Granger & Bazaz, 2018) disruptions in workplaces are anomalies, which emerge when new entrants or new technologies create pressure points, which threaten the status quo, such as a company's existing innovation and market position, the ability to sustain work, and threats to revenue and cost structures. It is the action of completely changing the traditional way

the labour market operates as a result of using new methods or technology (Amenduni, et al., 2022). According to Amenduni, et al., these changes occur as a response to a complex set of interrelated factors, including technological advancement (powered by the 4th Industrial Revolution), environmental challenges and health emergencies (such as the COVID-19 pandemic). An important characteristic of the disrupted labour market is that technology is going to dramatically reshape the workforce with increased demand for high skilled employees through a continued shift from manufacturing to services. Another notable feature is a change in patterns of work with more people becoming self-employed and choosing short term and part-time work over permanent jobs (Oliver, 2015).

The pace at which the 4th Industrial Revolution (4IR), the COVID-19 pandemic, and globalization continue to evolve makes it difficult to predict the impacts of the accompanied disruptions on the state of the future world of work. Nevertheless, it is expected that these issues will bring profound and rapid changes in all sectors (Teng, et al., 2019). A taste of such changes was witnessed during the pandemic, where workers were forced to work remotely from home. Workers who were not resilient, adaptable or flexible, and those who were not technologically adept, faced the risk of losing their jobs with reduced opportunities for alternative employment. The clear challenge thus posed for HE is around how to develop graduates with the requisite skills of resilience, adaptability and flexibility to operate successfully amidst the disruptions in the workplace.

Unprecedented expansion in the provision of HE with graduate employability at the forefront of measures that rank universities has resulted in graduate employability being a central objective of contemporary HE, (Oliver & Tucker, 2020). Therefore, as HE institutions globally continue to compete for students and tuition revenue, institutions that go beyond the development of purely academic or discipline-specific skills and knowledge (Roberts, 2018), and that offer innovative experiential programs focusing on the development of students' abilities to conceptualize their future work through learning the practice of the discipline, can help differentiate them in a crowded marketplace.

The changing nature of work has meant that companies, including prominent ones such as Google, Apple, IBM and accounting firms, are actively shifting focus away from only degree requirements to alternative methods of measuring graduates' preparedness for work (Østergaard & Nordlund, 2019). Core among these measures is multi-skilling. Multi-skilling is the ability of an employee to possess or be trained in more than one skill or area of expertise. Multi-skilling stresses the essence of transferable skills such as adaptability, flexibility, resilience, innovation, interdisciplinarity, communication, interpersonal, analytical, ICT and emotional intelligence skills (World Economic Forum, 2018; Seet et al, 2018; Fraser, et al., 2019; Panchanathan, 2019; Hayes, et al., 2022). Table 1 below shows descriptions of the skills.

These transferable skills are not specifically related to a job, task or academic discipline but can be used across a multitude of situations and work settings (Jackson & Tomlinson, 2020). Despite the predictions that computers, robots and Artificial Intelligence will be substituted for human labour and disrupt the pattern of work (Oliver, 2015), the argument is that unique human skills are not easily replicated by artificial intelligence and other disruptive technologies. This is particularly true of skills, which encourage and facilitate creativity, analytical and critical thinking, collaborative activity, complex communication and adaptability as they prepare workers to be flexible and cope with the rapid workplace changes that result from disruptive technologies (Seet, et al, 2018). The implication is that institutional employability strategies in HE should expose students to activities that equip them with transferable skills and enable them to make appropriate connections between theory and practice.

Table 1: Descriptions of Transferable Skills Needed for Navigating the Disruptive Workplace

Skill name	Descriptor
Adaptability	Ability to thrive in diverse environments. Being willing and able to adjust to changing conditions. This involves being able to notice change, and being able to find new approaches and alternatives to respond to this change
Analytical	Ability to collect and analyse information, solve problems and make decisions. Such skills as research, critical thinking, problem-solving, creativity and data analysis are examples of analytical skills
Communication	Being aware of how communication affects others; asking questions; listening actively; showing respect in all communications, oral and written; social skills.
Emotional intelligence	It refers to the ability to identify and manage one's own emotions, as well as the emotions of others.
Flexibility	Ability to respond to changes quickly and with ease
Information and Communication Technology (ICT)	Ability to understand and operate a wide range of technology software. For example, data management, online research, desktop publishing etc.
Innovation	Ability to turn creative ideas into worthwhile solutions that result in the introduction of new goods or services or improvement in offering goods or services
Interdisciplinarity	Ability to collaborate with others, who are not in your field in solving a problem
Interpersonal and teamwork	Skills that contribute to working and relating successfully well with other people
Resilience	Ability to persevere in the face of challenges and bouncing back after setbacks. It also involves learning from those setbacks, accepting own mistakes and learning from them

For universities to produce work-ready graduates, it is imperative that how students acquire transferable skills receive attention. Several strategies, such as career management competencies, work experience, extracurricular activities, overt and covert strategies, have been identified to develop students' employability (Jackson & Wilton, 2017; Fraser, et al., 2019). This study focused specifically on Experiential Learning (EL) and Career Guidance Activities (CGA), given their potential to be effective at equipping undergraduates with necessary skills that are transferable across jobs. Rather than relying on graduates' or employers' views in determining graduate preparedness for work, this research concentrated on students' perceptions. Responses from students, who are the direct beneficiaries of HE employability strategies offer more insight on employability (Dacre Pool, et al., 2014). This is because they are the ones who are directly involved in the process of getting prepared for the future job. They know and will (to a reasonable extent) portray the situation exactly the way it is. That is, whether they are being exposed to these strategies or not. Although, according to Tomlinson (2008) and Al-Harathi (2011); the students are yet to experience the real world of work, they are aware of the future challenges in terms of the link between their university experiences and required skills in the labour market.

This paper consolidated two independent studies undertaken among undergraduates at six universities in two developing countries - Nigeria and South Africa. Much of the research on students' employability has focused on developed countries, where both institutions and students have a relative advantage as compared to those in developing countries given that they are better resourced and that institutions typically have well-established arrangements for integrating employability into the curriculum. The limited existing research in developing countries necessitates this type of research, which augments both the developed and developing country literature on employability.

