UNDERGRADUATE ECONOMICS CURRICULUM AND EMPLOYABILITY SKILLS IN SOUTH AFRICA

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Abstract

Graduates with employability skills are considered as assets by employers because they are dynamic and adapt easily to today’s work environment. Thus, higher education globally is under pressure to produce graduates who are employable and able to continue learning and remain employed. This study examined the extent to which the undergraduate economics curriculum in South Africa equips economics graduates with employability skills. This was achieved through a qualitative approach using a content analysis design. Data analysed from advertisements extracted from the Sunday Times for four consecutive years and data from six undergraduate economics study guides indicated that there was a disjuncture between undergraduate economics skills and those required by the industry. The analysed study guides only cover about 29.4 % of the needed skills in the labour market. It is imperative for higher education institutions to produce employable graduates because evidence demonstrates that employers today do not hire employees solely based on academic qualifications. Recommendations are that there should be an alignment between employability skills required in the labour market and those offered by the academic institutions. Curricula and pedagogy should also be adjusted to enhance graduate skills outcomes.

Keywords: employability skills, undergraduate curriculum, content analysis

Introduction

The debate on employability skills or job readiness skills originated in the twentieth century when questions were raised on the economic value of education (Bacevic, 2014; Gallagher, 2020; Majid et al., 2020; McGunagle, & Zizka, 2020; Nicholas & Handley 2019; Williams 2020). The central debate revolved around the relationship between education and the market. Although research had been done on employability, defining this term is extremely complex and difficult. This might be partly because employability skills encompass so many stakeholders, including parents, students, employers, institutions and the government, each with different definitions based on their perception of these skills. Nicholas and Handley (2019) concurred, adding that employability remains a contested concept in terms of its use in both theory and policy, and throughout the past century has been used as both a predominantly labour supply and labour demand concept. However, Williams (2018) contended that employability is a multi-faceted characteristic of the individuals who must work towards obtaining the skills and attributes which allow them to perform competently in the labour market. To validate this point, Nghia (2019) who also researched around this phenomenon, added that employability can mean a set of achievements, skills understanding and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workplace, the community and the nation as a whole. For Majid et al. (2020) and Nghia (2019) employability is more than getting employment as it also relates to development of one’s attributes and experiences for life-long learning and knowing one’s capabilities. An attribute can be viewed as a quality or feature regarded as a characteristic or inherent part of a graduate. Employers today do not hire solely based on academic qualifications but also
possession of the right soft skills and generic competencies (Heang, et al., 2019). It is important for a graduate to possess flexible skills in order to be hired. In terms of the needs of the employer Majid et al. (2020) pointed out that “employers are looking for well-rounded employees who have employability skills and willing to learn” (p. 37). Hence, flexibility and mobility are the key attributes of an employable graduate. Given this background, the researcher found it worthwhile to investigate employability skills needed by employers of economics graduates. A comparative analysis was undertaken to assess if skills offered in an economics undergraduate curriculum correspond with those advertised by employers.

There has been a paradigm shift from placing much emphasis on high academic achievements to the possession of employability skills. Accordingly, employers today are concerned about finding good employees who not only have basic academic skills but also the abilities of challenging the status quo and the zeal to keep learning (Heang et al., 2019). Therefore, workers must demonstrate that they have the right workplace competencies to enter and compete in today’s labour market (Barman & Das, 2020). These flexible competencies have a lot to do with adaptability and the ability to deal with change and uncertainty in the workplace. This is because the fast-changing business environment and emergence of disruptive technology have created tremendous pressure on organisations to look for a worker who is competitive, for a company to achieve the competitive advantage (Barman & Das, 2020).

This above sentiment is echoed by Heang et al. (2019) who posited that graduates need to be technically prepared and sharpen their employability skills to secure and stay on the job. It is argued that graduates with employability skills do not find it intimidating to embrace and adapt to change. Adaptability can be explained as the quality of being able to adjust to new conditions especially adapting to the current job market demands. Bhagra and Sharma (2018) and Tan et al. (2018) added that employability skills are becoming an essential aspect of graduates’ employability in confronting global market demands. Therefore, education and training should enable graduates to be flexible so that they will be relevant to the workplace (Williams, 2018). To further clarify the concept of employability, Sin and Neave (2014) explained that employability may be viewed as an ongoing process which an individual should keep refining.

Therefore, an employable person should have skills that are transferable or that are flexible, and the person must be willing to learn fast and adapt easily. In this regard, it was imperative to find out if employability skills which are stressed in undergraduate economics curriculum at a South African University of Technology are aligned with the current workplace demands. At this university of technology, work-integrated learning (WIL) is part of its curriculum hence programmes are sandwiched with WIL through internships. It is from this background that this research was conducted to find out if employability skills are embedded in the undergraduate economics curriculum. The research was motivated by the dynamics of the work environment, the emergence of the knowledge economy and the fourth industrial revolution with its high demand on soft skills. The fourth industrial revolution ushered many crucial changes in the developing economies, especially in the context of the job market (Majid et al., 2020).

