



## What We Assess Is What We Produce: Moving Towards the Development of Skills in South African FET Colleges

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## What We Assess Is What We Produce: Moving Towards the Development of Skills in South African FET Colleges

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### ABSTRACT

The focus of this study was to investigate the coherence between the needs of industry and the curriculum offered at Technical and Vocational Education and Training (TVET) colleges. The context of this study was TVET colleges, which is a relatively recent sector in the Department of Higher Education and Training (DHET), in South Africa. There is an unacceptably high rate of unemployment in South Africa and in particular, there is a shortage of technical skills, which the TVET sector is expected to address. Concerns have been expressed about the effectiveness of these colleges in producing graduates with employability skills. This study investigated whether the assessment strategies employed in the Electrical Engineering curriculum are appropriate in preparing the students for practice. A qualitative research design was used where a sample consisting of seven Further Education and Training (FET) College graduates and three instructors (lecturers) were selected using a snowball sampling technique. Findings of this research are that the current assessment strategy used in FET colleges (written testing) does not lead to the development of employability skills in FET graduates. The proposed TVET programs are those that promote a dual assessment throughout the course that yields the technical knowledge and employability outcomes that will meet the needs of industries.

### Introduction

The conception of curriculum together with student assessment should undergo a *metamorphosis*, away from a linear, one-best-way approach to knowledge and assessment, toward a more diverse way of dealing with issues to meet the demands of the global world (Hargreaves, 1989; Hargreaves, Earl, & Schmidt, 2002). The paper focuses on Technical and Vocational Education and Training (TVET)/ Further Education and Training (FET) colleges' curricula and the assessment techniques employed to achieve its intended purpose, i.e., develop employability skills in graduates that will make them work-ready. The reason for this study emanated from the high number of FET graduates who were not employable because they lack employability skills (Egbenta, 2015). The paper worked toward identifying factors that lead to the lack of employment by focusing on the assessment techniques used in these colleges. The research paper is premised on the idea that "*lack of sufficient and relevant assessment strategies in TVET/FET colleges has resulted in producing graduates who have skills gap.*" Therefore, its main objective was to re-look into the current assessment practices in the South African TVET/FET colleges and identify gaps (if there are any) which hinders the production of *work process knowledge* (Boreham, Fischer, & Samurcay, 2002) graduates.

Literature has indicated that the implementation of the educational reforms in TVET colleges in the sub-Saharan Africa has resulted in less than desirable outcomes because according to Buthelezi (2018), there was no proper and effective implementation of the new policies. In the same breadth, Elias (1987) opined that the TVET/FET reforms in South Africa were not properly planned and hence did not

produce the anticipated socio-economic change. Ineffective implementation of such reforms contributed to making FET colleges' curriculum to be more of the transmission of knowledge than skill development (Fletcher, Meyer, Anderson, Johnston, & Rees, 2012). Even though currently most students who completed their matric see the community colleges as being the best fit (Vega, 2017); their thirst to have employment after completion was not quenched. This was brought about by the fact that the educational programs and the assessment strategies employed in these colleges did not prepare them for work in industries (Egbenta, 2015). Hence, there was a high percentage of unemployed FET college graduates. This study investigated the assessment tools employed in the Electrical Engineering curriculum and its deficiency in preparing the students for practice.

Assessment is seen by Postareff, Virtanen, Katajavuori, and Lindblom-Ylänne (2012) as a key toward producing graduates with employability skills and according to Brewer (2013), these employability skills need to be integrated into core academic content and vocational training. This means that the educational programs and the assessment thereof must be geared toward producing competent graduates who are capable of filling the skills gap. In the South African context, the Internal Continuous Assessment (ICASS) document used in the FET colleges for the Nated Report 191 (which go back to 1996) curriculum clearly stipulates that the curricula and the assessment strategies for the electrical engineering course consisted of generic technical knowledge, which is assessed using written testing (Department of Higher Education and Training, 2017) a strategy which prioritizes the technical knowledge over the applied knowledge (Ornstein & Hunkins, 2004). The study sought to investigate the coherence between the needs of industry and the curriculum offered at Technical and Vocational Education and Training (TVET) colleges looking specifically at the assessment tools used in these TVET colleges. At the moment little has been revealed about the role-played by assessment (formative and summative) in developing graduates who fit into the world of industry what Poon (2014) called "commercial awareness" (Poon, 2014, p. 53) This study sought to bridge that gap. The outcome of this study sheds light on the role that the TVET/FET programs and assessment strategies employed played on the development of work-ready graduates.