The purpose of the study was to examine how the sampled universities are responding to the skills demand of the disrupted workplace vis-à-vis the use of EL and CGA as strategies for preparing graduates for work. By comparing the responses of students from the two countries, this study also highlighted the influence of contextual factors on the development of employability. This comparative insight is one of the unique contributions of this research to the existing literature in the field of employability. In addition, the effect of gender and type of university attended on students' perceptions of employability was interrogated.

The following research questions were posed:

RQ1: What are the respective perceptions of Nigerian and South African students on the level of their exposure to the identified strategies (CGA and EL)?

RQ2: Is there any significant difference between students' perceptions in the two countries?

RQ3: What are the overall and relative contributions of CGA and EL to students' perceived level of preparedness for employment in each of the countries after controlling for the possible effects of gender and university attended?

Higher education (HE) and graduate employment outlook in Nigeria and South Africa

Although, HE consists of both a university and a non-university sector (i.e., Polytechnics, Monotechnics, and Colleges of Education), in this study, HE will be used as synonymous with universities only.

As with labour market outcomes for university graduates in numerous countries, university graduates in Nigeria and South Africa experience a relative advantage in the labour market. Despite this, there are challenges such as unemployment, underemployment, discrimination etc that these graduates contend with in the labour market. At the time of data collection, the total youth unemployment rate in South Africa was 55.2% and 31% for university graduates (aged 15–34) (Statistics South Africa, 2019), while in Nigeria, the unemployment rate for graduates by the fourth quarter of 2020 was 28.8% (Statista, 2022).

Among the major causes of graduate unemployment in the two countries, is the mismatch between the training provided at universities and the skill sets required by the job market (Ohei & Brink, 2019; Okolie et al., 2021). In Nigeria, the extent of the skills mismatch among employed university graduates was 60.6%, with deficiencies in communication, information technology, decision-making, critical thinking, interpersonal relationships, entrepreneurial and numeracy skills being identified (Pitan, 2016, p. 1). Similarly, in South Africa securing employment as a university graduate can be challenging given a lack of critical transferable skills and employers' preference for 'work-ready' individuals with industry knowledge (Walker & Fongwa, 2017).

Apart from the graduate unemployment rate in South Africa, variations in the duration of unemployment experienced by graduates based on characteristics such as the type of university attended, race, ethnicity and course of study are also observed (Oluwajodu, et al., 2015). In addition, inherent social, political and economic structures, such as favouritism and nepotism, which all downplay meritocracy, skill and competence (Imhonopi & Urim, 2018), negatively impact graduates. Disparities in gender, race, and type of university attended tend to be accentuated in the South Africa graduate labour market. In South Africa, men experience higher participation rates and higher earnings than women with similar levels of qualification and experience (Anand et al., 2016; Muller, 2019). In Nigeria similar research among university graduates revealed no significant difference in the unemployment duration between male and female graduates (Pitan & Adedeji, 2016). Another critical influence on graduate's employment outcomes in South Africa is that graduates of highly rated universities tend to have better employment prospects than those from low-rated universities (Walker & Fongwa, 2017; Pitan & Muller, 2019). Also, in Nigeria, the type of university based on ownership (that is, whether it is owned by the Federal government, State government or the Private sector) had a significant influence on graduates' employment outcomes (Pitan & Adedeji, 2016). However, the present research appears to be the first to consider the effect of type of university attended based on

ranking on students' perception of their employability in Nigeria. The classification by rating and prestige was adopted in this study for ease of comparison between the two countries (Seeber, 2020).

To ensure the alignment of university curricula to the demands of the industry, there are ongoing efforts and initiatives in place in many of the universities in the two countries. For example, in South Africa, universities typically make effort to provide career services to students and offer them a variety of extracurricular activities (British Council, 2015). Also, many certain universities in Nigeria have institutionalised arrangements for students' participation in industrial work experience in which, undergraduate students are exposed to between 3 and 6 months of industrial attachment at least twice before they exit the university. In addition, to ensure that students are not only prepared academically but also for work; universities in both countries are making efforts for students to develop an entrepreneurial culture. For instance, it is now mandatory in several Nigerian universities for students to offer courses in entrepreneurship while in South Africa also, programs such as the Entrepreneurship Development Programme (EDP) are in place in certain universities (British Council, 2015). Nevertheless, concern in respect of the inclusivity, implementation and effectiveness of initiatives remains (Okolie, et al., 2021).

Strategies for Students' Preparedness for Work (SPW)

In this article, students' (perception of their) preparedness for work (which henceforth will be referred to as SPW) refers to students' perception of themselves as being aware of and equipped with the skills needed to succeed in job search, in the performance of necessary duties when commencing employment, and in becoming flexible in the labour market (Hayes, et al., 2022). For this research, employability and SPW will be used interchangeably.

While there are numerous strategies for SPW, the focus of this research was on two strategies – EL and CGA - which have been identified by numerous employability studies as essential to equip undergraduates with almost all (if not all) the transferable skills, necessary to navigate the disruptive labour market (Jackson & Wilton, 2017; Tomlinson, 2017; Fraser et al., 2019; Oke & Fernandes, 2020). For example, through their practical dimensions, all the forms of graduate skills, which Tomlinson (2017) referred to as 'capitals', that is, human, social, cultural, psychological and identity capitals, can be achieved through EL and CGA.

Experiential Learning (EL)

According to Kolb's model of EL (as cited in Morris, 2020, EL activities expose students to real-world, tangible experiences, give them opportunities for reflection and discussion, and enable them to establish a link between theoretical academic knowledge and practice in the workplace. Following Kolb's model, EL refers to teaching and learning experiences that take place outside the confines of classroom walls, and which equip students with real-world skills through hands-on and applied learning (Roberts, 2018; Claiborne, et al., 2020). In the context of this work, such EL activities comprise, *inter alia*, students' exposure to work experience through work-based learning, internships, industrial attachment or work placement (or as may be used in different contexts), industry visits, employer involvement in course design and delivery, witnessing visits from alumni who share information about potential career paths and opportunities in their companies, community service, laboratory activities, simulation and all forms of practical sessions (Jorre de St Jorre & Oliver, 2018; Claiborne, et al., 2020).

