How TVET Teachers Foster Employability Skills: Insights from Developing Countries

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Abstract
Employability skills are a set of skills that when developed make graduates more likely to gain employment in their chosen careers. Despite the diversity views in the literature about what employability skills are, there appears to be general agreement that employability skills are important. However, there are concerns about whether Technical and Vocational Education and Training (TVET) graduates in developing countries are developing these skills and the onus falls upon TVET teachers to ensure they do so. In this qualitative study, 35 TVET teachers from 19 developing countries were interviewed to learn how TVET teachers foster employability skills of learners. Data collected were transcribed, coded and analyzed using thematic analysis. Findings show that the well-published notion that TVET teachers in many developing countries do not make efforts to impart employability skills to their students could be brought into question. Results of this study show that TVET teachers use various techniques to foster employability skills in their TVET learners. Continuous professional development of TVET teachers to ensure quality graduate outcomes is recommended.

Keywords: Employability skills, TVET, Graduate employability, Labour market

Introduction

Technical and Vocational Education and Training (TVET) institutions are designed to produce skilled graduates for labour markets. TVET plays a vital role in the provision of human resources to tackle ever-increasing demands of labour market (Dobbins & Busemeyer, 2015). However, employers expect that TVET graduates possess adequate skills and knowledge and be fundamentally motivated to discharge their duties when employed. The high demand for skilled workers by employers has urged TVET institutions in many countries to restructure their programmes to concentrate on imparting saleable skills required by employers to the learners (Deissinger & Gonon 2016; Okolie, Nwosu & Mlanga, 2019). TVET is essential for the advancement of technology, society, and the economy; it is, therefore, significant in the development of a nation's industrial revolution (Hall & Soskice, 2001). Due to the importance of TVET, some developed countries have integrated TVET closely into the general education system (Thelen, 2004; Trampusch, 2014). In some developed countries like Germany, there is a strong emphasis on a dual system of TVET (a combination of school-based training with work-based training), which is highly regulated and supervised by labour market parties (trade unions and employers) of their states (Hall & Soskice, 2001).

TVET is a well-planned programme of courses and learning experiences that offer the learners with an opportunity to acquire relevant skills to either get paid employment or become self-reliant to create jobs and contribute to the development of society (Okolie, Elom, Osuji, & Igwe, 2019). TVET develops skilled manpower through diversified self-employment-oriented courses to meet the requirements of the unorganized sector. UNESCO (2011: n.p.) defines TVET as "those aspects of the educational process involving, in addition to general education,

the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding, and knowledge relating to occupation in various sectors of economic life".

TVET is part of a lifelong learning programme, which means that it can take place at the secondary, college, and tertiary education levels. In many countries, particularly in developed nations, TVET is offered at the secondary school or college levels only, however, in Nigeria, TVET is offered in technical colleges, polytechnics, colleges of education (technical) and up to Ph.D level in many public universities. In some countries, TVET includes work-based learning and continuing training, as well as professional development training leading to professional qualifications, while in Nigeria, TVET is particularly designed to train technicians at the sub-professional level and technical teachers to teach at technical colleges and higher education institutions (Okolie, Igwe & Elom, 2019; Okolie, 2014). Overall, TVET facilitates the acquisition of a wide range of skills in demand by the labour market. It supports basic academic and life skills that enable learners to achieve high educational standards, leadership, and preparation for transition to labour market.

The Challenge

There is evidence that in spite of the skills that TVET aim to offer graduates, the majority of TVET graduates in many developing countries are unemployable and lack employability skills to be employed (e.g., Akerele, 2007; Ayonmike, 2014; Yusuf & Soyemi, 2012; Yangben & Seniwoliba, 2014). According to Ayonmike (2014: 87) lack of skills among TVET graduates *"*could be explained by the persistent petitions by the labour market that TVET graduates do not possess employable skills". This outcry from the employers according to Ayonmike (2014) could be traced to poor implementation of the TVET curriculum by TVET teachers. In Kenya for instance, Ligami (2018: n.p.) states that *"*technical and vocational education and training (TVET) institutions in Africa are still too theoretical and are not providing the real skills needed by the employers". According to TVET experts that spoke during the Sixth African Higher Education Week and Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) Biennial Conference, held in Nairobi, Kenya, in 2018, employers consistently claim that many TVET graduates do not have practical skills needed for employment. While this study acknowledges that employers are most likely to be unhappy about skill levels of TVET graduates generally, it is important to note that; (1) over-emphasis on theory and neglect of practical in the technical areas, and (2) the limited development of non-technical skills (also known as key, soft, core, essential or employability skills - the attributes that are often more difficult to teach and to learn) could be contributing factors to lack of technical skills to do a job and deficits in relation to employability skills.

Several TVET studies have shown that a high number of TVET graduates lack saleable skills, due to their institutions' over-dependence on theory-based TVET programmes instead of practical exercises (e.g., Badenhorst & Radile, 2018; Botchie & Ahadzie, 2004). Other studies have blamed the challenging situation on poor links between TVET institutions and industry (e.g., Badenhorst & Radile, 2018; Dasmani, 2011; Osidipe, 2017), while majority of TVET studies have blamed low skilled TVET graduates on poor quality of TVET teachers (e.g., Dasmani, 2011; Kennedy, Wanami, & Kerre, 2018). It is on this backdrop that this study investigated how TVET teachers in developing countries (Africa, Asia, South & North America, and the Middle East) foster employability skills in the process of teaching and learning. The study adopted a qualitative approach to learn how TVET teachers facilitated the acquisition of a wide range of employability skills in demand by the labour market through their TVET programmes.

Employability Concept

Employability is about what employers look for in fresh graduates. It has become a key subject of debate in many countries (Okolie, Nwosu & Mlanga, 2019). According to Yorke (2006) employability is a set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations. Employability benefits the employer, the workforce, the community, and the economy. Several studies have investigated how TVET reforms, redesign, and implementation can enhance employability, while others have investigated how government policies, employers and academics contribute to the burning issue of employability of graduates (e.g., Knight, 2001). Yorke (2006) noted that employability can be approached from two aspects; one relates to employability as the ability of graduates to secure jobs after graduation, while the second aspect is about developing the attributes, qualities, and skills that are very vital to employers, which enable graduates to get jobs. This identifies the need for all educational institutions, particularly, TVET institutions to develop mandatory academic courses strictly for enhancing employability.