The study followed a qualitative approach. Participants were selected according to the snowball sampling method and the data were collected using one-on-one interviews. The findings of this study revealed that the current assessment strategy used in FET colleges (written testing) does not lead to the development of employability skills in FET graduates.

Emanating from the introduction presented, the study sought to answer the research question: What were the factors that make the South African FET colleges' curriculum and the assessment strategies thereof not to produce the employability skills needed by the industries in graduates? The following sub-questions were formulated:

- Why were the TVET college graduates with N6 not work-ready?
- How did TVET curriculum and assessment strategies thereof contribute to producing graduates who are not employable?
- Which skills required by employers were lacking in the graduates?

The rest of this article proceeds as follows. First, a theoretical framework and literature provide a focus for the study. Second, the sampling and data collection methods are outlined. Third, the findings and a discussion of the shortcomings of the assessment tool used in TVET colleges. The article concludes with a summary of this study and some recommendations.

## **Theoretical framework**

The study looked into the TVET educational programs and its assessment techniques and it was underpinned by Tyler's theory of basic principles of curriculum and instruction (Tyler, 1949). According to Tyler, those involved in curriculum inquiry must define the (a) purposes of the school, (b) educational experiences related to the purposes, (c) organization of these experiences, and (d)

evaluation of the purposes. In defining the purpose of the school, Tyler posited that if education is viewed as a tool for better livelihoods of citizens, curriculum designers must be able to screen the relevant subject matter, which fulfills the needs of both students and society. This means that curriculum planners must do needs analyses that involve all stakeholders in education and cooperate with the local economy to ensure that the skills produced match the demand (Langer, 2013). For the TVET colleges to live up to their purpose, they are expected to produce graduates with the technical knowledge and employability skills that the job market requires.

Having identified the purpose of the said curriculum objectives, curriculum planners need to gear all educational activities toward this intended purpose. In this paper, for example, if the needs of stakeholders in TVET/FET education are the improvement of livelihoods through the creation of jobs then all the activities in the educational encounter must deal with the skills gap that is being widened by new technological advances. Such educational experiences are important because of the high level of unemployment in adolescents and young adults caused by globalization, which has tightened the availability of jobs (Gutman & Schoon, 2012). In working toward addressing the skills gap, the TVET colleges' educational activities must embrace theory and practical training to produce graduates who are employable. By organization of experiences, Tyler (1949) purported that in order to produce a maximum cumulative effect the learning experience must include skills, knowledge, attitudes, and values. Langer (2013) saw the combination of different skills in training programs and the thorough assessment of the required skill set as an important intervention to cater for individual student needs and to train the workforce. Thus, the use of written testing as the only tool applied by TVET colleges to assess electrical engineering students will be weighed against this theory to try and answer the above research question because according to Robeyns (2006), education is relevant as far as it creates skills that make a human being an economic factor of production, in other words, a worker. According to Tyler (1949), evaluation plays an important role during curriculum development to determine whether the learning experiences actually produced the intended results. Given the gap between the skills developed through TVET and the skills demanded by industry (Egbenta, 2015), curriculum developers need to prioritize the evaluation of current educational programs in community colleges so that they can develop new assessment techniques that will produce graduates with employability skills.