Researchers such as Jackson & Wilton, (2017); Ngwane (2017); Jorre de St Jorre & Oliver, (2018); Pitan & Muller (2019); García-Aracil, et al, (2021) showed that EL gained as undergraduates, has a significant and positive influence on student preparedness for work. These employability studies revealed that students' exposure to EL developed the necessary transferable skills to ensure a competitive edge and flexibility in the disrupted job market (Panchanathan, 2019). Such transferable skills included effective communication, being innovative, leadership, interdisciplinarity, interpersonal relationships, creativity, analytical thinking, reflection, self-confidence, self-efficacy, emotional intelligence, professional contacts and professional qualities.

Jorre de St Jorre & Oliver (2018) and Mason et al (2009) conducted independent qualitative studies among undergraduates in the UK to assess the influence of different employability skills initiatives on SPW. Their findings revealed that structured work experience and employer involvement in curriculum design and delivery (for example providing material and ideas for student projects, formal membership of course advisory panels and giving guest lectures) have clear positive impacts on SPW. García-Aracil et al., (2021), confirmed the significant relationship between EL and SPW and observed that these activities involve the development of transferable skills such as interpersonal, communication and participative and organizational competencies.

Career Guidance Activities (CGA)

CGA as a strategy for enhancing SPW refers to all activities that provide students with career information, advice and guidance. Such activities include training on CV preparation, job search, job applications and interview preparation, self-presentation, communications skills, career-self management skills, decision making and work etiquette. Frameworks and theories such as Watts' seminal DOTS model, illustrate the relevance of CGA for SPW (Law and Watts, 2003). According to the DOTS model, CGA are planned experiences designed by the university to facilitate the development of self-awareness, opportunity awareness, decision learning and transition learning in students.

The DOTS model was empirically tested and substantiated among undergraduates in Nigeria by Pitan & Atiku, (2017). The implication was that for students to be adequately prepared for work, possession of decision-making skills (being able to weigh up personal factors to make a well-informed and realistic career plan); opportunity awareness skills (knowing employment opportunities that exist and what their requirements are); transition learning skills (having job-search and self-presentation skills) and self-awareness skills (ability to identify and articulate one's interests, skills, abilities and values as they affect career plans) are prerequisites. CGA as a strategy for SPW aids students' ability to articulate the possession of desired attributes and present them to employers and has the potential to develop resilience and adaptability skills in students (Jackson & Tomlinson, 2020). Therefore, it is essential that students, after acquiring extensive knowledge and skills at university, receive assistance and guidance in communicating their achievements and the benefits of such achievements to prospective employers through application forms, CVs, interview activities and job search.

Other than preparing students for immediate jobs, CGA constitutes a major strategy that equips students with transferable skills such as resilience, adaptability, flexibility and self-efficacy that prepare them to adequately cope with the inevitable and impending challenges and stress of the disruptions and structural changes to the labour market (Bridgstock et al., 2019; Tomlinson, 2017 and Jackson & Tomlinson, 2020). Such challenges include having to change jobs frequently or start one's own business, the loss of a job, underemployment or sustained unemployment.

As with HE in other countries, the approach to students' engagement with EL and CGA differs from one institution to the other in the sampled countries according to the type of university, its organisational structure, its conceptions of graduate employability and the policy context in which the institution operates (Bridgstock et al, 2019).

Influence of control variables: Gender and type of university

Rather than following the norm of posing a series of directional questions, this study examined whether the effects of EL and CGA on students' perceived employability remain significant after accounting for the influences of gender and type of university attended. This approach is consistent with earlier claims that such control variables, which may mediate between employability and employment processes should not be overlooked in the measurement of employability to minimize the inconsistency of the results (Ergün & Şeşen 2021, Pitan & Muller, 2020).

Although the direction of influence of gender (being biologically male or female) on students' perceptions of their level of preparedness for work remains unclear, multiple studies confirmed that gender does affect students' perceptions of their level of preparedness for work (Donald, et al., 2018;

Monteiro, et al., 2016). This present study also assumed that gender will have a significant influence on SPW.

In addition, and as confirmed by Okay-Somerville & Scholarios (2017) students' perceptions of their level of preparedness for work are likely to differ according to the type of university they attend. Students from highly-rated universities may perceive themselves as more prepared for work than their counterparts from low-rated universities. In this study, the 'type of university' refers to the reputational category of the university attended by a student, for example whether the university is high rated, or low rated. Of the six universities under investigation, three (two from Nigeria and one from South Africa) were categorised as 'high-rated' and three (two from Nigeria and one from South Africa) as 'low-rated'. According to the Ranking Web of World Universities (2023), the three high-rated universities are among the top 10 universities in their respective countries and among the top 20 in Sub-Saharan Africa.

Methodological approach

Procedure and respondents

A descriptive survey research design was adopted for the study. For logistical reasons, purposive sampling was used to select two relatively accessible universities in South Africa and four in Nigeria. The two universities in South Africa were selected from one province out of the South Africa's eight provinces. As mentioned earlier, one of the two universities from South Africa is a high-rated university while the other is categorised as low-rated. According to South Africa's classification of her HE institutions, the high-rated university is a traditional university that provides theoretically oriented degrees and the low-rated one is a comprehensive University, which offers a combination of academic and vocational degrees with diplomas. The four universities from Nigeria were also chosen from one geo-political zone out of the six in the country. These four universities comprised two federal universities, one state, and one private university. The two Federal Universities were categorised as high-rated while the state and the private fall under low-rated universities.

Final-year students across different disciplines were purposely chosen because their exposure to and awareness of EL, CGA and employability would be greater as compared to new university entrants. Prior to data collection in each of the countries, ethical clearance certificates (with protocol reference numbers HSS/0866/015 and HSS/0061/017 for the Nigerian and South Africa studies respectively) were obtained from the requisite ethics committee in the researchers' institution. Informed consent that described the confidentiality of responses, a participant's right to withdraw at any time without penalty, and the voluntary nature of participation were attached to the questionnaire for all respondents.