**Literature Review**

Universities are mandated to produce graduates who are highly skilled, employable and remain employed (Heang et al., 2019; Majid et al., 2020; Rowe & Zegwaard, 2017; Shivoro et al., 2018). Therefore, there is a need for a partnership between industries and Higher Education (HE) institutions. However, research conducted by Akinwale (2020) revealed that clear policies should be formulated to encourage this partnership. Even in the absence of such policies, higher education is expected to address the matter of employability and all academic courses are supposed to include employability skills (Heang et al., 2019). The focus of higher education
should be on producing graduates with flexible skills since many employability skills are universally desirable. In this article, the desirable employability skills in the job advertisements are compared to the course outcomes as stated in the economics undergraduate curriculum offered by the University of Technology (UoT) in South Africa, (see Table 4).

Bacevic (2014) ascertained that in Europe, employability skills are a concern across the entire continent, and they feature in education policies. The discourse has increasingly shifted from the focus on hard skills to an emphasis on flexibility, adaptation, and the capacity to learn throughout the individual’s entire working lifetime, (lifelong learning). Barman and Das (2020) concurred, adding that continuous learning is key to the successful navigation of individuals in the labour markets. Today’s labour market is very dynamic due to technological advancement, hence lifelong learning should be promoted at all costs.

The dynamics of society and the work environment necessitate the development of flexible skills therefore educational providers across all levels are expected to respond to this new employability imperative (Hartmannn & Komljenovic, 2020). For instance, because of the need for skilled workers, the industrial revolution education programmes included technical skills; now the focus is different because the twenty-first century is a knowledge-based economy characterised by the information age which advocates for generic skills. Students should therefore be taught how to learn, not the position of qualifications only, since the work environment is always subject to a variety of uncertainties (Majid et al., 2020).

According to Barman and Das (2020) and Okoye and Nkanu (2020) employability skills are important because employers are more interested in soft skills than hard skills. The labour market is now recruiting employees with flexible skills and people who take the initiative and adapt easily to different environments. Recent research findings suggest that getting a degree and putting a few letters after a graduate’s name is just not enough to land a graduate with employment and remain employed (Majid et al., 2020). What graduates need currently are employability skills because employers currently prefer to hire graduates who can work both independently and as team players. Employers are after an employee who shows a capacity for leadership and demonstrates a willingness to learn and experience new situations and cultures. Today’s economy and society increasingly demand people who can easily adapt to the dynamics of the work environment. The possession of soft skills opens various doors in the work environment. Furthermore, the success of individuals in the fourth industrial revolution economy depends upon soft skills, creativity and imagination. This has resulted in an increasing pressure for all academic courses to include employability development (Tymon, 2013). In this regard, the major role of universities should be to produce graduates with employability skills (Noe & Kodwani, 2018).

The major concern revealed by literature is that graduates lack soft skills though most of them have good qualifications (Majid et al., 2020; Shivoro et al., 2018). The soft skills that are most lacking are: communication skills, teamwork and integrity, (personal transferable skills) which the employers need in this customer-based world (Tyron, 2013). Chalkiadaki (2018) referred to them as core skills and they can be grouped into four categories namely, basic skills, thinking skills, people skills and personal qualities. Universities across the globe are increasingly required to produce highly educated graduates who possess flexible skills (Shivoro et al., 2018). This is the reason why employability skills are increasingly becoming more and more essential in the labour market.

Most companies acknowledge that their success depends on a highly qualified workforce; this in turn requires developing new ways of entering into partnership with external and internal training providers (Slotte’ & Tynjala, 2010). For instance, UK universities are getting quality students because of their ability to produce employable graduates (Boden & Nedeva, 2010). In addition, Misnia et al. (2019) argued that many industries in many nations are now focusing on graduate employability. It is imperative that institutions should be concerned with both the
effectiveness and the efficiency of what they produce. The main focus should be on empowering graduates with flexible skills. In other words, graduates should possess both hard and soft skills as both skills are crucial in the work environment and for personal growth as well. However, it is also of paramount importance to note that industries should also participate in empowering graduates with employability skills.

Graduates with a set of employability skills easily get employment but these skills are lacking in school-leavers, graduates and those already in employment. Industries and universities should therefore work together to prepare graduates for the workplace and provide clear information on career choices and more importantly, equip them with employability skills. This will reduce worker-turnover because employees tend to be loyal to employers who invest in their employability. Additionally, employees also become committed to the organisation, making them less prone to thinking of changing their jobs or moving to another organisation. In this regard, Williams (2018) argued that students with employability skills have the ability to defend opinions, change themselves, be flexible, self-assess, recognise quality work and are confident.