The theory has direct implications for the educational set-up in sub-Saharan Africa community colleges, which includes South Africa in that it stipulates what needs to be done to ensure that educational programs address the intended needs. With the declining economy experienced globally and specifically in South Africa, there is a need to reshape community colleges by issuing reforms (UNESCO, 2014). However, one needs to ask whether these reforms are addressing societal problems. The fact that industries are still pleading for the development of employability skills by institutions of higher learning indicates the need to reshape community colleges in line with Tyler's theory of basic principles of curriculum and instruction (Tyler, 1949).

## Literature

### ***Development of employability skills using an assessment strategy that integrates technical knowledge with skills***

Industrialization has led to the emergence of a sophisticated technologically advanced industrial and agricultural economy that calls for a skilled labor force. According to Hurrell and Scholarios (2014), a lack of the right skills is often referred to as the "skills gap" (p. 61), where current employees are not considered fully proficient resulting in loss to their employers because it takes a long time to train, and build the confidence and skills of these workers (Egbenta, 2015). In the same breadth, Novoselov and Spasibov (2015) asserted that most companies require employees with employability skills because developing, for example, competitive engineers is time-consuming and expensive. The FET colleges came to the fore to address the skills gap that existed between the educational programs offered in schools and the demands set by the industry.

Currently, the educational programs in most TVET/FET colleges in South Africa have led to a decline in living standards (Mok, 2015) because the programs provide technical knowledge rather than employability skills. The word employability refers to “the ability to gain and maintain employment and to manage employment transitions, such as transitions between jobs and roles within the same organisation to meet changing job requirements” (Wickramasinghe & Perera, 2010, p. 231). This means that employees who are employable are those that have the requisite skills for the job market and the ability to utilize such skills to adapt to changes within the organization (Froehlich, Beusaert, Segers, & Gerken, 2014). According to Robles (2012), technical knowledge which is also called the hard skills need to be compensated with other skills to make one employable. Further Klaus (2010) opined that 75% of skills needed for the success of the industry are soft skills such as integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic, while only 25% is dependent on technical knowledge. Klaus (2010) referred to such soft skills, as people’s skills which according to Kigwilu (2016) need to be integrated within the curriculum to avoid using the workplace as a site for acquiring such (soft) skills. Chaudhary and Dey (2013) opined that using a variety of assessment strategies such as observation, assignments, projects, and portfolios could help students to acquire such employability skills. On the other hand, Ng (2016) suggested the use of an assessment strategy that encourages collaboration and interaction among students.

Egbenta (2015) suggested a reshaping of the community colleges to provide the youth with skills that prepare them for work. Bauer and Gessler (2016) suggested an integrated approach for teaching and assessing students at FET colleges to ensure that students who attend FET colleges, including those who do not acquire an N6 qualification, are employable. The integrated approach to teaching and learning in TVET colleges has been a general practice in European countries using the so-called dual approach in vocational education and training programs (Bauer & Gessler). In the dual approach system, the education and employment systems are structurally linked which makes individual transition much easier than it would be if the two systems were not linked. In a dual approach system, “34% of students in upper secondary education attend general education courses and 66% are enrolled in a vocational programme” (Bauer & Gessler, 2016, p. 52). Of this 66%, 60% take part in a combined school-based and work-based dual program (OECD-Organisation of Economic Cooperation and Development, 2015, p. 317). The dual approach provides easy transition to the workplace because it involves companies that usually are responsible for the apprenticeships that is, students receive practical training in companies based on the theory imparted in schools.