In total, 1050 paper-based adapted questionnaires were administered in the two countries. From these, 865 completed responses (a response rate of 82.38%) were returned. These 865 final-year students comprised the respondent base for this research. A summary of the respondents' characteristics relating to gender and type of university attended is shown in Table 2.

Table 2. Respondents' Demographic Profile

Characteristics	Nigeria		South Africa		Combined	
	N	%	N	%	N	%
Gender						
Male (0)	198	42.8	166	41.3	364	42.1
Female	265	57.2	236	58.7	501	57.9
Type of University						
High-Rated (0)	222	47.9	203	50.5	425	49.1
Low-Rated	241	52.1	199	49.5	440	50.9
Total	463	100	402	100	865	100

Instrument

The items on the instrument were based on the results of the pilot study, Exploratory Factor Analysis (EFA), as well as previous models (Dacre Pool, 2020) and empirical studies (Jackson & Wilton, 2017) of students'/graduates' employability. The dependent variable, a 'student's preparedness for work' (SPW) scale, was measured with three items. Considering the skills they have acquired, respondents were asked to rate their level of preparedness for work. The three items on the SPW scale are: (1) I am aware of graduate employability & the skills recruiters expect; (2) I am aware of the employment opportunities open to me; and (3) I feel confident that I will be able to find appropriate work after leaving the university. For this scale, Cronbach alpha scores of .85 and .74 were achieved for the Nigerian and South African samples respectively. To measure the strategies for preparing students for work, two scales (CGA and EL), each with fifteen items, were used (see Table 3). The Cronbach alpha scores for these scales in the two countries ranged from .82 to .86, suggesting acceptable internal consistency and reliability of the items (Pallant, 2013). A five-point Likert rating scale ranging from strongly disagree (1) to strongly agree (5) was used for both the dependent and the independent variables.

Analysis

A descriptive analysis of means and standard deviations along with Mann–Whitney U tests of comparisons were used to answer research questions 1 and 2 (see Table 3). Hierarchical regression analysis was conducted specifically to answer research question 3 (see Table 4). Dummy variables were created in the regression for gender and type of university attended. For gender, the base variable was male, and for the type of university, the base variable was a low-rated university.

Results and discussion

Level of students' exposure to EL and CGA: Comparison between Nigerian and South African Universities

To gain insight into the level at which the sampled universities were equipping students with transferrable skills, the research examined students' levels of agreement with fifteen questions relating to their exposure to EL and CGA. To understand the effects of context on the development of employability, the research also explored if there were basic differences between students' perceptions of their exposure to these strategies in the two countries.

Experiential Learning (EL)

The level of agreement of South Africa students to the items on the EL scale showed that their level of exposure to EL was below adequate level. Comparisons of mean scores indicate that for EL scale and all the items under it (except one) there was a statistically significant difference in the responses of students across the two countries. Students from universities in Nigeria recorded a higher mean score (72%) than their counterparts from South Africa (66.6%). The only item with no significant difference is 'I have been exposed to work experience at least twice.' Students' level of agreement with this item was below the threshold level of 3.5 for samples in the two countries.

The large and significant difference in the extent to which students were exposed to EL in the two countries reflects contextual differences in institutional arrangements for students' engagement with EL, especially work experience. In most universities in Nigeria, students' industrial work experience (SIWES) is integrated into the curriculum. However, the effectiveness and the quality of the programme in achieving the desired goal of developing transferable and entrepreneurial skills among students are questionable (Okolie, et al., 2021). For example, this opportunity does not apply across all disciplines and, as revealed in students' response to item 2 - majority of the students that participated did so only once. Jackson & Wilton (2017) argue that for work experience to be effective; it should be made mandatory for students from all fields at least twice before exiting the university. If the universities will not be responsible for exposing students to EL in all fields of study, then they

should educate them on its relevance for their future employability. The significance of work experience exposure as an undergraduate cannot be over-emphasised as it is regarded as the optimum technique for the development of transferable skills (Tymon, 2013).

In contrast to what is obtainable in Nigeria, there are limited formal arrangements for student work placements in South Africa universities, particularly for students at less reputable universities who are from disadvantaged backgrounds (British Council, 2015; Walker and Fongwa, 2017). Students' low level of agreement with items 1, 2 and 6 confirmed that many were not engaged in EL activities. Other EL activities where South Africa students are inadequately engaged are career fairs, career workshops and employers' participation in project presentations (items 7, 8 and 9). South Africa students' inadequate exposure to EL aligns with Ohei & Brink (2019) and Walker & Fongwa, (2017). Using a mixed method approach Ohei & Brink (2019), probed the problems that graduates encounter when entering the labour market in South Africa and explored why graduates are not obtaining their desired jobs in their profession. Their findings showed that the majority of such graduates have limited work experience and cannot apply the knowledge acquired in the university to the workplace setting. Also, 85% of the graduates in Ohei & Brink's (2019) study believed that lack of work experience was a reason for not being shortlisted.

Career Guidance Activities (CGA)

One area of concern around students' exposure to CGA was that the mean ratings in the two countries were below the threshold level of 3.5. Students from both countries indicated that their respective universities were not exposing them adequately to CGA. The analysis of the individual items under CGA further showed that the students were deficient in the presentation skills (i.e. CV and job application writing skills and skills to succeed at job interviews), needed to convince prospective employers about their suitability for a job. Walker & Fongwa (2017) and Donald, et al. (2018) suggest that students' responses of inadequate acquisition of presentation skills may be the result of a large percentage of students not participating in activities developing these skills at university. According to Walker & Fongwa (2017), this is particularly true of some reputable universities in South Africa, where because career services are run as a co-curricular activity, students may not be aware of these services' existence or importance in respect of work preparedness; or are unable to attend due to academic timetable commitments. This indicates that not only should the universities provide careers services, but that appropriate measures, such as frequent orientation programmes and incorporation of career education into courses from the first year, should be instituted to encourage and create awareness among students on the necessity of CGA for the development of skills needed to succeed in the world of work (Bridgstock, et al, 2019).