In many developed countries, graduates are made to complete a 'general accepted' set of attributes, which prepare them for employers. A large percentage of institutions particularly those of higher learning have introduced employability skills in their curriculum and they assess students through work-based related learning criteria (Kalfa & Taksa, 2015). In developed countries like New Zealand, the National Qualifications Framework in consultation with education and industry specialists has been further developed to enhance employability of graduates (Spronken-Smith et al., 2015). Also, in developing countries like South Africa, the National Qualification Framework includes critical and specific skills, which contribute to graduates' development and development of the economy (Harvey & Bowers-Brown, 2004). These instances show that education authorities in many countries make efforts to enhance the employability of graduates. However, while there is evidence about various efforts of education authorities to ensure employability of graduates (Kalfa & Taksa, 2015; Spronken-Smith et al., 2015), little is known about the efforts of TVET teachers toward ensuring that the students develop the employability skills. There are little or no findings of how TVET teachers impart employability skills that the employers demand of the learners. This is the gap that this study intends to address.

Employability skills that employers demand

The relationship between TVET and the demand for skills has gained high-priority concern among scholars recently (Kleibrink, 2013). Evidence has shown that there is a change in the skills demand of employers in the past few decades (see, e.g., Pumphrey & Slater, 2002). For instance, Walters (2004) noted that while technical skills are important because of the new knowledge economy, they are not the only skills that employers demand. There is considerable evidence within the literature to indicate that employers value employability skills and in addition to technical skills, graduates with generic skills are in high demand (De Weert, 2011; Mourshes et al., 2012; Ogier, 2009).

Employability skills according to Cassidy (2006) are a set of non-technical vital skills that involve the development of knowledge, expertise, and mindset that is needed to succeed in the modern labour market. York (2006) states that employability skills are vital for the career progress of graduates into the labour market. Evidence in the literature shows that acquiring employability skills enable new graduates to easily get paid employment and be able to make immediate contributions to the organizations that recruited them (Athiyaman, 2001). Table (see appendix) shows the lists of the employability skills that the labour market demands based on

extensive search in the literature. Each of the skills is defined with the descriptive behaviours. The table presents a summary of employability skills that labour markets demand and which TVET graduates are expected to possess in addition to technical skills. All the 24 employability skills are regarded as essential by employers as evident in the literature. This study acknowledges that it is difficult to categorically state the actual employability skills that every employer wants; however, the views of the majority of employers have been captured in previous studies highlighted in the table.

Theoretical Framework

This study builds on human capital theory (HCT) propounded by Schultz (1961) and developed by the Nobel Prize-winning economist Gary S. Becker in his seminal work on the economics of employer-provided training of 1962 and 1964. The HCT upholds that education or training offers functional knowledge and skills to the learners, which enable them to improve on their productivity and income (Becker, 1964). Becker was of the view that human capital is about investing in humans through education or training for maximum production. HCT upholds that through education or training, the trainees are imparted with context-specific skills as well as general skills required to be productive. Schultz (1961: 1) states: "I propose to treat education as an investment in man and to treat its consequences as a form of capital. Since education becomes a part of the person receiving it, I shall refer to it as human capital." According to Spence (1973), education may simply be a market signal of the potential productivity of a worker since there is hardly any other way for firms to determine the productive attributes of workers. The HCT has remained the principal theoretical construct that is used for understanding the human capital investment, both from the perspective of individuals and firms (Bassi & McMurrer, 2006).

As Tomlinson (2017: 341) states, "human capital refers to the knowledge and skills which graduates acquire which are a foundation of their labour market outcomes. This form of capital bears the closest relation to skills approaches given that it is concerned with what and how graduates can make connections between their formal education and future employment outcomes." It refers to an individual's skills, education, abilities, and knowledge that have a direct impact on the person's economic and social activities (Bohlander et al., 2001; OECD, 2001). Thus, human capital development is an action that improves the quality of employees. Human capital acquired through education inculcates both social and technical skills in graduates which enables them to be fit for the world of work (Marimuthu et al., 2009). The human capital is the central point in every organization, a key to an individual's employability and earning capacity, and an important variable that decides a nation's competitive success and profitability in the modern labour market (Grobler et al., 2002).

This study focused on how TVET teachers in developing countries foster employability skills of TVET graduates. Based on the literature and theory reviewed, the study, therefore, formulated the following research questions:

RQ 1: How do TVET teachers impart employability skills to learners during teaching processes?

RQ 2: What innovative strategies do TVET teachers adopt to impart employability skills to learners?

Methodology

This study adopted a qualitative approach for data collection. The first part was the use of a qualitative questionnaire that was designed using Google Form (an online survey tool) that

targeted TVET teachers from developing countries. The link to the online qualitative questionnaire was shared on UNESCO-UNVOC Online Forum – the world's largest TVET online forum. The use of a qualitative questionnaire for data collection has been used successfully in previous studies (e.g., Gibbons, 2018; Ribeiro, Caetano & Menezes, 2016). Also, the use of online forums for the collection of research data has been supported by many scholars (e.g., Andrews, Nonnecke, & Preece, 2003; Cho & LaRose, 1999; Couper, 2000; Smedley & Coulson, 2018). According to Cummings, Sproull, and Kiesler, (2002), online forums can play an important role in assisting individuals to share important ideas, such as research ideas, or management of various challenges. The link to the qualitative questionnaire was shared multiple times on the TVET forum within a period of 11 weeks.

The process brought in a total of 69 responses from 30 countries. The online qualitative questionnaire was designed to capture the intending participants' brief information such as gender, occupation, age, years of teaching experience and location. The invitation specifically requested short biographies and email addresses of interested participants. The major reason for requesting their biographies was to learn whether the intending participants are qualified and experienced to provide relevant information regarding the purpose of this study. Also, the reason for requesting their email addresses was to easily approach the most qualified TVET teachers for interviews.

The study sample

Out of the 69 TVET teachers that responded to the online questionnaire, 34 were eliminated. As the focus of the study was on developing countries and TVET teachers with more than 10 years of experience, the responses from 22 teachers from developed countries and the 12 teachers from developing countries with less than 10 years of experience were removed from the data set. The responses of the remaining 35 TVET teachers were used for final data analysis. They were drawn from the following 19 developing countries; Afghanistan (3), Argentina (1), Bangladesh (2), Bhutan (2), Botswana (2), Brazil (2), Colombia (2), Cambodia (2), Ghana (2), Gambia (2), Ethiopia (2), Haiti (1), India (3), Iran (1), Kenya (2), Malaysia (1), Nigeria (3), Uganda (1), and United Arab Emirates (1). The 35 TVET teachers included; 23 males and 12 females between the ages of 34-59 years. 27 of them had above ten years of work experience in TVET institutions (college and tertiary education), while 8 of them had above ten years of work experience in both TVET institutions and Industry.