### ***Enhancing assessor competence to impart and assess key skills***

One of the strategies laid down by the Dakar Framework for Action and Education for All (UNESCO, 2000) was to develop successful education programs, which require above all, well-trained teachers. A commitment was made to that effect to improve teacher education and training to enhance competence. One of the responsibilities of educational practitioners (teachers included) is to research relevant assessment strategies that prepare graduates for work in industries (Gielen, Peeters, Dochy, Onghena, & Struyven, 2010; Popham, 2011). Research done by Watkins, Dahlin, and Ekholm (2005) indicated that most of the institutions of learning use the assessment methods that make them come across as effective to maintain their reputation. It is a common knowledge that results are seen as the determining factor for the effectiveness of institutions. Conversely, literature recommends that assessment strategies be applied that will produce graduates who are competent and are able to provide for the needs of the changing economy and labor market (Agrawal, 2012; Nguyen, 2012). Literature also indicated that the FET management team is unable to develop a curriculum that is responsive to present needs because of lack of professional support (Albashiry, Voogt, & Pieters, 2015; Nguyen, 2012; Wolverson, Ackerman, & Holt, 2005). The importance of in-service training for the management team is crucial in this regard so that they can provide support to ordinary teachers cannot be overemphasized.

The European Union (2014) Synthesis report in Africa indicated that TVET teacher education takes place largely within general teacher education qualifications. The TVET teacher programs curricula focus

more on general teaching pedagogy instead of the technical and practical skills needed to teach a particular trade. In Germany, for example, there are three models of TVET teacher training, namely, the Consecutive, Top-up, and Blended models, and in all of them, there is no synergy between theory and praxis (Nielson, 2002). This has led to graduating teachers who lack the skill to teach and assess practical knowledge and skill development in students. The lack of teacher expertise in assessing students is also exacerbated by the curriculum that does not explicitly define the content and the achievement standards to be achieved. Since employability skills are not core to TVET programs, the achievement standards, which are usually embedded in the tasks given to students, do not relate to the skills to be acquired. Thus, graduates with only content knowledge will be produced.

## **Methodology**

A qualitative research approach was followed which created an environment where direct interviews took place which helped the researcher to collect as much information as possible. An interpretivist paradigm was followed whereby the researcher constructed meanings and developed understanding (Denzin & Lincoln, 2013) while searching for information about the curriculum and forms of assessment used in South African TVET/FET colleges.

### **Population and sampling**

The population of the study comprised Nated Report 191 electrical engineering graduates who passed their N6 qualification during 2016 and 2017 at TVET/FET colleges and TVET instructors/lecturers. Three FET colleges were earmarked for sample participants in the study. Due to the geographic locations of the sites and some of the graduates being reluctant to take part in the study, the researcher used a snowball sampling technique to source for information-rich participants. The sample comprised seven unemployed and three employed electrical engineering graduates who completed their N6 qualification, and three instructors who were all males. The three employed graduates did the internship (practical) for one year and six months, and they have obtained their diploma certificate. They were added to the sample to source for information about the skills they acquired during their training which made them employable. Two participants (a graduate and an electrical engineering instructor) assisted the researcher with contact numbers of other graduates and instructors. Of the 10 electrical engineering graduates who participated in the study, six were male and four were female. Only one instructor taught electrical engineering and the other two were FET instructors who taught other courses.

Ethics principles such as informed consent, privacy, and confidentiality were applied by the researcher to protect the identity of the participants (Denzin & Lincoln, 2013).

### **Data collection strategies**

The researcher used one-on-one interviews to collect data from the 15 participants. Out of the 15 participants, only six of them had a face-to-face interview with the researcher and the other nine participants were interviewed telephonically due to the geographic location of the sites. The researcher used a semi-structured interview strategy to allow him to ask probing questions to explore in more detail what participants share (Hoets, 2012; Jensen & Laurie, 2016). The interview questionnaire consisted of open-ended questions was developed to allow the researcher to have follow-up questions on assessment tools used in FET colleges and whether these tools prepared them for work or not.

### **Data analysis**

Data analysis was done throughout the data collection process using Saldana (2016) method of qualitative analysis. Transcripts of interviews were developed and codes about the assessment tool used in TVET colleges were developed by identifying patterns. Similar codes about the advantages

and disadvantages of the writing testing and the importance of the practical training were grouped together. Three themes emerged from the analyses of data, namely, participants agreed that TVET colleges produced graduates who were not work-ready, caused by the fact that written testing was the only tool of assessment used by incompetent assessors, and finally, that internships empowered graduates with employability skills.