The mean difference between the two countries showed that there was no significant difference between students' responses for aggregate scores for CGA and four of its five individual items. The only item that recorded a high significant difference was item 1, (Services of career counselling are made available to me). There was a higher level of agreement among South Africa students on this question than among students from Nigeria. The result of inadequate availability of services of career counselling to students from Nigeria is also a confirmation of past studies (Okolie et al., 2020; British Council, 2015) which found that most universities in Nigeria lack guidance and counselling units, and where they existed, they were either dysfunctional or underutilised. For example, of the 14 universities, including from South Africa and Nigeria, that participated in the British Council study only four had a fully functioning career service. Nine had a career service, but with inadequate staffing or funding to function fully while one had no career service. In several of these universities, only one person is available to attend to all the activities of the career's office. In certain cases, career service is just one of the services subsumed under the student office, where several other services such as general academic guidance and personal counselling are provided. What these suggest is that in some universities, careers services are not functioning fully as expected.

Table 3: Students' Exposure to CGA and EL -Comparison Between Nigeria and South Africa

ITEMS	Nigeria (N= 463)			South Africa (N=402)			Mean Difference
	Mean	SD	Standard Error of Mean	Mean	SD	Standard Error of Mean	Z-score
Career Guidance Activities							
	3.43	.87	.041	3.47	.87	.044	-0.71ns
Services of career counselling are made available to me	3.26	1.14	.053	3.68	1.11	.055	-5.45***
I have knowledge & understanding of career opportunities	3.73	.95	.044	3.75	1.00	.050	-0.29ns
I have the skills to make successful written applications	3.52	1.09	.051	3.49	1.01	.055	0.43ns
I can produce an up-to-date CV targeted to applications	3.26	1.14	.053	3.20	1.27	.063	0.71ns
I have acquired the skills to succeed in job interviews	3.38	1.17	.055	3.25	1.24	.062	1.3ns
Experiential Learning							
	3.60	.733	.035	3.33	.96	.048	4.90***
I have been exposed to work experience through an internship or work placement	4.04	1.13	.052	3.31	2.38	.119	6.4***
I have been exposed to work experience or placement opportunities at least twice	3.11	1.24	.058	3.14	1.37	.068	0.33ns
I have awareness of workplace structures and practice	3.79	1.01	.047	3.51	1.31	.065	3.63***
I have the skills to succeed in employment as I reflect on my progress	3.67	1.00	.047	3.53	1.17	.058	1.97*
I have the opportunity to take part in simulations and case studies	3.65	.84	.040	3.50	1.19	.060	1.94*
I have had the opportunity to visit local employers	3.38	1.20	.056	3.13	1.42	.071	2.81**
I have listened to employers about employment opportunities and their skill requirements	3.62	1.13	.052	3.36	1.24	.062	3.13***
I have experienced employers' participation in programme delivery or project presentation	3.52	1.16	.054	3.23	1.23	.062	3.45***
I have witnessed alumni visit to talk about their career paths and opportunities in their company	3.41	1.25	.058	3.14	1.30	.065	3.25***
I have been encouraged to seek new skills to increase my employability	3.78	1.25	.053	3.41	1.21	.060	4.46***

Notes: ns $p \geq 0.05$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Determinants of students' perceived level of preparedness for work

Table 3 below illustrates the results of the Hierarchical Multiple Regression analysis used to assess the ability of CGA and EL to predict SPW while controlling for the influence of gender and the type of university attended. Preliminary analyses ensured that the estimation assumptions in respect of normality, linearity, multicollinearity and homoscedasticity were not violated. Gender and type of university attended were included in model 1 and explaining 0% and 14% of the variance in SPW for Nigeria and South Africa, respectively. After entry of the CGA and EL in model 2 the total variance explained by the model was 45% for Nigeria and 38% for South Africa. The two strategies explained an additional 45% (Nigeria) and 23% (South Africa) (of the variance in SPW after controlling for gender and the type of university attended). In Nigeria, only CGA and EL were significant in both models 1 and 2 while for South Africa, both the students' characteristics (gender and type of university) and the two measures of SPW were statistically significant in both models.

EL and CGA

In accordance with extant literature (Tymon, 2013; García-Aracil et al., 2021) the results indicated that, overall, the two strategies have significant positive influences on SPW among students in the two countries after controlling for the effects of gender and type of university attended.

Comparing the relative contributions of each strategy, EL is the highest contributor to SPW in the two countries with (40%, $p < 0.001$) and (31%, $p < 0.001$) in Nigeria and South Africa respectively. CGA contributed (35%, $p < 0.001$) and 28%, $p < 0.001$) in Nigeria and South Africa respectively. With these results, it is confirmed that the two main strategies (EL and CGA) examined in this study jointly and individually serve as predictors of students' perceptions of their level of preparedness for work.

Gender and type of university attended

Consistent with Jackson & Tomlinson's 2020 study among Australian and UK university students, gender and type of university attended do not have a significant influence on SPW in the two models for Nigeria (Table 4). In contrast, there are significant differences in the influence of gender and type of university attended on SPW among South Africa students. Variations in the results of the influence of gender and university attended in the two countries may be because gender inequality and racial disparities in the type of universities students attend are more pronounced in South Africa than in Nigeria. In South Africa, male students exhibited a higher level of optimism in their level of preparedness for work, which may be a result of existing gender stereotypes and labour market realities whereby males are known to gain access to graduate-level jobs faster than females (Anand et al., 2016; Pitan & Muller, 2020).

Contrary to expectations, the results reveal a higher level of perceived preparedness for work by students from low-rated universities than those from high-rated ones in South Africa. One possible explanation is that students from low-rated universities in South Africa, being aware of the disadvantage the type of university attended may pose on their future labour market success (such as being less employable, and having a lower absorption rate into the labour market) are more proactive and more engaging in activities (such as experiential learning) that mediate between university attended and their future employability (Pitan & Muller, 2019) than those from high-rated universities. Also, most of the academics in low reputable universities are conscious of their students' needs and thus, assist, counsel and encourage them to add value to their academic skills (British Council, 2015).