Data Collection and Analysis

In order to triangulate the data obtained from the online qualitative questionnaires (Denzin, 2009) interviews were conducted with participants that permitted us. The first step was contacting the respondents of the online qualitative survey from the 19 developing countries to participate in a phone or Skype interview. The goal was to explore issues that were generated through the online qualitative survey responses. Efforts were made to ensure that the same questions that formed the online qualitative survey were asked during the interviews, although, there were further clarifications to enable smooth interactions between the moderator and respondent. This process led to 13 telephone and 5 Skype interviews (among the 35 respondents from 19 developing countries whose responses were used for final data analysis). The follow-up interviews were semi-structured and were designed to ensure that the interviewees delve deeper into their personal experiences (Robson, 2002) about how they fostered employability skills during teaching and learning processes. The use of the qualitative research approach in this study enabled the capture of a rich and comprehensive image of the situation and allowed the participants to share their experiences in detail (Ary, Jacobs, & Sorenson, 2010). The

anonymity of the respondents was assured; they were given assurance that they can freely decline their participation in the study at any time unless data analysis was completed.

The Skype interviews lasted between 32 to a maximum of 47 minutes, while the phone interviews lasted between 25 minutes to a maximum of 41 minutes. The first names of participants (online qualitative survey respondents and interviewees) were changed for reasons of anonymity. The changed first names were used to present quotes during data analysis. The interviewees and qualitative questionnaire respondents gave consent for the conversations to be recorded electronically. Every recorded conversation was transcribed verbatim into written form to enable coding of the responses and to conduct thematic analysis.

Coding was done manually and multiple times to identify the themes that emerged based on issues that repeatedly emerge during the interviews. The interview questions were carefully presented to the interviewees to enable them to express their views and share their personal experiences freely leading to obtaining rich information from them on the purpose of this study. The process of transcription enabled familiarizing with the data collected (see. e.g., Braun & Clarke, 2006). Also, the simple steps prescribed by Braun and Clarke (2006) to carry out a thematic analysis, which include, (i) familiarizing with the data, (ii) assigning preliminary codes to the data in order to describe the content, (iii) searching for patterns or themes in the codes across the interviews, (iv) reviewing the themes, (v) defining and naming themes and (vi) producing the report were carefully adopted.

Findings

The analysis focused on three key themes that emerged from the thematic analysis, which include: (i) encourage learning rather than teaching, (ii) one-on-one vocational counseling, and (iii) motivation for non-dependence on white-collar jobs.

Encourage learning rather than teaching

Significantly, all the respondents provided evidence that they had good knowledge of the subject of the research and demonstrated adequate experiences about helping TVET learners develop employability skills. The respondents pointed out that employability skills cannot be fostered through classroom or on-the-work teaching alone, rather through encouraging learning. They confirmed that many TVET institutions in developing countries have not adequately improved in the teaching of TVET courses because the majority of the institutions predominantly engage students in more theoretical teachings instead of more exposure to life skills learning. One of the TVET teachers from Colombia explained:

> *I do my best to encourage more learning rather than more teaching. I simply integrate a life skills-based education in my teaching. I make sure that my students can make quality presentations, which helps them to develop communication skills* (Matías).

Matías's teaching techniques were in line with Ugyen's practices during teaching and learning processes in Bhutan. Ugyen felt that despite the practical nature of TVET programme, learners cannot acquire relevant skills if teachers do not constantly use innovative teaching techniques to encourage students to construct learning themselves:

> *I adopt the problem-based learning approach to ensure that the students are seriously engaged in finding out solutions to problems on their own. I simply act as their coach or a guide while they construct learning; although, the curriculum has not adequately supported this* (Ugyen).

Many of the interviewees pointed out that many TVET courses were too theoretical, which made the teachers adopt traditional teaching methods that do not allow learners to construct learning and develop employability skills. They encouraged TVET institutions to promote the

use of inquiry-based active learning, which can occur during collaborative group interactions that can result in valuable outcomes. The excerpt below explains a technique used by a Kenyan TVET expert to foster employability skills:

> *I adopt the learning-by-doing method. For example, during welding and fabrication practical exercises, I make sure that the attention and interests of learners are drawn to the major projects. They jointly do the work after understanding the safety regulations while I direct them. After the exercise, I ask them to write down their input into the execution of the project. This helps them to continuously reflect on the things they've done, which eventually become part of them* (Alhaadi).

The instructive narrative by Alhaadi's technique in Kenya draws out three important points: the first is a need to make TVET learners learn on their own instead of teaching them to learn or the teacher acting as the transferor of knowledge. The second point is a need to make the learners work together, which enables them to develop effective collaboration and teamwork skills. The third important point is making learners reflect on what they have done, learned or what they have been taught by the teachers. The majority of respondents pointed out that making the learners continuously reflect on what they'd learned required teachers to use innovative approaches to help learners acquire employability skills. These approaches as narrated by Alhaadi, surely enabled TVET learners to understand the reality of the job market. It helped learners to learn that being competent in the job isn't enough; that one needs other important skills to survive. The benefits of making TVET learners reflect were clearer in the excerpt from a Ghanaian TVET expert:

> *As a metal and fabrication instructor, I predominantly form my students into smaller groups to help them develop teamwork skills…. Also, I ask students to undertake reflective writing by thinking critically about what they learned, what they did, why they did what they did, what went well and not. What do they need to improve and overcome future challenges or undertake a similar task in the future? This has helped my students to a large extent to improve their employability skills* (Kwaku).

Participants affirmed that they presented TVET students with opportunities to reflect on key challenges that they encountered working as a team and to manage their individual and cultural differences:

> *I regularly ask my students to undertake peer review of their team members' performances, the team strength, and weaknesses. This enables them to develop analytical, communication, presentation, self-confidence skills among others which are in high demand by labour market* (Diego).

In line with Diego's narrative of his technique in Colombia, many respondents confirmed their efforts in assisting their students to develop questioning skills which lead to developing critical thinking skills. A TVET teacher from Uganda commented:

> *I ask my students to think critically by asking or using the why questions of what is the issue? When did this problem start? Who or how did it develop? Where did it develop? Why this issue? How can it be resolved? What if? So What? And what next? These are questions that I make my TVET students frequently ask for almost any topic or case to develop critical thinking skills* (Adroa).