It is of great importance that curriculum designers, take cognisance of this need when designing learning programmes. Curriculum should skill-up graduates to participate in the economic system which is being promulgated by the fourth industrial revolution (Misnia et al., 2019). Graduates therefore, need to be thoroughly prepared because the competition for employment is stiff due to the high increase of students registering for higher education and the dynamicity of the work environment. Thus, continuous learning and the development of generic skills increase one’s employability prospects. Students should be armed with life-long learning skills so that they can easily adapt to any given working environment. In this regard, Misnia et al. (2019) proposed that higher education needs to transform the undergraduate curriculum to accommodate the development of employability skills. This means that employability skills must become a priority of higher education and play a centre stage. However, it must be pointed out that HE cannot address all the needs of the industry, but it can at least try to consider what will make the graduate relevant.

Jackson (2009) observed with concern that industries are no longer eager to train the new graduates, particularly in transferable skills, because most of the graduates are generation Y, who are notoriously ambivalent to commitment and less loyal than their predecessors. Thus, a strong policy is needed to stipulate how employability skills can be developed. This can be achieved if a strong relationship between universities and industries is developed. Higher education institutions need to consult with industries when designing curricula and learning programmes in order to enhance employability skills but not compromising their core duties.

To ensure that graduates are adequately prepared for the workplace, there should be continuous interaction between the industry and the university. This interconnection will keep the two institutions well-informed about what is needed by the dynamic world. As Bacevic (2014) pointed out, the advancement of nations demands that the higher education programmes be shifted towards education for work and through work. The nature of a university of technology also encourages this partnership through its WIL programmes. Industries, however, should specify the proper attributes of the twenty first century worker they are looking for and universities should aim at empowering the graduates with relevant skills. For better results, there should be a component of employability skills in the learning programmes. The sections which follow present the statement of the problem and the research method which the article employed.
Higher education institutions are supposed to produce employable graduates in order to contribute to economic development. However, in South Africa, little is known about the extent to which these institutions produce employable graduates. Researchers who have conducted studies on workplace competencies and employability skills include Barman and Das (2020); Bhagra and Sharma (2018); Heang et al. (2019); Majid et al. (2020); Sin and Neave (2014) and Tan et al. (2018) but no specific study has focused on economics undergraduate course materials and job advertisements. The comparative analysis between employability skills offered in the economics undergraduate programmes and the ones in the job advert makes this research unique. The aim was to inform curriculum designers and instructors to integrate employability skills in the curriculum and pedagogy because institutions are encouraged to produce graduates who are fit for purpose. A shift from production to a service-driven economy has made soft skills increasingly important for people seeking their first employment. Thus, research surrounding employability skills is worthwhile because currently soft skills are in demand across the globe. Given this background the following research aim and research questions inform this research.

**Research Aim and Research Questions**

The aim of this research was to find out if the undergraduate economics curriculum empowered graduates with employability skills. The research responded to the following questions:

1. What type of skills are in job advertisements?
2. What type of skills are in undergraduate economics study guides?
3. How do skills in the job advertisements compare with those in the undergraduate economics study guides?

**Research Methodology**

**Research Design**

The research employed systematic literature review to answer the research questions. The approach fits the research focus because the researcher is able to engage with the data which is available and answer the research questions. In this particular research, the arching problem was the need to find out if the undergraduate economics curriculum equipped graduates with work readiness skills. A qualitative approach was employed to find out employability skills in six undergraduate economics study guides. A content comparative analysis of newspaper job advertisements between 2015 and 2018 was done. The reason for choosing these four years is that they tend to represent the most recent curriculum content. The study therefore adopted a qualitative content analysis to investigate employability skills in the study materials and job advertisements. Lin et al. (2018) and Goel and Khan (2018) described content analysis as the primary message centred methodology which has been the fast-growing technique in the past years. A list of employability skills valued by employers was used as a coding frame. A Google search of The Sunday Times was conducted to identify the skills that are required by employers of economics graduates. The Sunday Times was chosen because it is widely read. Its popularity is evidenced by the fact that the paper is distributed all over South Africa and in neighbouring countries such as Lesotho, Botswana, and Swaziland.

Job advertisement skills were matched against the outcomes stated in six study guides for a three-year undergraduate programme. Purposive sampling was used to select six study guides namely, two first year study guides, two second year study guides and two third year study guides.
guides. The reason for choosing two from each level was the need to focus on study guides that dealt with macroeconomics and microeconomics topics only because these are the main components of economics. Purposive sampling is useful in these instances because it provides researchers with the justification to make generalisations from the sample that is being studied, whether such generalisations are theoretical, analytic or logical in nature (Gaganpreet, 2017). In this particular research paper, the purposive sampling technique was significant because the researcher wanted to make a reliable generalisation focusing on study guides which dealt with macroeconomics and microeconomics only.

A similar strategy was used by Ocholla and Shongwe (2013) who conducted an analytical literature review and the content analysis of recent longitudinal (2009-2012) newspaper scanning of LIS job advertisements to investigate the employability of information studies graduates. This method is also being utilised by other researchers in different disciplines. For instance, Heang et al. (2019) employed the same strategy when they investigated skills required for business graduates in Malaysia.

**Data Collection**

This section illustrated employability skills which were extracted from job advertisements between 2015 and 2018 as well skills extracted from the economics course material in six study guides. Skills extracted from job advertisements are reflected in table 1.

**Table 1**

| Skills reflected in all job advertisements |
|-------------------------------------------|
| Complex problem solver                     |
| Good leadership skills                     |
| Team oriented                             |
| Self-control                              |
| Effective communicator                    |
| A good team player                        |
| A decision maker and a problem solver      |
| A fast learner                            |
| Good written and verbal skills             |
| People management                         |
| Communication skills (written)            |
| Communication skills                      |
| Online marketing                          |
| Team oriented                             |
| Critical thinking                         |
| Problem-solving skills                    |
| Plan, organize and prioritize work        |
| Critical thinking                         |
| Problem solving                           |
| Negotiation                               |
| Communication skills (verbal)             |
| Obtain and process information            |
| Focus                                     |
| Initiative and self-motivation            |
| Quality control                           |
| Strong work ethic                         |
| Data analysis                             |
| Patience                                  |
| Multitask                                 |
| Service orientation                       |
| Initiative                                |
| Leadership                                |
| Social Skills                             |
| Hard worker                               |
| Judgement and decision making             |
| Analytical/quantitative skills            |
| Fast Learning                             |
| Data analysis                             |
| Quantitative analysis                     |
| Active listening                          |
| Flexibility/adaptability                  |
| Focus                                     |
| Leadership                                |
| Ability to learn and adapt                |
| Creativity                                |
| Technical skills                          |
| Coaching                                  |
| Communication                            |
| Good time management                      |
| Negotiation                               |
| Social skills                             |
| Marketing                                |
| Service orientation                       |
| Good decision maker                       |
| Focus                                     |
| Service orientation                       |
| Technical skills                          |
| Creative skills                           |
| Persistence                               |
| Creativity                                |
| Technical skills                          |
| Productivity                              |
| Positive attitude                         |
| Leadership                               |
| Negotiation                              |
| Productivity                              |
| Coaching                                  |
| Good work ethic                           |
| Patience                                  |
| Service orientation                       |
| Negotiation                              |
| Initiation                                |
| Good leadership skills                    |
| Strong work Ethic                         |
| Productivity                              |
| Social skills                             |
| Emotional intelligence                    |
| Dependable                                |

Beatrice NQULUBE. Undergraduate economics curriculum and employability skills in South Africa
The skills reflected in the job advertisements and a summary of the skills which appeared in the 4-year period are presented in Table 1. Skills in the economics undergraduate study guides are presented in Table 2.

### Table 2
**Skills in the Economics Undergraduate Study Guides**

| 1st year skills | 2nd year skills            | 3rd year skills | Skills which appeared in all the study guides |
|------------------|-----------------------------|-----------------|-----------------------------------------------|
| Technical skills | Calculation skills          | Presentation skills | Effective communicator                       |
| Presentation skills | Critical thinking         | Teamwork         | Ability to calculate                          |
| Calculation skills | Communication skills        | Critical thinking | Critical thinking                            |
| Critical thinking | Presentation skills         | Communication skills | Presentation skills                          |
| Effective communicator | Teamwork          | Technical skills | Teamwork                                      |
| Teamwork          | Data analysis              | Plan effectively |                                               |

According to Tables 1 and 2 above, tasks which are given to the students in the analysed study guide course material focus mainly on the following verbs: explain, distinguish, calculate, define, describe and differentiate. Students are not empowered with emotional skills which will cultivate a positive attitude towards their work and colleagues. Soft skills are overlooked in favour of hard skills. This clearly indicates that instructors are not empowering graduates with employability skills. Thinking skills and interpersonal skills need to be promoted. Researchers such as Jones (2010), Noe and Kodwani (2018); Shivoro, Shalyefu and Kadhila (2018) have also urged institutions to produce graduates who possess generic skills so that they will be relevant in the labour market. The overall skills analysis from job advertisements and study guides is presented in Table 3 below.

### Table 3
**Top Ranked Skills in the Job Advertisements and Study Guides**

| Job advertisements Skills which appeared in all the 4 years (17 skills) | Study guides Skills which appeared in all the study guides (5 skills) |
|------------------------------------------------------------------------|---------------------------------------------------------------------|
| Communicate effectively/ written and verbal                           | Communicate effectively/ written and verbal                         |
| Ability to calculate/ qualitative analysis                            | Ability to calculate/ qualitative analysis                          |
| Critical thinking                                                     | Critical thinking                                                  |
| Presentation skills                                                   | Presentation skills                                                 |
| Teamwork                                                              |                                                                     |
| Interpersonal skills                                                  |                                                                     |
| Ability to learn and adapt                                            |                                                                     |
| Positive attitude                                                     |                                                                     |
| Dependability                                                         |                                                                     |
| Decision making                                                       |                                                                     |
| Creativity                                                            |                                                                     |
| Time management                                                       |                                                                     |
| Multitasking                                                          |                                                                     |
| Work ethic                                                            |                                                                     |
| Initiative                                                            |                                                                     |
| Leadership                                                            |                                                                     |
| Self-motivation                                                       |                                                                     |
|                                                                      | Teamwork                                                            |
Data analysis revealed that not all employability skills are emphasised in undergraduate economics curriculum at this selected university. This is consistent with a survey conducted in 2009 by the South African Qualification Authority (SAQA) in partnership with Higher Education South Africa (HESA), which revealed that higher education is not producing graduates with relevant skills as indicated earlier. There is a disjuncture. A number of soft skills are not developed, and teaching and learning is focused on the subject content. It can be argued that content and assessment components are still very loyal to the type of assessment aligned to Bloom’s taxonomy. Majid et al. (2020) and Rowe and Zegwaard (2017) suggest that academic qualifications are important but students must be able to reflect and evaluate these experiences which will lead to the development of self-awareness and make them relevant in the labour market hence the need for the development of soft skills and employability skills. This is supported by Rowe and Zegwaard (2017) who argued that a large number of university graduates are jobless due to lack of experience and lack of employability skills. Furthermore, Heang et al. (2019) also argued that many graduate job seekers found that their skill sets did not match those expected by potential employers.

The South African Qualification Authority (SAQA) study recommended that industries and higher education should work together to produce graduates that are employable and relevant to the economy. Nothing has been done so far to actualise the intended skills match. Conversely, it should be noted that the university curriculum should not be narrowed down to meet the demands of the labour market because the amount of information available increases every year to the point where what you learn today will be out of date within the next two years. Life-long learning should be the central focus, meaning students should be able to learn fast and continue learning because this is a required skill at this point. The same line of thought was echoed by Heang et al. (2019) and Rowe and Zegwaard (2017) who pointed out that employers are more interested in interpersonal skills, intrapersonal skills and flexible skills than academic qualifications or the institution attended. However, the reality is that Bloom’s cognitive domain is currently the primary focus of the most traditional education and is frequently used to structure the curriculum, learning objectives, assessments and activities. Hard skills are still at the centre of the curriculum and instruction, and not soft skills. It is therefore suggested that HE should give employability skills pride of place in the restructuring of the learning programmes. To motivate this Olabanji and Abayomi (2019) suggest that universities in the twenty-first century must develop graduate employability strategies to improve the stock and quality of graduates who are entering the labour market. Therefore, graduates should be developed holistically, paying special attention to employability skills such as personal attributes, workplace skills, applied and core knowledge skills influencing personal, academic and professional performance in work setting (Bhagra & Sharma, 2018). It must however be highlighted that employability skills can only be fully achieved when pedagogical approaches seek to develop soft skills. These approaches are however, beyond the scope of this research.

Additionally, partnerships between universities and industries where the majority of the graduates are employed must be established. In agreement, Guimón (2013) argued that collaboration between universities and industries is critical for skills development (education and training), the generation, acquisition, and adoption of knowledge (innovation and technology transfer), and the promotion of entrepreneurship (start-ups and spin-offs). Suffice to say this can be done with caution because universities cannot structure learning programs to solemnly solve the problems of the industries. Therefore, for optimal results, universities must aim at empowering graduates with generic skills; they should not only teach students subject content but also how to adapt to different work environments. This is supported by Heang et al. (2019) who contended that tacit skills, knowledge, and attitudes are expected to be an integral part of higher education programmes and curricula, to provide soft skills. For better results, industries must assist in defining the term employability, offer employability training and also
write detailed description or informative reports for students when they are on internship. This will assist university instructors when developing a new learning taxonomy for the knowledge-based economy.

The work which was initiated by the International Society for Technology in Education [ISTE] (2007) to combine Bloom’s higher order thinking skills and the constructivist philosophy to describe the types of digital age skills twenty-first century learners need to be considered for skills development as well. The International Society for Technology in Education (2007) identifies six core technology standards developed by the ISTE for the twenty first century students as follows:

- Creativity and innovation,
- Communication and collaboration
- Research and innovation fluency
- Critical thinking, problem solving and decision making
- Digital citizenship
- Technology operations and concepts

These will assist in developing cognitive skills as well as soft skills which most of the graduates are lacking. Williams (2018) suggested four ways of enhancing student employability, work experience, entrepreneurship modules, careers advice and portfolios, profiles and records of achievement. Work experience through internships will assist students with work experience. Universities of technology should, however, have an advantage when it comes to the development of employability skills because of their attachment programmes. At the moment, subject content is the component of teaching and learning which is pushed and gets a centre stage for the development of hard skills and soft skills are overlooked. This is demonstrated in Table 4 of this article.

Data Analysis

Skills reflected in all job advertisements were analysed and compared with skills in the analysed economics undergraduate study guides. Top ranked skills in the job advertisements and economics undergraduate study guides are illustrated in tables 3 and 4.

Research Results

Employability Skills in the Job Advertisements

Skills which appeared in all the four years are as follows: 1) communication and interpersonal skills (written and verbal), 2) team oriented, 3) problem solving, 4) self-motivation, 5) organised/ multitask, 6) hard worker, 7) Quantitative analysis, 8) ability to learn and adapt, 9) time management, 10) decision-making, 11) creativity, 12) positive attitude, 13) work ethic, 14) leadership skills 15) dependable, 16) initiative, 17) interpersonal skills. In the table below, these are matched with those offered by the UoT as stipulated in the undergraduate economics study guides.

Employability Skills in the Undergraduate Economics Study Guides

The skills emphasised in undergraduate economics study guides are as follows: 1) communicate effectively, 2) ability to calculate, 3) critical thinking, 4) presentation skills and 5) teamwork. There is therefore a disjuncture between what the institution offers and the job market requirements. Results of the data analysis revealed that UoT offers five out of the seventeen skills and attributes that are needed in the industry, meaning that graduates are not effectively
prepared for the labour market. According to the analysis, the institution is empowering the graduates with approximately 29.4% of the skills needed for the work environment.

**Table 4**
*Top Ranked Skills in Job Advertisements Matched with those of the Study Guides*

| Top ranked skills identified from job adverts | Match with the study guides |
|---------------------------------------------|-----------------------------|
| Communicate effectively/ written and verbal  | Yes                         |
| Ability to calculate/ qualitative analysis  | Yes                         |
| Critical thinking                           | Yes                         |
| Presentation skills                         | Yes                         |
| Teamwork                                    | Yes                         |
| Interpersonal skills                        | No                          |
| Ability to learn and adapt                  | No                          |
| Positive attitude                           | No                          |
| Dependable                                  | No                          |
| Decision making                             | No                          |
| Creativity                                  | No                          |
| Time management                             | No                          |
| Multitasking                                | No                          |
| Work ethic                                  | No                          |
| Leadership skills                           | No                          |
| Initiative                                  | No                          |
| Self-motivation                             | No                          |

There is a mismatch between what is offered and what is required in the labour market because universities focus on enabling students to complete their baccalaureate degrees and ensure that students master the subject matter of economics as indicated by the requirements they fulfil, courses they complete, content of these courses, and course grades.

It can also be suggested that universities should redesign degree programmes paying attention to employability skills. However, catering for all the skills can be a daunting task for higher education institutions because the work environment is dynamic. What is needed is continuous communication between academic institutions and industries.

**Discussion**

Data analysed from advertisements extracted from the Sunday Times for four consecutive years and data from six undergraduate economics study guides indicate that there is a disjuncture. This is in line with Shivoro et al. (2018) who asserted that there is a mismatch between the skills which the employers require and what is offered by educational institutions. That makes students to be less competent for the jobs resulting in the talent crisis in the global labour market. That implies that ‘graduates need capabilities beyond subject knowledge – interchangeably designated as ‘cross-disciplinary qualifications’ or ‘skills’ or ‘competences’ presented as elements essential for the preparation of employable students’ (Sin & Neave 2014, p. 1448). With the amount of competition for students, universities should not bank on in-house training provided by the employers because most industries are now looking for a finished
product to cut on costs (Jackson, 2009). Thus, institutions must adopt employability as a key 
goal, create connections with the labour market, and provide high quality and relevant programs 
(Sin & Neave, 2014, p. 1451).

The comparative analysis that was undertaken indicates that graduates do not possess 
the skills which the labour market requires. The percentage of the skills offered by one of the 
UoT institutions in South Africa as indicated in Table 3 is very low compared to the demands of 
the industry. Graduates only possess about 29.4 % of the skills needed in the job market. This 
implies that there is no alignment between what is offered by academic institutions and what 
is required by the industry. Consequently, a number of employers are not employing the newly 
qualified graduates because of the skills gap resulting in many graduates remain unemployed 
(Ayonmike & Okeke 2016).

Therefore, there is a great need for higher education institutions and industries to 
collaborate in order to produce graduates with employability skills. Partnership with industries 
is necessary for the institutions to produce graduates with needed skills in the workplace in order 
to bridge the skills gap (Ayonmike & Okeke, 2016). Collaboration will ensure that the needs 
of industries are known to the academic institutions. Organisation can only have the best and 
brightest workforce if academic institutions are able to produce graduates with talent (Barman 
& Das 2020). The main focus of academic institutions should be on competency studies in order 
to produce graduates who are able to lead and confront workplace challenges. This implies that 
academic institutions and industries must not work in silos in order to ensure that the former 
produces graduates with requisite cognitive skills while meeting the employability expectations 
of the latter.

Conclusions and Implications

Data analysis established that higher education is inadequate in equipping graduates with 
skills required in the industry. From the analysis table 1 displays 17 skills which employers are 
looking for while table 2 shows only 5 skills offered by the institutions. The top ranked skills 
in the job advertisements are soft skills, giving a clear indication that employers are looking 
for employees with flexible skills. It is therefore strongly suggested that there must be that 
connectivity between the industry and the institutions of higher learning but this partnership 
should not water down the main focus of universities, which is primarily to equip graduates 
with high quality content knowledge. While it is important for universities to pay attention to 
the specific needs articulated by potential employers, content coverage should remain the main 
paramount focus of the institutions. However, a new paradigm shift in terms of curriculum 
content which incorporates employability skills is needed. It should also be noted that 
universities gain recognition and good reputation when they produce graduates who possess 
employability skills. It is vital therefore to include employability skills in the curriculum 
and pedagogy strategies tailored towards the development of soft skills in order to enhance 
graduate skill outcomes. Employers find soft skills more preferable to hard skills. According 
to the literature reviewed for this article as well as job advertisements, employers look for 
graduates with employability skills, but the labour market is witnessing a serious shortage in 
this regard hence a lot of graduates remain unemployed. This actually defeats the purpose of 
being educated because it is a general belief that acquiring a degree is a passport to a good well-
paying job.
References

Akinwale, Y. O. (2020). Exploratory analysis of university-industry interactions: The case of Nigerian oil sector. International Journal of Education Economics and Development, 11(2), 149-164. https://doi.org/10.1504/IJEED.2020.106580

Ayomike, C. S., & Okeke, B. C. (2016). Bridging the skills gap and tackling unemployment of vocational graduates through partnerships in Nigeria. Journal of Technical Education and Training, 8(2), 1-11. https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/1254

Bacevic, J. (2014). (Education for) work sets you free: ‘employability’ and higher education in former Yugoslavia and its successor states. European Journal of Higher Education, 4(3), 281-296. https://doi.org/10.1080/21568235.2014.916534

Barman, A., & Das, K. (2020). Whether B-Schools Care Spencer & Spencer’s workplace competency framework in the 21st century? Revalidating through reliability. International Journal of Advanced Science and Technology, 29(11), 2910-1920.

Bhagra, A., & Sharma, D. K. (2018). Changing paradigm of employability skills in the global business world: A review. IUP Journal of Soft Skills, 12(2), 7-24.

Bhanugopan, R., & Fish, A. (2009). Achieving graduate employability through consensus in the South Pacific island nation. Education+ Training, 51(2), 108-123. https://doi:10.1108/00400910910941273

Boden, R., & Nedeva, M. (2010). Employing discourse: Universities and graduate ‘employability’. Journal of Education Policy, 25(1), 37-54. https://doi.org/10.1080/02680930903349489

Chalkiadaki, A. (2018). A systematic literature review of 21st century skills and competencies in primary education. International Journal of Instruction, 11(3), 1-16. https://doi.org/10.12973/iji.2018.1131a

Gallagher, S. R. (2020). The future of university credentials: New developments at the intersection of higher education and hiring. Harvard Education Press.

Goel, R., & Khan, M. (2018). Content analysis of coverage on Swachh Bharat Mission in Hindi Newspapers. International Journal of Education and Management Studies, 8(1), 42-47. https://www.questia.com/library/journal/1P4-2159152675/content-analysis-of-coverage-on-swachh-bharat-mission

Griesel, H., & Parker, B. (2009). Graduate attributes: A baseline study on South African graduates from the perspectives of employers. Higher Education South Africa & the South African Qualification Authority. https://www.saqa.org.za/docs/genpubs/2009/graduate_attributes.pdf

Guimón, J. (2013). Promoting university-industry collaboration in developing countries (Policy brief). The Innovation Policy Platform. https://www.researchgate.net/publication/278961909_Promoting_university-industry_collaboration_in_developing_countries_Innovation_Policy_PlatformOECD_and_World_Bank

Hansen, W. L. (2001). Expected proficiencies for undergraduate economics majors. The Journal of Economic Education, 32(3), 231-242.

Hartmann, E., & Komljenovic, J. (2020). The employability dispositif, or the re-articulation of the relationship between universities and their environment. Journal of Education and Policy, 1-26. https://doi:10.1080/02680939.2020.1725983

Heang, L. T., Ching, L. C., Mee, L. Y., & Huei, C. T. (2019). University education and employment challenges: An evaluation of fresh accounting graduates in Malaysia. International Journal of Academic Research in Business and Social Sciences, 9(9), 1061-1076. https://doi:0.6007/IJARSS/v9-i9/6396

International Society for Technology in Education. (2007). National educational technology standards for students. http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm

Jackson, D. (2009). An international profile of industry-relevant competencies and skills gaps in modern graduates. International Journal of Management Education, 8(3), 29 -59.

Lin, T.J., Lin, T., Potvin, P., & Tsai, C. (2018). Research trends in science education from 2013 to 2017: a systematic content analysis of publications in selected journals. International Journal of Science Education, 41(3), 367-387. https://doi.org/10.1080/09500693.2018.1550274
Majid, M. Z. A., Hussin, M., Norman, M. H., Kasavan, S. (2020). The employability skills among students of public higher education institution in Malaysia. *Malaysian Journal of Society and Space, 16*(1), 36-45. https://doi.org/10.17576/geo-2020-1601-04

McGunagle, D., & Zizka, L. (2020). Employability skills for 21st-century STEM students: The employers’ perspective. *Higher Education, Skills and Work-Based Learning, 10*(3), 591-606. https://doi:10.1108/HESWBL-10-2019-0148

Misnia, F., Hasnaa, F., Mahmooda, F., & Jamil, R. (2019). The effect of curriculum design on the employability competency of Malaysian graduates. *Management Science Letters, 10*(2020), 909–914.

Nghia, T. L. H. (2019). *Building soft skills for employability: Challenges and practices in Vietnam*. Routledge.

Nicholas, J. H., & Handley, M. H. (2019). Employability development in business undergraduates: A qualitative inquiry of recruiter perceptions. *Journal of Education for Business, 95*(2), 67-72. https://doi.org/10.1080/08832323.2019.1604483

Noe, R. A., & Kodwani, A. D. (2018). *Employee training and development* (7ed). McGraw-Hill Education.

Ocholla, D., & Shongwe, M. (2013). An analysis of the library and information science (LIS) job market in South Africa. *South African Journal of Libraries and Information Science, 79*(1), 35-43. https://www.researchgate.net/publication/259646947

Okooye, K. R. E., & Nkanu, S. M. (2020). Employers’ identification of skills needed by technical and vocational education graduates for industrial work effectiveness. *Journal of Education, Society and Behavioural Science, 33*(2), 32-41.

Olabanji, O. E., & Abayomi, A. A. (2019). Technical education and graduates’ employability in Nigeria. *Islamic University Multidisciplinary Journal, 6*(4), 115-119.

Ozcan, P., & Eisenhardt, K. M. (2009). Origin of alliance portfolios: Entrepreneurs, network strategies and firm performance. *Academy of Management Journal, 52*(2), 246-279.

Rowe, A. D., & Zegwaard, K. E. (2017). Developing graduate employability skills and attributes: Curriculum enhancement through work-integrated learning. *Asia-Pacific Journal of Cooperative Education, 18*(2), 87-99.

Sharma, G. (2017). Pros and cons of different sampling techniques. *International Journal of Applied Research, 3*(7), 749-752.

Sin, C., & Neave, G. (2014). Employability deconstructed: Perceptions of Bologna stakeholders. *Studies in Higher Education, 41*(8), 1447-1462. https://doi:10.1080/03075079.2014.977859

Slotte, V., & Tynjälä, P. (2003). Industry–university collaboration for continuing professional development. *Journal of Education and Work, 16*(4), 445-464.

Shivoro, R., Shalyefu, R., & Kadhila, N. (2018). Perspectives on graduate employability attributes for Management Sciences graduates. *South African Journal of Higher Education, 32*(1), 216-232.

Tan, O. K., Cham, T. H., & Chuah, S. Y. (2018). Future technical professionals’ interrelationship on personality, self-efficacy and entrepreneurial intention. *The Journal of Social Sciences Research, 6*, 1018-1023. https://ideas.repec.org/a/arp/tjssr/2018p1018-1023.html

Tymon, A. (2013). The student perspective on employability. *Studies in Higher Education, 38*(6), 841-856.

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