Table 4: Hierarchical Regression Analysis Predicting Students' Perceived Level of Preparedness for Work

Variables	Nigeria						South Africa					
	Model 1			Model 2			Model 1			Model 2		
	B	SE	B	B	SE	β	B	SE	β	B	SE	β
Step 1												
Gender	-.06	.09	-.03ns	.03	.07	-.02ns	.15	.07	.10*	.15	.06	.10**
Type of University	.06	.09	.03ns	.04	.07	.02ns	.54	.07	.36***	.24	.07	.16***
Step 2:												
CGA				.37	.05	.35***				.22	.04	.28***
EL				.50	.06	.40***				.26	.04	.31***
F-value		0.51ns			88.33***			33.56***			59.43***	
R ²		.00			.45			.14			.38	
Adjusted R ²		-.00			.45			.14			.37	
ΔR ²		.00			.45			.14			.23	

Notes: ns p \geq 0.05; *p<0.05; **p<0.01; ***p<0.001

Implications of the study

Implications for policy and practice

One major finding from this research is that students' exposure to the identified strategies can distinctly influence their employability. The implication is that the sampled universities can enhance their students' employability by raising the level of student exposure to EL and CGA. One of the methods by which the universities can achieve this is for the individual bodies that oversee the administration of HE in the two countries to mandate all universities to establish a formal arrangement for students' participation in EL and CGA. They would also need to do a follow-up to ensure compliance and quality. Where universities will not be responsible for students' placement for work experience in all fields of study, it should be a requirement that programmes emphasize the relevance of work experience for future employability so that students can make personal efforts or arrangements to obtain placements.

Students from South Africa were also found to have inadequate exposure to certain other EL activities, such as career workshops, employers' participation in programme delivery or project presentations, excursions and witnessing alumni visit to talk about their career paths and opportunities in their company. These are supposed, real-world activities that are basic to acquiring reflection, self-awareness and opportunity awareness skills. To ensure that students are exposed to these EL activities, universities need to develop stronger collaboration with industries and alumni in such activities as curriculum development and delivery, inviting experts from the industry as guest lecturers for student project supervision, building networks and workshops and training on current skills needs of the industry. Field trips and site seeing should also be made a priority by different departments in the universities.

Insufficient exposure of students to CGA in both countries suggests that the sampled universities may produce graduates who are ignorant of the ongoing disruptions and the skills demand in the labour market. When they have the required skills, such graduates may not be able to confidently convince prospective employers of their possession of such skills. It therefore, becomes a matter of necessity for Higher Education Institutions (HEIs) to ensure the provision of and students' exposure to CGA such as CV preparation targeted at specific applications, skills to succeed in job interviews and skills to write successful written applications. Apart from providing such activities for students, appropriate

measures, such as frequent orientation programmes and incorporation of career education into courses from the first year, should be put in place. Such measures will encourage and create awareness among students on the necessity of CGA for the development of transferable skills needed to succeed in the world of work.

Another policy implication is the effect of country context on students' perceptions of their preparedness for work as revealed in the result of the significant influence of gender and type of university on SPW among South Africa students. This confirms the multidimensionality of employability, which implies that skills and competencies are not the only determinants of students' perception of employability. Such issues are particularly relevant in the South Africa context, which are to be evidence of inherent inequality rooted in the legacies of apartheid. There is a need for policymakers and HEIs to find ways of addressing such social processes to develop graduate employability effectively. In making quantitative comparisons on HEIs between countries, it becomes necessary to acknowledge such prevailing contextual differences.

Limitations and further study

The findings of this research are restricted to the use of perceptions of students who are yet to have real experience of the labour market. Nonetheless, and as Bandura et al. (2003) confirms self-perceptions are often associated with actual behaviour. To ascertain the sustainability (or otherwise) of students' perceptions, future researchers can conduct graduate tracer studies to track and know the labour market outcomes of graduates post university. An additional limitation is that although this study references literature on the quality of EL and CGA, this research did not assess the quality or effectiveness of the EL and CGA strategies used in the universities sampled. Such extension is recommended for future research. In addition, subsequent research should consider the influence of other demographic and contextual factors such as the course of study, age, race/ethnicity, religion and family background that may influence students' perceptions and how to overcome the resulting stereotypes.

Conclusion

In an ever-changing world of work, universities are increasingly being called upon to not only impart content knowledge to graduates, but to ensure that students are adequately engaged with tools and strategies that will equip them with the necessary transferable skills to secure employment (or start their businesses) and be able to meet the demands of the workplace. This study has determined the overall and relative contributions of CGA and EL to students' perceived level of preparedness for work in Nigeria and South Africa after controlling for the possible effects of gender and type of university. More importantly, it assessed the extent to which EL and CGA as means of equipping students with transferable skills are being used in HE in the two countries to prepare graduates for the disruptive labour market. One significant contribution of the study to the existing body of knowledge on SPW is that university students from both countries agreed, after controlling for the effects of gender and type of university attended; that the two strategies (EL and CGA) jointly and individually have significant positive influences on their preparedness for the labour market. Among the two strategies, EL was found to be the highest contributor to SPW in the two countries. Despite the significant positive influences on SPW, further analysis indicated that the universities in the two countries are not adequately exposing their students to these strategies. Students from Nigeria demonstrated adequate exposure only to EL, while those from South Africa demonstrated inadequate exposure to both EL and CGA. However, the quality and the length of work experience offered by Nigerian universities are issues of concern. For example, many of the students who claimed to have been exposed to the work experience were exposed only once. Inadequate exposure of students to these strategies in both countries is a signal that the sampled universities may produce graduates who lack competence and who are unprepared for the challenges of disruption in the job market. When they have the required skills, such graduates may not be able to confidently convince prospective employers of their possession of such skills. In respect of gender and the type of university attended on SPW, there are

significant differences among university students in South Africa, while in Nigeria, none of the two features exerted a significant influence on SPW. A major implication of the results is the need for all HEIs to have an institutionalised arrangement for students' participation in EL and CGA.