The respondents noted that the purpose of TVET is to provide learners with a specific set of technical skills that lead to competency related to a particular job function. In this respect, if a teacher intended to develop a learner to become a plumber, for instance, the teacher would

expect the learner to have skills to fit and repair pipes. The interviewees pointed out that achieving this may be difficult if TVET teachers continuously use a teacher-centered teaching approach that supported- the delivery of instruction to large classes because they are considered cost-effective in developing countries' education systems. The views of the respondents were in agreement with Goldstein (2016) that the traditional teacher-centered learning, which is popularly used by teachers, promoted passive learning, and as a result, promotes unsustainable results. Goldstein (2016) further states that students that often lose interest in learning do not gain significant knowledge and skills. Such students often do not remember much of the course content soon after examinations for promotion to the next class or level are over.

One-on-one vocational counseling

As the interview participants pointed out, vocational counselling is a vital practical process due to the implications it has in education, work, economy, health, culture, trade, and services. The majority of TVET teachers interviewed confirmed that they offer students some current information regarding making realistic career choices. Although, they pointed out that they face many difficulties in providing one-on-one vocational counseling to TVET learners due to the large number of students per teacher. In Malaysia, a TVET teacher used proactive means to help his students to improve employability skills. :

> *I am aware that for an individual to choose a certain vocation/career, he/she must have an interest, ability, and aptitude, as well as the potentials to cope with the chosen vocation. I offer vocational counselling to my students particularly when they visit my office. I motivate them to work harder by making them understand what they stand to gain if they perform well as TVET scholars* (Zikri).

The respondents pointed out that majority of newly admitted TVET students had difficulties understanding the careers that TVET could lead to after graduation. For instance, one of the Nigerian TVET teachers interviewed confirmed that students who enroll in TVET departments of Nigerian universities were those that were mostly rejected by other popular departments. When such students were admitted into the TVET department, they spent years battling with understanding the career paths that TVET leads to. This according to the respondent was why some of the TVET teachers engaged students in one-on-one free vocational counseling to assist the students to understand the careers paths and how to develop employability skills that the employers demand:

> *Once in a while, I independently organize TVET career talk and interactions with my students, during which we discuss the importance of developing interests and love for their chosen vocations. This has assisted some of my students in the last 10 years. Although, my institution has not invested adequately in this direction* (Abeo).

As a TVET teacher from Bangladesh explained, through vocational counseling, she has supported TVET students to understand their career path and used the acquired career information to become useful and active members of the communities. She further explained that TVET learners had vocational propensities which she had consistently directed and harnessed through effective vocational counseling:

> *Most times, I attend major TVET conferences and workshops with one or two of my students where they can learn career paths that TVET graduates can follow. Many of my students have made real contacts with industry experts through this means – contacts that facilitated their smooth transition to the industry (Abdur).*

A large number of respondents pointed out that in many developing countries, there seems to be a 'disconnect' between TVET system which is concerned with the supply of workforce, the general education system and the world of work. This 'disconnect' was responsible for the high-level mismatch between what TVET learners are taught and the reality of life and work that await graduates. In Botswana for instance, a TVET teacher worked hard to address this mismatch by making learners visit real workplaces for a work-related experience instead of depending on classroom work alone:

> *I have used newspaper testimonies of TVET graduates who have established their own small and medium scale enterprises to serve as taking off points for my students' learning. I have carried out role-plays with my students and used simulated work environments besides visiting real workplaces for a work-related experience* (Atith).

TVET teachers in this study demonstrated that through one-on-one vocational counseling and guidance, TVET students were better motivated to devote their interests in acquiring employability skills that employers require. The practices and strategies used by the respondents and interviewees align with the human capital theory (Schultz, 1961) which this study adopts.

Motivation for non-dependence on white-collar jobs

A majority of the interviewees shared brief experiences about their efforts in motivating their students to be self-reliant instead of hoping for white-collar jobs after graduation. They agreed that due to the predominant use of traditional teacher-centered methods in teaching TVET courses, many TVET students believed that they were trained to work in air-conditioned offices after graduation. In Nigeria where this sort of challenge is prevalent, a TVET teacher had been striving over a decade to achieve positive changes:

> *Before I became the head of the TVET department of my university, we usually run the TVET programme as a 65% theory and 35% practical. Students continuously struggled to pass the theoretical aspects of the courses with little or no interest and zeal in practical courses. This is because; everybody wants to acquire a certificate with little or no skills. I didn't blame them because; the government and our society are in need of certificates instead of skills. I quickly changed the situation the moment I became the head of the department. I made sure that students' graduation must be based on practical experiments, like construction or production of an object instead of writing a long thesis/ dissertation as it had been practiced in many Nigerian universities TVET departments* (Adaeze).

Adaeze's narrative is important because many of the interviewees confirmed that a vast majority of TVET students are interested in acquiring certificates instead of skills because the government recognizes certificates more than skills. Abeo from Nigeria acknowledged the same challenge and explained that TVET graduates who ought to be more interested in skills that can allow them to be self-reliant, set up small enterprises and create new jobs to employ others have recently become obsessed about certificates acquisition leading to work in air-conditioned offices:

> *I take my students to small and medium scale firms like farms, furniture, and upholstery, metal works and fabrication, bricklaying and block industries among others that are owned and run by young TVET graduates who are entrepreneurial. This makes my students change their views about searching for white-collar jobs after graduation. But overall, I feel that TVET programs are currently run based on the way the curriculum is designed* (Abeo).

However, Reyansh's initiative in India was highly commendable because he made TVET students shun the notion that graduates are not meant to do manual labour. This is in line with the findings of a previous study by Okolie (2014) that the majority of graduates believed that it is degrading for them to be engaged in manual labour or to work with their bare hands. Reyansh's strategy is highly a motivating factor for TVET students because; they will understand that they can earn more as they work harder with their bare hands:

> *I encourage my students to run projects independently and I aid them to adopt innovations to bring out ingenuity. I make my students see the need to be financially independent and be their own boss instead of relying on monthly salaries that are sometimes not paid as at when due* (Reyansh).

In Ethiopia, a TVET teacher adopted another interesting approach which she explained in the following way:

> *I introduce my students to many key concepts about educational and work competency. By the end of the TVET courses, they have completed an action plan with goals, action steps, and outcomes as to what they have done to begin to become more culturally competent and self-reliant* (Mazaa).

Respondents and interviewees noted that to foster employability skills of TVET students, they needed to be motivated to realize what they stand to gain if they start their small enterprises, create jobs and employ others. This view is in line with Henderson and Dalton's (2010) assertion that when students are well guided and motivated, they will be aware of the growing waves of unemployment into the government jobs; this will no doubt offer them the knowledge and ideas to create new businesses, be self-employed and contribute to the development of society. Fostering employability skills can assist TVET students in developing confidence, high esteem, hope, and self-reliance.

Discussion and Conclusion

This study aimed to learn how TVET teachers from developing countries fostered employability skills during the teaching and learning process. The study has presented findings on strategies used by TVET teachers in developing countries to impart employability skills to their students. Findings show that TVET teachers use various teaching methods such as student-centered learning, problem-based learning, collaborative learning and other active learning strategies instead of teacher-centered learning, which the respondents have described as passive. Findings were based on personal experiences of TVET teachers from 19 developing countries. The findings suggest that the blame that TVET teachers are mostly incompetent and do not make adequate efforts to help students develop employability skills, as reported in the literature (e.g., Arifin et al., 2017; Chua & Jamil, 2012; Paryono, 2015; Sulaiman et al., 2014; Yusuf & Soyemi, 2012; Yangben & Seniwoliba, 2014) is problematic and may be misleading. The TVET teachers from the 19 developing countries in this study demonstrated that they used several innovative teaching methods to ensure that students are offered the right support to enable them to develop employability skills, gain employment, create small scale businesses, become responsible citizens, compete with the world of work and contribute to society.

From the findings of this study, it is also evident that many of the innovative teaching techniques used by TVET teachers to impart employability skills to their students have not been well supported by TVET curriculum in many developing countries. Therefore, only TVET teachers who are highly experienced in the programme can adopt these innovative methods to improve students' learning outcomes. From this study it is also clear that TVET

teachers are ever willing to improve and perform adequately if the institutions motivate them (provision of teaching resources and continuous pedagogical training among others). This finding is in agreement with previous findings (e.g., Carson & Chase, 2009; Han & Yin, 2016; Watt & Richardson, 2008). Arguably, TVET teachers may have been working hard to ensure that students are adequately trained to be fit for work after graduation, as this can be seen from excerpts of TVET teachers in this study, but may have been lacking adequate support from their institutions.

Another interesting finding of this study is that TVET teachers make efforts to offer their students one-on-one vocational counseling whenever they are opportune. This has enabled students to gain from vocational counseling, which has helped TVET students to develop interest in becoming experts in the field. This finding is in agreement with Ryan and Tomlin (2010) that vocational counseling is an extraordinary training that enables students to acquire skills to master a particular job, and it directly impacts graduate employability. Egbule (2009) also found that students that are offered vocational counseling gain occupational typology and classification, vocational guidance, vocational development, vocational choice-making, and aspiration relationships, information about chosen vocation, job preparation and preparedness, occupational engagement, vocational adjustments, post job placement, retirement preparation, etc. It assists students to develop self-exploration and self-examination to enable them to understand their interests, abilities, aspirations, attitudes, traits and career goals (Hackett, & Betz, 1981). Further, this study reveals that in addition to the efforts of TVET teachers to provide students with one-on-one vocational counseling, TVET institutions need to invest adequately in the provision of vocational counseling services for students. This is in line with Okolie, Nwosu, and Mlanga (2019) that many institutions in developing countries do not have vocational counseling units or centers where students can freely obtain quality vocational guidance and information.

In a study conducted by Dogar et al., (2011) on 60 final year students to identify their major counseling needs; of the five main assessed needs categories (educational, vocational, emotional, social and behavioral), the study found that vocational needs occupied the largest proportion of 45%. This is a glaring sign that the need for directing students by trained experts or teachers on career choice-making cannot be overemphasized. Răduleţ (2013; 45) conducted a much bigger complex study on a sample of 724 students, aiming particularly the way they make career decisions. The study found that students are confused about career choices, highlighting the urgent needs for vocational guidance and counseling services to assist students to clarify their career interests, abilities, skills, and values. This can help students to understand many factors that have an active role in their career planning, which also influences their decision.

The current study also found that TVET teachers have used several innovative techniques to motivate their students not to depend on white-collar jobs, rather to use their vocational and employability skills to start small scale enterprises after graduation. From the excerpts of the respondents, there is evidence that students' passion for certificate acquisition is due to the governments' overemphasis and overdependence on certificates instead of skills. With institutions designing programme and course contents based on the demands of the public instead of the demands of the industry, it is difficult to lay the blame at the feet of TVET teachers if employer technical and employability skill demands are not being met. This is in agreement with Okolie, Elom, Osuji, and Igwe (2019) that the education systems in developing countries need pedagogical re-engineering from certificate driven to skills driven to produce competent graduates capable of competing for the world of work.

Limitations and Implications for Future Studies

This study has shown that the challenge of TVET graduates' lack of employability skills is a complex one which is beyond TVET teachers alone to address. The real challenge rests with TVET institutions or institutions offering TVET courses and not totally with TVET teachers as widely reported in many published scholarly articles. The study also acknowledges that employability skills that an employer may consider most important may differ from other employers, which means that TVET graduates are expected to possess almost all the employability skills to show competency during job interviews or during starting their small scale enterprises. Linked to human capital theory, there is a need for TVET institutions to build a stronger link with the industries, involve the industries in the design of TVET curricula to ensure that TVET students are taught based on the demands of labour market. This can reduce the mismatch between what the institutions supply and what the employers demand (Helyer & Lee, 2014).

Regarding implications for social, practice and policy, the importance of employability skills of TVET graduates is evident (e.g., Kleibrink, 2013). In light of the situation and linked to the findings of this study, some recommendations have been made. First, the study advocates a re-validation of TVET curriculum in developing counties to align to international standards that encourage work-based learning activities, outdoor activities, and training at the industries or on-the-job training. It also advocates the use of innovative teaching techniques such as practice-based learning, collaborative and teamwork learning, which are student-centred instead of traditional teaching methods which have been described as passive. Overall, this will require involving industry experts to assist in redesigning TVET courses and other activities of TVET institutions and departments in higher education systems (e.g., Harris, Sumner & Rainey, 2005). Second, the study recommends that TVET institutions should invest in establishing internal and external quality assurance systems through a regular quality audit. Also, a modular blended approach should be consistently used during TVET. The 21st employability skills should be integrated into the vocational content/skills modules and be assessed outcome-based. Such reform will make TVET more sensitive to social and economic changes and demands.