## Findings

From the data collected, three themes emerged, namely, TVET colleges producing graduates who are not work-ready, using written testing as the only tool for end-of-term assessment and incompetent assessors, and the skills acquired during internships and employers' requirements.

### *TVET/FET college producing graduates who are not work-ready*

For the electrical engineering FET college students, the notion that the FET College serves as a vehicle for providing skills that respond to the economic needs of the country was never realized because they could not be employed due to lack of relevant skills. Participant 1 commented, "All these years, i.e., from the time I started with N1-N6 courses, I attended three months in each level and the college instructors taught us theory only after which written testing was administered."

Participants also indicated that the duration of the study period to obtain a qualification at private TVET colleges is six months of training on both theory and skills. Participant 2 commented:

The duration of government colleges to complete a course is three months unlike in private TVET colleges where a course takes six months. During the six months, the first three months is theory and another three months is practical. In such colleges, they also have practical tests where the learners engage in hands-on activities to put theory into practice. One disadvantage of some of these private colleges is that they are the "fly by night" they just make money and offer "fake qualifications."

Participant 3 had this to say, "Because I did not do the practical, companies do not hire me because they always say they need experience, that is, they want somebody who has been exposed to real work situation."

### *Using written testing as the only tool for end-of-term assessment and incompetent assessors*

Participants declared that the assessment tool used in FET colleges for the Report 191 curriculum is predominantly written tests. Even though assignments are used as a form of formative assessment, they too are a written form of assessment. Participant 4 said,

In FET colleges we write trimester tests to be moved to the next level. Unlike those learners who are doing vocational education and who do only the practical, we are expected to pass written tests to move to a higher level.

When participants were asked whether the practical examination of which the marks add to the final mark helped them to acquire employability skills, this is what Participant 3 replied, "The practical examination does not differ from the tests because like the tests they test technical knowledge, which is theory."

Participants also indicated that the tests are not very difficult. They stated that they only needed to study and use previous question papers to prepare for exams. Participant 2 had the following to say in this regard, "The tests are not difficult. If you use previous question papers, you will pass because some questions are repeated."

Participants also indicated that for them to qualify as artisans, they were expected to do an apprenticeship for a year and a half, and pass the trade test. Chances of getting such apprenticeships were very slim because companies do not want to work at a loss; companies want to use cost-effective measures to beat the declining economy. Participant 1 said,

You will never understand how these companies are working. I waited for the apprenticeship by the time I passed my N2 until now. It is surprising to hear that when you pass N6 you do not stand a better chance to be placed because they say you are over-qualified. The lucky ones who are placed are those with N2 or N3 qualifications. This is frustrating.

Participant 4 had this to say, “When the municipality advertise posts, it looks like there is fraud because, only those with a ‘connection’ can be placed. If you do not have somebody you know, forget.”

The three interviewee teachers, also referred to as instructors, indicated gaps in the training of teachers caused by training which imparted only generic knowledge. These instructors declared that they were in no position to engage students in practical activities because they lack the expertise. Teacher A said, “My training as an instructor is similar to normal school teachers. I was not trained how to do practical stuff.”

The lack of a formal teaching qualification also made the instructors incompetent. Teacher B said, “Most of my colleagues were once students in the TVET colleges where they are now teaching. Their qualification is N6 plus internship, so they lack the teaching methodology.” It appeared that even if the instructors did not receive adequate training, there were no professional development activities such as in-service training to capacitate them. Their heads of department could not provide such development because they were at the same level of knowledge. Teacher C said,

Since I started teaching at the college, I have six years now, I do not remember attending the professional development. Sometimes I want to engage learners in practical tasks, but I am unable due to lack of resources. The department poorly finances FET colleges. Even my salary is so little.

When the facilitators were asked who was setting the formative assessment tasks, Teacher B stated, “I am the one who set the tests, and it is so difficult to do it because I do not have the skill and my head of department is not assisting.”

### ***Skills acquired during internships and employers’ requirements***

When the three participants who attended a one year and six months training were asked what the training was all about, Participant 5 commented, “... through my interaction with co-workers I have acquired generic skills such as communication which required language proficiency and computer skills for writing emails and reports and social skills needed to develop a teamwork spirit.”

In as far as professional skills were concerned, Participant 6 had this to say:

... when I went to the field, the theory I gained in the college started to make sense, the truth is I did not remember all the theory, it was like I was never taught. I enjoyed engaging practically with the wiring and installation of electricity. Doing things brought a wider understanding and I also learned about fault finding, health, and safety skills.

Participants also indicated how easy it was for them to get employment, Participant 7 said, “After the internship, most graduates are employed by the same company which offered the training. I got the current job because in the interviews they needed experience which I acquired during the one year six months of internship.”

### **Discussion**

The findings of this research revealed that the South African FET colleges are not functioning according to their purpose as per Tyler’s theory of basic principles of curriculum and instruction (Tyler, 1949) because they are not addressing the current “skills gap” (Hurrell & Scholarios, 2014, p. 61). There appears to be no collaboration between the FET colleges and the industries, and that is proven by a growing mismatch between the training the graduates have received at these colleges and what the labor market demands (Egbenta, 2015). From the participants’ point of view, the trimester system practiced in the FET colleges appears to be one of the obstacles to practicing an



integrated form of curriculum, where technical knowledge and employability skills are integrated. Participants indicated that there were other few TVET colleges which were not funded by the government and which catered to the needs of the students, namely, offering technical and practical knowledge within a six-month period. The biggest challenge that the students faced with such TVET colleges were that they were expensive and some of them were “*fly-by-night*,” i.e., not registered TVET colleges (Buthelezi, 2018). The trimester course is very short and it forces instructors to focus on theory only. Therefore, they can only assess students through written testing. This results in graduating students who are unable to compete globally because they lack the relevant skills needed in the job market (Agrawal, 2012; Nguyen, 2012). The majority of such graduates are unemployed because apart from lacking relevant skills they also do not have the interpersonal skills that increase productivity in the job and this leads to a decline in living standards (Mok, 2015). FET graduates’ hopes were shattered because the colleges did not meet their expectations of being the best fit for them to acquire employment (Vega, 2017).

Findings also revealed that the Department of Higher Education did not provide the financial support to FET colleges that will help in reshaping them toward their intended purpose. The lack of resources such as not having enough sites for practicals where students are prepared for the labor market has turned the FET colleges into mere high schools where the acquisition of theoretical knowledge is core. In TVET colleges where sites for practicals existed, practicals were not performed because of lack of expertise by instructors or lecturers who claimed they did not receive training for such practicals. Lack of in-service professional development coupled with senior management staff who are incompetent and thus, unable to provide support to junior instructors makes the role of the FET College as bridging the skills gap a mirage. The findings indicated the importance of Tyler’s principles 3 and 4, namely organizing educational experiences related to the purposes. The Department of Higher Education has the responsibility of organizing programs for teacher training that capacitate them with outcomes related to the purpose of the colleges. The study shed light that not only the short duration of the trimester and/or lack of training facilities contributed to the production of graduates who are not work-ready, but the data collected also indicated the role-played by teacher colleges which did not impart relevant curricula and methodology as well as the government’s role in not allocating enough funds for TVET colleges.

The production of a high level of graduates who are not job competent indicated that there was no continuous evaluation of FET colleges’ purpose as per Tyler’s theory of basic principles of curriculum and instruction (Tyler, 1949). Had there been such constant evaluation it might have prevented the high number of graduating students who are not employable. This experience calls on institutions of learning to put systems in place that will allow close monitoring and evaluation of programs so that if such programs are not in line with the institutions’ purpose, interventions could be made to reshape them according to their intended purpose. In the South African FET colleges, in particular, the situation is such that the current practice in FET colleges boosts the country’s image with the accreditors (Maki, 2002). As the situation is to date, the colleges seem to be very effective in producing high numbers of graduates. The role of the TVET/FET colleges according to Buthelezi (2018), is to provide for the country’s economic needs where every citizen benefits; it is not about individual needs and boosting numbers. Individual needs will be curtailed only if the curriculum planners do needs analyses by involving all stakeholders in education and by cooperating with the local economy to ensure that the skills produced match the demand (Langer, 2013).

The implementation of the Nated Report 191 (curriculum) which was initiated 23 years back became quite obvious that the work schedule and course contents thereof were not relevant to the current economy in which skills and technology are now a high priority. In addition to the above, the use of only one method of assessing students, namely written testing appeared to be a contributory factor in graduating students who are poor in employability skills. The ICASS document (Department of Higher Education and Training, 2017), which is used as an assessment guideline emphasizes written testing more than practical activities. As posited by one participant, it is easy to pass the written examination because usually the same question papers are used more than once, so revising the work scheduled for the trimester using previous

question papers affords students a better chance to pass. Findings indicated that the FET colleges did not apply a variety of assessment methods, e.g., using observations as suggested by Chaudhary and Dey (2013). With this method, students are given the opportunity to observe and practice the required skill. Participants clearly indicated that such a skill is acquired only when they do internships, which the majority of students are unable to secure. Participants indicated that they could not get the opportunity to go for internships; hence, they were lacking in what Klaus (2010) called soft or people skills that are important in the workplace. Comments by participants who did the practical training indicated that companies recruit only graduates who have the experience of the advertised post and have acquired skills such as communication, social, faultfinding, and safety skills (Klaus, 2010), which are practically not taught in TVET colleges for the N6 students. Participants also indicated that the ICASS document does refer to practical examinations, but in practice, students do no practical work, and the written tests only measure their theoretical knowledge. Therefore, the only tool used for assessment was the assessment of theoretical knowledge that they studied since students were expected to reproduce the technical knowledge taught (Fletcher et al., 2012). If learning had to be assessed, the assessment tool would measure the capabilities that the student acquired that will enable him or her to compete easily in the job market. Even though the applied tests are of different cognitive levels that do not qualify this type of assessment to be the best method to produce graduates who are work-ready. The practical part in terms of applying the acquired knowledge is not given much priority in FET colleges; hence, students who qualify from these colleges are lacking the necessary expertise to be employable. The study sheds light on the importance of on-job training where graduates would acquire experience in putting theory into practice. A participant commented that during his internship, it became as if he was never taught the course content, because everything looked new, indicated the deficiency of technical knowledge in preparing graduates who are ready for work.

## Conclusion

This paper has shed light on how the assessment strategies employed in the South African TVET/FET colleges affect the economy and the livelihoods of individuals in society. The use of written testing has led to the high unemployment rate of FET graduates and that caused a drop in living standards. The written testing only developed the graduates' technical knowledge; whereas, employability skill development, which is key to getting a job, was ignored.

## Recommendations

Based on the knowledge gained during this study, the following recommendations to education stakeholders are offered:

- FET colleges must practice a dual model such as the one used in European countries, which caters for technical knowledge and skill development.
- The government must extend the length of the program at public TVETs to include a practical component and not just a theoretical component.
- The Department of Higher Education must fund FET colleges adequately to afford them the opportunity to use alternative teaching and assessment strategies such as observation, projects, activities, etc.
- TVET teachers must be given relevant training and be provided with continuous in-service training to keep them abreast of new economic demands.
- There should be specific teacher-training colleges that train TVET college instructors to equip them with both theory and skills.
- The TVET curriculum must be changed and developed to meet the demands of the global world.

The limitations of the study relate to the fact that it was based on a small sample, as only 15 participants were willing to take part in the study and the study was confined to three TVET colleges

in the Gauteng province. It was therefore not possible to generalize the findings. I, therefore, recommend further research involving a larger sample taken from a wider geographical area.

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