References

- Al-Harthi, H.K. (2011). University student perceptions of the relationship between university education and the labour market in Egypt and Oman. *Prospects* 41, 535–551. <https://doi.org/10.1007/s11125-011-9216-4>
- Amenduni, F., Ryymin, E., Maetoloa, K., & Cattaneo, A. (2022). Facing Disruptive Changes with Informal Workplace Learning Strategies: The Experience of European Companies. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.889850>
- Anand, R., Kothari, S., & Kumar, N. (2016). South Africa: Labor market dynamics and inequality. International Monetary Fund Working Papers, Issue 137. <https://doi.org/10.5089/9781498358934.0>
- Bandura, A., Caprara, G. V., Barbaranelli, C., Gerbino, M., & Pastorelli, C. (2003). Role of affective self-regulatory efficacy in diverse spheres of psychosocial functioning. *Child development*, 74(3), 769-782. <https://doi.org/10.1111/1467-8624.00567>
- Bridgstock, R., Grant-Iramu, M., & McAlpine, A. (2019). Integrating career development learning into the curriculum: Collaboration with the careers service for employability. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 56-72 <https://doi.org/10.21153/jtlge2019vol10no1art785>
- British Council (2015). *Student perceptions of employability and inclusive development: South Africa*. https://www.britishcouncil.org/sites/default/files/2.5_student-perceptions-of-employability-inclusivity.pdf
- Claiborne, L., Morrell, J., Bandy, J., Bruff, D., Smith, G., & Fedesco, H. (2020). *Teaching Outside the Classroom*. Vanderbilt University Center for Teaching. <https://cft.vanderbilt.edu/guides-sub-pages/teaching-outside-the-classroom/>
- Dacre Pool, L. (2020). Revisiting the CareerEDGE model of graduate employability. *Journal of the National Institute for Career Education and Counselling*, 44(1), 51-56. <https://doi.org/10.20856/jnicec.4408>
- Dacre Pool, L., Qualter, P. & Sewell, P., (2014). Exploring the factor structure of the CareerEDGE employability development profile. *Education + Training*, 56(4), 303-313. <https://doi.org/10.1108/ET-01-2013-0009>
- Donald, W.E., Ashleigh, M.J., & Baruch Y., (2018). Students' perceptions of Education and employability: Facilitating career transition from higher education into the labour market. *Career Development International*, 23(5), 513-540. <https://doi.org/10.1108/CDI-09-2017-0171>
- Ergün, M., & Şeşen, H. (2021). A Comprehensive Study on University Students' Perceived Employability: Comparative Effects of Personal and Contextual Factors. *SAGE Open*, 11(3). <https://doi.org/10.1177/21582440211036105>
- Fraser, C. J., Duignan, G., Stewart, D., & Rodrigues, A. (2019). Overt and covert: Strategies for building employability skills of vocational education graduates. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 157–172. <https://doi.org/10.21153/jtlge2019vol10no1art782>
- Granger, R. C., & Bazaz, P. (2018). *The Art of Disruption. Creative learning and disruption in the higher education sector*. Creative and Cultural Industries Research Group, De Montfort University, Leicester. <https://tinyurl.com/d6kznakh>
- García-Aracil, A., Monteiro, S., & Almeida, L. S. (2021). Students' perceptions of their preparedness for transition to work after graduation. *Active Learning in Higher Education*, 22(1), 49-62. <https://doi.org/10.1177/1469787418791026>
- Hayes, S., Freudenberg, B., & Delany, D. (2022). Work-ready graduates for Australian small and medium Accounting firms. *Journal of Teaching and Learning for Graduate Employability*, 13(1), 1-19. <https://ssrn.com/abstract=4037066>
- Imhonopi, D., & Urim, U. M. (2018, July 15-29). Youth employment in Nigeria and the impregnable but artificial walls: The urgency of a new and inclusive country [Paper presentation]. XIX World Congress of Sociology, International Sociological Association and Responsibilities, Toronto, ON, Canada. <https://isaconf.confex.com/isaconf/wc2018/webprogram/Paper88311.html>
- Jackson, D., & Tomlinson, M. (2020). Investigating the relationship between career planning, proactivity and employability perceptions among higher education students in uncertain labour market conditions. *Higher Education*, 80(3), 435-455. <https://doi.org/10.1007/s10734-019-00490-5>
- Jackson, D., & Wilton, N. (2017). Perceived employability among undergraduates and the importance of career self-management, work experience and individual characteristics. *Higher Education Research and Development*, 36(4), 747-762. <https://doi.org/10.1080/07294360.2016.1229270>