Lastly, this study adds to the body of knowledge of TVET in developing world context. The study has relied on a qualitative method that enabled the exploration of experiences of TVET teachers from 19 developing countries- an approach which is the strength of this study. The approach helped in understanding the efforts of TVET teachers in fostering employability skills to enable learners' smooth transition to the labour market – the objective of this study. However, despite the methods used and careful processes involved in conducting this qualitative study, there are some limitations related to the size of the data. Overall, this study provides the groundwork for future studies in each of the 19 developing countries involved in this study. Scholars can study how TVET teachers foster employability skills in each of the developing countries through a quantitative approach to enable researchers to carry out the study with a larger sample.

References

Akerele, W.O. (2007). Management of technical and vocational education in Nigeria: the challenges of the country. *Journal of Research in Education and Society*. *1*(2&3), 117-124.

Andrews, D., Nonnecke, B., Preece, J. (2003). Electronic survey methodology: A case study in reaching hard to involve Internet users. *International Journal of Human-Computer Interaction*, *16*(2), 185-210.

Athiyaman, A. (2001). Graduates' perception about business education: An exploratory research. *Journal of Further and Higher Education*, *25*(1), 5-17.

Arifin, M. A., Rasdi, R. M., Anuar, M. A. M., and Omar, M. K. (2017). Competencies of vocational teacher: A personnel measurement framework. *International Journal of Academic Research in Business and Social Sciences*. *7*(4), 147-164

Ary, D., Jacobs, L. C. & Sorenson, C. (2010). *Introduction to research in education*." New York: Wadsworth Cengage Learning.

Ayonmike, S. (2014). Challenges in Implementing the TVET Curriculum in Technical Colleges in Southern Nigeria. *Makerere Journal of Higher Education, 6*(1), 87 – 97.

Badenhorst, J. O. & Radile, R. S. (2018). Poor performance at TVET colleges: Conceptualising a distributed instructional leadership approach as a solution. *Africa Education Review. 15*(3), 91-112.

Bandele, S. O. & Faremi, Y. A. (2012). An investigation into the challenges facing the implementation of technical college curriculum in South West Nigeria. *Journal of Education and Practice, 3*(16), 14-20.

Bassi, L. J. & McMurrer, D. P. (2006). Employers' perspectives on human capital development and management. Organization for Economic Co-operation and Development (OECD).

Becker, G. (1964). Human capital. Columbia University Press. New York

Bohlander, G., Snell, S.A., & Sherman, A. (2001). *Managing human resource*. (12th edition). South-Western College Publishing, Cincinnati, OH.

Botchie, G, & Ahadzie, W. (2004). Poverty reduction efforts in Ghana: The skill development option. Accra: University of Ghana, Legon.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77–101.

Carson, R. L., & Chase, M. A. (2009). An examination of physical education teacher motivation from a self-determination theoretical framework. *Physical Education and Sport Pedagogy*, *14*, 335-353.

Cassidy, S. (2006). Developing employability skills: Peer assessment in higher education. *Education + Training, 48*(7), 508-517.

Chapple, M., & Tolley, H. (2000). Embedding key skills in a traditional university. In S. Fallows & C. Steven (Eds.), *Integrating key skills in higher education* (pp. 67–76). London: Kogan Page.

Cho, H. & LaRose, R. (1999). Privacy issues in Internet surveys. *Social Science Computer Review, 17*(4), 421-434.

Chua, J.H. & Jamil, H. (2012). Factors influencing the technological pedagogical content knowledge (TPACK) among TVET instructors in Malaysian TVET Institution. *Procedia - Social and Behavioral Sciences, 69*, 1539–1547.

Couper, M. P. (2000). Web-based surveys: A review of issues and approaches. *Public Opinion Quarterly, 64*, 464-494.

Cummings, J.N, Sproull, L. & Kiesler, S.B. (2002). Beyond hearing: where the real-world and online support meet. *Group Dynamics: Theory, Research, and Practice*, *6*, 78–88.

Davies, L. (2000). Why kick the 'L' out of 'learning'? The development of students' employability skills through part-time working. *Education + Training, 42*(8), 436-445.

Dasmani, A. (2011). Challenges facing technical institute graduates in practical skills acquisition in the upper east region of Ghana. *Asia-Pacific Journal of Cooperatuve Education*, *7*; 67-77.

Deissinger, T. & Gonon, P. (2016). Stakeholders in the German and Swiss vocational educational and training system: Their role in innovating apprenticeships against the background of academisation. *Education + Training, 58*(6), 568–577.

De Weert, E. (2011). Perspectives on higher education and the labour market: review of international policy developments. IHEM/CHEPS thematic report, available at: www.utwente.nl/bms/cheps/publications/Publications%202011/C11EW158%20Final%20version%20Themarapport%20onderwijs%20-%20arbeidsmarkt.pdf (accessed 1 April 2017).

Denzin, N. K. (2012). Triangulation 2.0. *Journal of Mixed Methods Research, 6*(2), 80-88.

Dobbins, M., & Busemeyer, M. R. (2015). Socio-economic Institutions, Organized Interests and Partisan Politics: The Development of Vocational Education in Denmark and Sweden. *Socio-Economic Review, 13*(2): 259–284.

Dogar, A. H., Muhammad, A., Majoka, I. M., Amir, M., & Latif, S. (2011). Need Assessment of Students' Guidance and Counseling. *British Journal of Arts and Social Sciences, 1*(2), 102-124.

Egbule, P.E. (2009). Quality assurance in vocational technical education teacher preparation: Imperative for the achievement of millennium development goals, Lead paper presented at the 2009 Annual Conference of the Nigeria Vocational Association (NVA), University of Nigeria, Nsukka, 22nd–25thNovember, 2009.

Egerton, M. (2001). Mature graduates: Occupational attainment and the effects of labour market duration. *Oxford Review of Education, 27*(1): 135-150

Fallows, S. & Steven, C. (2000). Building employability skills into the higher education curriculum: a university-wide initiative. *Education + Training, 42*(2), 75-83.

Gibbons, J. (2018). Reflection, realignment and refraction: Bernstein's evaluative rules and the summative assessment of reflective practice in a problem-based learning programme, *Teaching in Higher Education*, *24*(7), 834-849

Goldstein, O. (2016). A project-based learning approach to teaching physics for pre-service elementary school teacher education students. *Cogent Education,* 3: No. 1200833.

Grobler, P., Warnich, S., Carrell, M. R., Elbert, N.F. & Hatfield, R. D. (2002). *Human resource management in South Afric*a. (2nd Edition). Thomson, Australia.

Gush, J. (1996). Assessing the role of education and training in meeting the needs of the retail sector. *Education + Training, 38*(9), 5-13.

Hackett, G., & Betz, N.E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior, 18*(3), 326–339.

Hall, P. A., & Soskice. D. (2001). *Varieties of capitalism: The institutional foundations of comparative advantage*. Oxford: Oxford University Press.

Han, J. and Yin, H. (2016). Teacher motivation: Definition, research development and implications for teachers. Cogent Education, 3: 1217819. http://dx.doi.org/10.1080/2331186X.2016.1217819

Harvey, L. & Bowers-Brown, T. (2004). Employability cross-country comparisons: *Graduate market trends*, winter 2004/5. Available online at: http://www.prospects.ac.uk/cms/Show-Page/Home_page/p!emlpid (accessed 23 March 2005).

Harvey, L. & Knight, P. (2003). Briefings on employability: Helping departments to develop employability. York: ESECT.

Harvey, L. & Green, D. (1997). *Employer satisfaction*, QHE Project. Birmingham: University of Central England.

Harris, R., Sumner, R., & Rainey, L. (2005). Student traffic: Two-way movement between Vocational Education and Training and Higher Education. Adelaide, Australia: National Centre for Vocational Education Research.

Helyer, R., & Lee, D. (2014). The role of work experience in the future employability of higher education graduates. *Higher Education Quarterly, 68*(3), 348–372.

Kalfa, S., & Taksa, L. (2015). Cultural capital in business higher education: Reconsidering the graduate attributes movement and the focus on employability. *Studies in Higher Education, 40,* 580–595.

Kennedy, K., Wanami, S., & Kerre, B. W. (2018). Challenges affecting the implementation of technical curriculum in public TVET institutions in Kenya: A *case of Nandi and Uasin Gishu Counties. IOSR Journal of Research & Method in Education, 8*(3), 30-34

Kleibrink, J. (2013). Causal effects of educational mismatch in the labour market. Ruhr Economic papers No. 421, Ruhr University, Bochum. Germany.

Knight, P. T. (2001). Employability and quality, *Quality in Higher Education, 7*(2), 93–95.

Ligami, C. (2018). TVET colleges fail to prepare youth for agricultural jobs. University World News Africa. Available at https://www.universityworldnews.com/post.php?story=20181031115939495.

Marimuthu, M., Arokiasamy, L., & Ismail, M. (2009). Human capital development and its impact on firm performance: Evidence from developmental economics." *The Journal of International Social Research*, 2/8,

Mohamad, M. M., Saud, M. S., & Ahmad, A. (2009). The need in training and retraining for TVET teachers in Malaysia. *Journal of Technical Education and Training, 1*, 51–58.

O'Brien, E. & Deans, K. (1995). The position of marketing education: A student versus employer perspective. *Marketing Intelligence and Planning, 13*(2), 47-52

Ogier, T. (2009), Skills to compete: Post-secondary education and business sustainability in Latin America. London: Economist Intelligence Unit.

Okolie, U. C., Nwosu, H. E. & Mlanga, S. (2019). Graduate employability: How the higher education institutions can meet the demand of the labour market. *Higher Education, Skills and Work-Based Learning, 9*(4), 620-636.

Okolie, U. C., Elom, E. N., Osuji, C. U., & Igwe, P. A. (2019). Improvement needs of Nigerian technical college teachers in teaching vocational and technical subjects. *International Journal of Training Research, 17* (1), 21-34.

Okolie, C. U., Igwe, P. A. & Elom, E. N. (2019). Improving graduate outcomes for technical colleges in Nigeria. *Australian Journal of Career Development, 28* (1) 21-30.

Okolie U. C. (2014), Management of woodwork workshop in tertiary institutions in Nigeria: An analytical study. *Malaysian Online Journal of Education*, 2 (1); 20-36.

Organization for Economic Co-operation and Development (OECD) (2001). The Well-Being of Nations: The Role of Human and Social Capital. Paris: OECD.

Paryono, P. (2015). Approaches to preparing TVET teachers and instructors in ASEAN member countries. *TVET@ Asia*, issue 5, pp. 1–27, viewed on 12 December 2015, http://www.tvet-online.asia/issue5/paryono_tvet5.pdf.

Persson, B. & Hermelin, B. (2018). Mobilising for change in vocational education and training in Sweden – a case study of the 'Technical College' scheme, *Journal of Vocational Education & Training*, 70 (3), 476-496. DOI: 10.1080/13636820.2018.1443971

Pitan, O. S. (2017). Graduate employees' generic skills and training needs. *Higher Education, Skills and Work-Based Learning,* 7(3), 290-303.

Pumphrey, J. & Slater, J. (2002). Skills dialogue: A comprehensive summary of generic skills requirements, Department for Education and Skills, Nottingham.

Ribeiro, A. B., Caetano, A., & Menezes, I. (2016). Citizenship education, educational policies and NGOs. *British Educational Research Journal,* 42(4), 646-664

Schultz, T. W. (1961). Investment in human capital. *American Economic Review*, 51 (1), 1–17.

Smedley, R. M. & Coulson, N. S. (2018). A practical guide to analyzing online support forums. *Qualitative Research in Psychology*, DOI: 10.1080/14780887.2018.1475532.

Spence, M. (1973). Job market signalling. *Quarterly Journal of Economics,* 87(3), 355-375

Spronken-Smith, R., Bond, C., McLean, A., Frielick, S., Smith, N., Jenkins, M., & Marshall, S. (2015). Evaluating engagement with graduate outcomes across higher education institutions in Aotearoa/ New Zealand. *Higher Education Research & Development, 34*, 1014–1030.

Stewart, J. & Knowles, V. (2000). Graduate Recruitment and Selection: implications for HE, graduates and small business recruiters. *Career Development International*, 5(2), 65-80.

Sulaiman, N.L., Alias, M., Masek, A. & Mohd Salleh, K.. (2014). Further training in occupational skills for vocational teachers: the case of metal cutting in Malaysia', *TVET@Asia*, issue. 3, pp. 1–13.

Thelen, K. (2004). How institutions evolve: The political economy of skills in Germany, Britain, the United States and Japan. Cambridge. Cambridge University Press.

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

Trampusch, C. (2014). Collective skill formation: A historical analysis of the least-likely case New Zealand. *Journal of Vocational Education and Training*, 66 (2), 135–155.

Răduleț A. (2013). *Orientarea în carieră a studenț ilor*, Ed. Accent, Cluj-Napoca

Robson, C. (2002). *Real world research* (Second ed.). Malden, MA: Blackwell Publishing

Ryan, W., C., & Tomlin, H., J. (2010). Infusing systems thinking into career counselling, *Journal of Employment Counseling; 47, 2*, 79-85.

United Nations Educational, Scientific and Cultural Organization (2012) Youth and skills: Putting education to work. Education for All Global Monitoring Report 2012. UNESCO, Paris

Walters, D. (2004). A comparison of the labour market outcomes of postsecondary graduates of various levels and fields over a four-cohort period. *The Canadian Journal of Sociology*, 29 (1), 1-27.

Watt, H. M. G., & Richardson, P. W. (2008a). Motivation for teaching. *Learning and Instruction*,18, 405–407.http://dx.doi.org/10.1016/j.learninstruc.2008.06.009

Wengraf, T. (2001). *Qualitative research interviewing: Biographic narrative and semi-structured methods.* London: SAGE.

Yamada, s., Otchia, C. S. & Taniguchi, K. (2018). Explaining differing perceptions of employees' skill needs: the case of garment workers in Ethiopia. *International Journal of Training and Development*, 22(1), 51-68

Yangben, P. N & Seniwoliba A. J. (2014). Career challenges in construction craft training in technical vocational education and training in Ghana. *International Journal of Vocational and Technical Education,* 6(3), 13-29.

Yorke, M. (2006). Employability in higher education: What it is – What it is not. York, United Kingdom: The Higher Education Academy.

Yusuf, M.A. & Soyemi, J. (2012). Achieving sustainable economic development in Nigeria through technical and vocational education and training: the missing link. *International Journal of Academic Research in Business and Social Sciences*, 2(2),71-77.

Appendix

Table 1: Employability skills that the labour market demands

Employability Skills	Definition with Descriptive Behaviour	Evidence in Literature

Analytical	The act of assembling, analyzing and articulating information from diverse sources for the aim of problem-solving and making serious decisions.	Pitan (2017); Okolie, Nwosu and Mlanga (2019): Harvey & Green (1997)
Communication	Ability to articulate, transmit and defend effectively any arguments, ideas, feelings without making the parties involved feel unwanted.	Davies (2000); Fallows & Steven (2000); Gush (1996)
Decision-making	Being able to make serious decisions that affect one's organization positively. Ability to think of several choices, analyzing information and making predictions.	Yamada, Otchia, & Taniguchi (2018); Okolie, Nwosu & Mlanga (2019); Cassidy (2006); York (2006).
Interpersonal	Ability to listen, understand and be receptive to others.	Persson & Hermelin (2018); Okolie, Nwosu & Mlanga (2019); Pitan (2017).
Adaptability/ flexibility	Coping with changes and uncertainties in the workplace. Ability to adapt to new situations and environment.	Davies (2000); Harvey & Green (1997); Spilsbury & Lane (2000).
Information technology	Ability to use the power of the internet, computer sets, and software, information data, digital content creation, etc. to achieve the aim of one's organization.	Spilsbury & Lane (2000); Fallows & Steven (2000); Harvey & Green (1997); Pitan (2017)
Problem-solving	Ability to engage in actions that facilitate solutions to complex problems. Ability to proffer solutions during difficult situations.	Chapple & Tolley (2000); Gush (1996); Harvey & Green (1997); O'Brien & Deans (1995);
Numeracy	Being about to express ideas using numerical information and making the right conclusions or decisions.	Harvey & Green (1997); Pitan (2017); O'Brien & Deans (1995); Pitan (2017)
Teamwork	Ability to co-work, collaborate and join forces with mates or colleagues from different ethnicities, religious and cultural backgrounds to achieve a common. Ability to become a team player.	Davies (2000); Gush (1996); Harvey & Green (1997); O'Brien & Deans (1995); Okolie, Nwosu and Mlanga (2019).
Leadership	Ability to demonstrate a futuristic vision and prove how to turn ideas into real-world success stories.	Athiyaman (2001); Gush (1996); Holbeche (2000); O'Brien & Deans (1995)
Motivation	Ability to stay motivated despite the difficulties and work toward achieving the organization's goals.	Athiyaman (2001); Chapple & Tolley (2000); Harvey & Green (1997)
Language proficiency	Being able to speak fluently and understand other people's languages for easy communication with customers.	Persson & Hermelin (2018); Tomlinson (2071); Chapple & Tolley (2000);
Organizational	Ability to stay focused on different tasks, and use one's time, energy, strength, mental capacity, physical space, etc. effectively and efficiently in order to achieve the set objectives.	Gush (1996); Harvey & Green (1997); Stewart & Knowles (2000)
Management	Taking full control of situations, setting goals and priorities, setting deadlines and managing conflicts between two or more parties in an assertive way	Chapple & Tolley (2000); Gush (1996); Harvey & Green (1997)
Creativity	Ability to be innovative, turn problems into opportunities. Ability to find new ideas for solving problems.	Chapple & Tolley (2000); Harvey & Green (1997); Tomlinson (2017).
Initiative	Ability to take up tasks or start projects without being asked. Being able to solve problems that others have not noticed.	Athiyaman (2001); Stewart & Knowles (2000); Chapple & Tolley (2000).

Learning to learn	Ability to successfully manage one's own learning needs.	Chapple & Tolley (2000); Tomlinson (2017); Yorke (2006).
Entrepreneurial	Ability to discover new problems, reveal potential niche opportunities, initiate the original business process, and make profits.	Pitan (2017); Okolie, Nwosu & Mlanga (2019); Tomlinson (2017); Pitan (2017)
Presentation	Being able to deliver and engage a variety of audiences. Ability to use quality structure, slides, tone of voice and body language to convey messages.	Harvey & Green (1997); O'Brien & Deans (1995); Yorke (2006)
Self-confidence	Showing strength, strong self-concept, internal locus of control, independence, positive ego strength, decisive, accept responsibility	Davies (2000); Gush (1996); Harvey & Green (1997)
Self-control	Ability to show stamina and resist stress. Being able to stay calm and maintain high emotional quotient. Ability to resist temptation and calm others during hard times.	Tomlinson (2017); Okolie, Nwosu and Mlanga (2019); Chapple & Tolley (2000)
Research and inquiry	Being able to carry out thorough investigations and have a good understanding of situations.	Egerton (2001); Gush (1996); Okolie, Nwosu & Mlanga (2019)
Critical thinking	Ability to analyze thoughts, information, choices, and be able to make predictions.	Chapple & Tolley (2000); Tomlinson (2017); Pitan (2017); Yorke (2006).
Technical	Ability to show expertise and professionalism based on one's field, technical knowledge, etc.	Pitan (2017); Okolie, Nwosu & Mlanga (2019); Tomlinson (2017); Yorke (2006).