- Jorre de St Jorre, T., & Oliver, B. (2018). Want students to engage? Contextualise graduate learning outcomes and assess for employability. *Higher Education Research & Development*, 37(1), 44-57.
<https://doi.org/10.1080/07294360.2017.1339183>
- Law B., & Watts A.G., (2003). *The dots analysis*. National Institute for Career Education and Counselling
<http://www.hihohiho.com/memory/cafdots.pdf>.
- Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: what effects do they have on graduate labour market outcomes? *Education Economics*, 17(1), 1-30.
<https://doi.org/10.1080/09645290802028315>
- Monteiro, S., Almeida, L., & Aracil, A.G. (2016). Graduates' perceptions of competencies and preparation for labour market transition: the effect of gender and work experience during higher education. *Higher Education, Skills and Work-Based Learning*, 6(2), 208-220. <https://doi.org/10.1108/HESWBL-09-2015-0048>
- Morris, T. H. (2020). Experiential learning—a systematic review and revision of Kolb's model. *Interactive Learning Environments*, 28(8), 1064-1077. <https://doi.org/10.1080/10494820.2019.1570279>
- Muller, C. (2019). Changes in Labour Market Policy and the Gender Wage Gap among Part-Time and Full-Time Workers in South Africa. *Interdisciplinary Journal of Economics and Business Law*, 8(3), 25-51.
- Ngwane, K. (2017). Work-Integrated Learning as a Fundamental Tool to be used for University-Industry Cooperation: A Case of a Selected Higher Education Institution in South Africa. *Proceedings of 11th International Technology, Education and Development Conference*, 4325-4332.
<https://doi.org/10.21125/inted.2017.1029>
- Ohei, K.N., & Brink, R. (2019). Investigating the prevailing issues surrounding ICT graduate employability in South Africa: a case study of a South African university. *The Independent Journal of Teaching and Learning*, 14(2), 29-42. <https://hdl.handle.net/10520/EJC-1d66cb012b>
- Okay-Somerville, B., & Scholarios, D. (2017). Position, possession or process? Understanding objective and subjective employability during university-to-work transitions. *Studies in Higher Education*, 42(7), 1275-1291. <https://doi.org/10.1080/03075079.2015.1091813>
- Oke, A., & Fernandes F.A.P. (2020). Innovations in Teaching and Learning: Exploring the Perceptions of the Education Sector on the 4th Industrial Revolution (4IR). *Journal of Open Innovation: Technology, Market and Complexity* 6(2), 1-22. <https://doi.org/10.3390/joitmc6020031>
- Okolie, U.C., Nwajiuba, C.A., Binuomote, M.A., Ehiobuche, C., Igu, N.C.N. & Ajoke, O.S. (2020). Career training with mentoring programs in higher education: Facilitating career development and employability of graduates. *Education + Training*, 62(3), 214-234. <https://doi.org/10.1108/ET-04-2019-0071>
- Okolie, U.C., Nwajiuba, C.A., Eneje, B., Binuomote, M.O., Ehiobuche, C., Hack-Polay, D. (2021). A critical perspective on industry involvement in higher education learning: Enhancing graduates' knowledge and skills for job creation in Nigeria. *Industry and Higher Education*, 35(1), 61-72.
<https://doi.org/10.1177/0950422220919655>
- Oliver, B. & Tucker (2020). Editorial, *Journal of Teaching and Learning for Graduate Employability*, 11(1).
<https://doi.org/10.21153/jtlge2020vol11no1art900>
- Oliver, B. (2015). Redefining graduate employability and work-integrated learning: Proposals for effective higher education in disrupted economies. *Journal of Teaching and Learning for Graduate Employability*, 6(1), 56-65. <https://doi.org/10.21153/jtlge2015vol6no1art573>
- Oluwajodu, F., Blaauw, D., Greyling, L., & Kleynhans, E. P. (2015). Graduate unemployment in South Africa: Perspectives from the banking sector. *SA Journal of Human Resource Management*, 13(1), 1–9.
<https://doi.org/10.4102/sajhrm.v13i1.656>
- Østergaard, S.F., & Nordlund, A.G. (2019, December 20). *The 4 biggest challenges to our higher education model – and what to do about them*. World Economic Forum.
<https://www.weforum.org/agenda/2019/12/fourth-industrial-revolution-higher-education-challenges/>
- Pallant, J. (2013). *SPSS survival manual: A step-by-step guide to data analysis using the SPSS program* (5th ed). McGraw-Hill Education.
- Panchanathan, S. (2019, June 16). *How universities can prepare their students for the fourth industrial revolution*. Times Higher Education. <https://www.timeshighereducation.com/opinion/how-universities-can-prepare-their-students-fourth-industrial-revolution>
- Pitan, O.S. (2016). Towards enhancing university graduate employability in Nigeria. *Journal of Sociology and Social Anthropology*, 7(1), 1-11. <https://doi.org/10.1080/09766634.2016.11885696>
- Pitan, O.S. & Adedeji, S.O. (2016). Demographic Characteristics as Determinants of Unemployment among University Graduates in Nigeria. *Africa Education Review*, 13(3-4), 157-171.
<https://doi.org/10.1080/18146627.2016.1224556>

- Pitan, O.S. & Atiku, O.S. (2017). Structural determinants of students' employability: Influence of career guidance activities. *South African Journal of Education*, 37(4), 1-13.
<https://doi.org/10.15700/saje.v37n4a1424>
- Pitan, O.S. & Muller, C. (2019). University reputation and undergraduates' self-perceived employability: mediating influence of experiential learning activities. *Higher Education Research & Development*, 38(6), 1269-1284. <https://doi.org/10.1080/07294360.2019.1634678>
- Pitan, O.S. & Muller, C. (2020). Students' self-perceived employability (SPE): Main effects and interactions of gender and field of study. *Higher Education, Skills and Work-Based Learning*, 10(2), 355-368.
<https://doi.org/10.1108/HESWBL-03-2019-0040>
- Ranking Web of Universities (2023, January). Sub-Saharan Africa <https://www.webometrics.info/en/Sub-Saharan>
- Roberts, J. (2018). From the editor: The possibilities and limitations of experiential learning research in higher education. *Journal of Experiential Education*, 41(1), 3-7. <https://doi.org/10.1177/1053825917751457>
- Seeber, M. (2020). Framework and operationalisation challenges for quantitative comparative research in higher education. *Higher Education Quarterly*, 74(2), 162–175. <https://doi.org/10.1111/hequ.12245>
- Seet, P. S., Jones, J., Spoehr, J., & Hordacre, A. L. (2018). The Fourth Industrial Revolution: the implications of technological disruption for Australian VET. NCVER.
<https://ro.ecu.edu.au/cgi/viewcontent.cgi?article=5824&context=ecuworkspost2013>
- Statista (March 2022). Unemployment rate in Nigeria in the 4th quarter of 2020, by educational level.
<https://www.statista.com/statistics/1119383/unemployment-rate-in-nigeria-by-educational-level/>
- Statistics South Africa (2019). Youth graduate unemployment rate increases in Q1: 2019.
<https://www.statssa.gov.za/?p=12121>
- Teng, W., Ma, C., Pahlevansharif, S. & Turner, J.J. (2019). Graduate readiness for the employment market of the 4th industrial revolution. The development of soft employability skills. *Education + Training*, 61(5), 590-604. <https://doi.org/10.1108/ET-07-2018-0154>
- Tomlinson, M. (2017). Forms of graduate capital and their relationship to graduate employability. *Education + Training*, 59(4), 338-352. <https://doi.org/10.1108/ET-05-2016-0090>
- Tymon, A. (2013). The student perspective on employability. *Studies in Higher Education*, 38(6), 841-856.
<https://doi.org/10.1080/03075079.2011.604408>
- Walker, M. & Fongwa, S. (2017). *Universities, Employability and Human Development*. Palgrave Macmillan
- World Economic Forum (2018). *The Future of Jobs Report 2018*. Centre for the New Economy and Society.
https://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf