Teacher trainees' perceived challenges of VET teacher training in Zimbabwe

Abstract

The paper examines the challenges of training VET teachers in Zimbabwe as perceived by teacher trainees who are the consumers of the curriculum. The paper suggests strategies which might help to resolve the identified challenges by drawing upon previous researches by others elsewhere (European Commission, 2014). Vocational education and training teachers' education is the weakest point in the chain of learning (Majumdar, 2012). According to literature, there is limited research on challenges encountered in the training of VET teachers in the Zimbabwean context. A survey research design was used to generate data. The study targeted 175 VET teacher trainees from which a sample of 70 participants were randomly selected. Data were collected from one technical teachers' training college since it is the only institution in the country offering this type of training. A closed and open ended questionnaire was utilised for data collection. The questionnaire was validated by three independent VET experts. The questionnaire was designed to elicit information on the nature of the challenges faced in the training programme and how the challenges could be resolved. Descriptive statistics including mean and standard deviation was used for data analysis. Open ended questions were thematically analysed. The study revealed challenges relating to VET lecturers such as; inadequate funding, inadequate training equipment, recruitment of low achievers, weak industrial linkages, lack of industrial experience by lecturers and mismatch between curriculum and industry requirements. It was also established that some VET lecturers lacked sufficiently strong blend of subject specialist knowledge and pedagogical skills. From the findings, it can be concluded that VET teacher education reform is needed to improve teacher education practices in Zimbabwe. The findings of the study if taken on board by policy-makers, could provide useful directions in improving the quality of VET teacher training in general and particularly in Zimbabwe.

Introduction

The aim of this study was to examine the challenges faced in the training of TVET teachers in Zimbabwe. The role of TVET in preparing a workforce for national development is well acknowledged in Africa today (Ahmed, 2010). The potential of TVET in doing this has however not been fully exploited because of a range of challenges. Pavlova (2014) points to adequate teacher preparation as a remedy for these challenges. Majumdar (2012; 2013), on the other hand, claims that challenges of teacher quality and current professional needs can only be addressed if the TVET teacher education system can ensure high-quality training. Adequate training equipment and tools may also enhance the quality delivery of the TVET. Furthermore, without qualified and highly experienced TVET lecturers to plan and execute TVET programmes, little will be achieved. It thus means that mitigating challenges that lecturers face in the TVET teacher training colleges is a recipe for delivering quality teacher training programmes (Afeti, 2014). The study examines teacher trainees' perceived challenges of VET teacher training in Zimbabwe.

Lipsmeier (2013) claims that when TVET teacher training is the subject of discussion at any international conference, it quickly becomes clear that there are many unresolved issues related to this sector. One of the challenges faced in the sub-Saharan African TVET sector is the provision of adequate and relevant technical skills that are responsive to the labour market AU, 2007; Sirk et al. 2016). The delivery of quality TVET is dependent on the competences of the teacher, competence measured in terms of; theoretical knowledge, technical and pedagogical skills, as well as being abreast with new technologies in the workplace. Despite making efforts to promote technical and vocational subjects in Zimbabwean schools, the system is faced by many challenges (Coltart, 2012) such as the lack of adequate resources, teacher quality and current professional needs and high staff turnover in schools and colleges (Ministry of Higher and Tertiary Education, 2008).

The findings contribute insights towards the understanding of the nature of challenges in the TVET teacher training in Zimbabwe and by implication other developing country contexts. This article continues by explaining TVET and the selected theoretical lens, providing the background on teacher training in Zimbabwe, discussing teacher training challenges in the sector, discussing the methods of the study and presenting the results.

Literature and background

In Zimbabwe, TVET has always been associated with those who have failed in the academy and even today, hence, the notion of TVET being a preserve for the less bright learners still holds. Chakamba, Jumo, Edziwa and Chiweshe (2013) indicate that despite Zimbabwe's thrust towards TVET, the situation is actually to the contrary since the academic stream still dominates. This can be attributed to the negative perception that TVET is associated with manual work. Bukit (2012) stresses that TVET teacher-trainees should be equipped with specific and generic skills so much needed to adapt to the changes in technological career environment. Consequently, to achieve this, teacher development and support has a critical role to ensure quality teaching in competencies development, which includes knowledge, skills and attitudes relevant to the rapidly changing labour market. Lucas (2014) claims that if TVET in all its forms is to be significantly improved, teaching and learning methods, which make it work best, must be understood. Khambayat and Majumdar (2010) assert that the next generation of educators will have to be creative and innovative in managing web-based technologies and selecting the appropriate media.

In Zimbabwe, Ministry of Higher and Tertiary Education (MOHTE) is responsible for the pre-service training of teachers. In addition, it is responsible for polytechnics and universities. However, both ministries, i.e. the Ministry of Primary and Secondary Education and the MOHTE, are involved in the in-service training of teachers. Staff development programmes involving additional academic and professional qualifications are the responsibility of MOHTE. Teacher education colleges produce qualified teachers for primary, secondary, technical high schools and vocational training centres. Out of the 14 teacher training colleges in Zimbabwe, only one trains TVET teachers to teach in secondary schools. Universities offer degrees relevant to the staff development needs of TVET institutions. For example, the University of Zimbabwe offers the Bachelor of Education (Technical) degree, which is an in-service programme to upgrade secondary school teachers of technical subjects with certificate and diploma qualifications so that they can also teach at Advanced level, at TVET teacher colleges, or they can become administrators in technical education. This is one programme that has kept the university in contact with secondary education and the schools; it has also

contributed to capacity building for improved teaching and learning of TVET subjects at this level. The teacher training college in this study is affiliated to the University of Zimbabwe that awards the Diploma in Education to its graduates.

TVET Teacher Training Programme

For TVET secondary school teacher trainees, the entry requirements are at least five O-level subjects including English, Mathematics and Science, and preferably the subject to be studied. The TVET programme is structured in such a way that the first three years are meant for skills training in a particular trade area, including one year of industrial attachment to gain hands on experience. Upon successful completion of skills training, trainees return to college for 16 months pedagogical training where they obtain a Diploma in TVET Education. The 16 months include four months of teaching practice to get the real classroom experience.

Challenges in TVET implementation

The African Union's Strategy Paper (2007) has identified multiple challenges facing TVET programmes on the continent, such as weak national economies and shortage of qualified TVET personnel. Also, TVET programmes tend to be expensive to implement, and poor schools suffer disproportionately from a lack of financial resources (Bvekerwa, et al., 2011; European Commission, 2014). Murinda (2014) and Woyo (2013) concur that in Zimbabwe the underfunding of polytechnics and inability to pay fees by most students has led to the failure of these institutions to purchase the necessary equipment and tools. There is a lack of equipment in schools and most of the teachers assigned to teach practical and technical subjects are under-qualified to implement the two-pathway education system (Tshabalala & Ncube, 2014). Studies on VET pedagogy established that the subject matter knowledge of the teacher helps to build up the self-efficacy of the student (Etuk & Usoro, 2016; Dickson & Ladefoged, 2017). Reid and Kleinhenz (2015) asset that VET teaching is often seen as a second-class occupation for people whose academic results are not good enough to allow them entry into more prestigious careers like law or engineering. As a result, VET institutions recruit and select trainees with low levels of passes who may present problems to the lecturers. This phenomenon affects the ideal situation whereby TVET teachers should possess knowledge of subject matter (content), hands-on experience (technical skills), knowledge of learners and knowledge of teaching (pedagogics) (Bünning & Zhao, 2006: 20).

A number of studies show that the problem of inadequate resources trickles down to secondary schools, hampering the effective implementation of technical and vocational subjects (Gwembire & Katsaruware, 2013; Chikoore & Museva, 2014). Zindi and Matienga (2017) also found out that TVET lecturers face the challenges of heavy workload since they have to teach theory lessons, run practical workshops and supervise students on industrial attachment. A close collaboration between the VET institutions and the labour market is important to align the curriculum with the skills needs of the labour market (Bukit, 2012; Paryono, 2015). To facilitate student placements, the Organisation for Economic Cooperation and Development [OECD] (2015) suggests that, institutions should conduct career fairs/exhibitions where recruiters and students can meet to exchange information about placement opportunities.

Theoretical lens

To give direction to the study, this study was framed in the evaluation theory. After reviewing various programme evaluation models, Stufflebeam's (2003) context, input, process and product (CIPP) model was opted for the study. The CIPP model provides a comprehensive framework for evaluating the TVET teacher-training programme since it examines the phenomenon through these four concepts. According to Dubrowski and Morin (2011), the CIPP model intends not only to provide a sound evaluation of the merit and worth of a training programme, but goes beyond to gain a better understanding of how the programme functions. The capacity of TVET systems to provide high-quality and relevant training to students depends largely on the quality of its teachers and trainers, and, by extension, on the quality of their teacher training systems (International Labour Organisation [ILO], 2015). Therefore, the issue today is not about the importance of TVET, but how to ensure its relevance, responsiveness and value in an increasingly globalised economy, with particular reference to Zimbabwe.

Research method

A survey research design was used to generate data. The survey design was chosen as it allows researchers to gather a large set of data from many respondents and facilitate the reporting of quantitative information of a population from a selected sample of that population (Ponce & Pagan-Maldonado, 2015). Data were collected from one technical teachers' training college since it is the only institution in the country offering this type of training. In this study, 175 VET teacher trainees constituted the target population from which a sample of 70 participants were randomly selected. Stratified random sampling was used to select 10 respondents from each of the seven departments in the institution. The departments are Technical Graphics, Wood Technology, Mechanical Engineering, Tourism and Hospitality Management, Clothing and Textile Technology and Information Technology. The teacher-trainees were asked about the pedagogical training. Although TVET teachers teach both in secondary schools and in other colleges, this study focussed on training of secondary school teachers only.

A closed and open ended 33 item questionnaire was utilised for data collection. Closed questions allowed to limit responses so that results could be analysed with coherence. The questions were designed on a five-point Likert scale, ranging from strongly agree to strongly disagree. Data from the initial five-point Likert scale was collapsed into a 3-point scale with, agree, neutral and disagree to allow for a more precise focus to assist in the interpretation of data. Open-ended questions enabled the researchers to gather as much information as possible from the respondents (Sekaran & Bougie, 2012).The questionnaire was validated by three independent VET experts. The questionnaire was designed to elicit information on the nature of the challenges faced in the training programme and how the challenges could be resolved. The instrument was constructed following the CIPP model to get in depth information about the teacher training programme. The first part of the questionnaire included questions on biographical information to illuminate the context of the students enrolled for VET teacher training. Secondly, questions which elicited information related to institutional factors related to VET teacher training where asked to establish programme goals, policy on recruitment of trainees and funding of the programme. Thirdly, input evaluation focussed on the challenges related to the infrastructural factors in terms of resources channelled towards the training programme. The fourth part of questions comprised questions on curricular factors which solicited information on curriculum relevance for the job market. The last part on closed ended questions elicited information on lecturer pedagogical competence evaluating the process related to the implementation of lecturing in VET teacher training. Descriptive statistics

including frequencies and percentages were used for data analysis since there was no hypothesis testing involved. Finally, the open ended question asked information on how the challenges faced in VET teacher training could be resolved. Open-ended questions' answers were subjected to thematic analysis in which the underlying themes and ideas were identified, coded and assigned numbers and descriptively analysed for frequency of occurrence.

Results and discussion

The purpose of this study was to examine the challenges faced in the training of VET teachers in Zimbabwe as related lecturer practices. The results of the three open-ended questions are also presented to complement questionnaire responses. The data collected were presented and summarised in tabular form.

VET teacher trainees' biographic information

The study involved 45 males and 25 females. Fifty-six percent of the trainees were aged between 21 and 30 while 34 % were between 31and 40. The remaining 10% were between 41 and 50 years of age. This indicates that the majority of the VET teacher trainees were in the younger age group. In terms of qualifications, it was established that although the respondents had appropriate basic qualifications some of them did not study the subject they intended to study at school. Qualifications on admission to college are important for lecturers to be able to employ appropriate lecturing methods for trainees with diverse backgrounds.

Institutional factors related to TVET teacher training

The institutional factors had items which helped in identifying contextual challenges. The findings on teacher trainees' responses on institutional factors are shown in Table 1.

Table 1: Institutional factors related to TVET teacher training: Context (N=70)

Statement	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Clarity of teacher-training goals	52	74	7	10	11	16
The teacher-training objectives meet students expectations	63	90	5	7	2	3
The TVET teacher-training programme is expensive	57	81	3	4	10	14
Inadequate funding of the training programme	61	87	3	4	6	9
Recruitment policy ensures enrolment of competent trainees	48	69	13	18	9	13
Responsive training programme for professional needs	54	77	8	11	8	11

From the results in Table 1, it was established that the VET teacher training goals were clearly defined to attract students to the programme. It was established that the VET teacher-training programme was expensive. The majority of respondents (87%) also show that there was inadequate funding for the programme. Literature confirms that lack of funding and resources seems to be a common global phenomenon. Most respondents (69%) indicated that the college student recruitment policy did not ensure the enrolment of competent VET teacher trainees. Consequently, the quality of the teacher produced is compromised. It is imperative that VET teacher training institutions strive to attract the best students to train as teachers to raise the quality of VET education.

Infrastructural factors related to TVET teacher training

VET teacher trainees responded to the items focussing on the infrastructural factors as shown in Table 2. The items solicited information on input evaluation in the form of resources required for the effective training of TVET teachers.

Table 2: Infrastructural factors related to TVET teacher training: Input (N=70)

Statement	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Adequacy of machines, tools and equipment	24	34	3	4	43	61
Equipment and machines in the workshops match those in industry in terms of quality and efficiency	19	27	4	6	47	67
Relevance of library textbooks	45	64	6	9	19	27
Functionality of machines and equipment in workshops	17	24	8	11	45	64
Maintenance programme for equipment and machines	15	21	8	11	47	67
Accessibility of computer laboratory to students	46	66	5	7	19	27
The college has reliable internet connectivity	33	47	4	6	33	47

The results in Table 2, revealed that equipment and machinery in the workshops did not match those in industry. This outcome is in agreement with Tshabalala and Ncube (2014), who stress that the lack of laboratories and adequate materials that reflect the real environment of the industries is also a problem in technical education. The results suggest that trainees did not have sufficient functional and well-maintained equipment and machinery, hence the need for this to be addressed to improve the quality of training.

Curricular factors related to TVET teacher training

The key questions in table 3 are on the relevance of the curriculum in preparing students for the world of work.

Table 3: Curricular factors related to TVET teacher training: Input (N=70)

Statement	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Course content lacks relevance for industry	58	83	3	4	9	13
The course prepares me to be a competent TVET teacher in my subject	61	87	5	7	4	6
Curriculum emphasises lifelong learning skills	55	79	11	16	4	6
The content of the courses in this programme enables me to teach my TVET subject in secondary schools confidently	63	90	2	3	5	7
Mismatch between the curriculum and industry requirements	28	40	13	19	29	41
The curriculum motivates me to be a TVET teacher when I complete the course	48	69	12	17	10	14
Preference to work in industry than schools	41	59	13	19	16	23
The curriculum is determined by the subject content to be taught in secondary schools	41	59	22	31	7	10
Difficulty to place students on industrial attachment	39	55	6	9	25	36

According to results in Table 3, the majority of respondents (83%) concurred that the course content lacked relevance for industry. According to most of the respondents (55%) the college also finds it difficult to place students on industrial attachments. It could be concluded that the policy on industrial linkages was not being implemented effectively. It is therefore important for the institution to find ways of building synergies with industries.

Pedagogical factors related to TVET teacher training

Table 4 presents the finding on the pedagogical factors. The major questions focussed on lecturing strategies and lecturers' theoretical, practical and pedagogical knowledge. Responses were also required on the competence of lecturers in the use of information technologies during lecture delivery.

Table 4: Pedagogical factors related to TVET teacher training: Input (N=70)

Statement	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Lecturers lack competence in practical skills	53	76	7	10	10	14
Lecturers provide suitable examples, demonstrations and illustrations of concepts and skills	53	76	4	6	13	19
Lecturers stimulate my thinking through problem-solving techniques and asking challenging questions	52	74	5	7	13	19
The teacher-training programme incorporates a variety of training methods such as field trips and simulations	59	84	1	2	10	14
Lecturers regularly improve their teaching material	38	54	14	20	18	26
Lecturers use a variety of instructional materials effectively	42	60	10	14	18	26
Lecturers lack competence in ICT skills	35	50	10	14	25	36
Effective use audio-visual equipment by lecturers	32	46	5	7	33	47
Students are actively involved in classroom activities	65	93	0	0	5	7
Assessment of students' work is done fairly according to the marking scheme	56	80	8	11	6	9

According to results in Table 4, there seemed to be a challenge to the competence in terms of information and communication technology (ICT) skills. Furthermore, results of this study show that most lecturers were competent in theoretical knowledge but lacked practical competence of the subjects they taught. This suggests that the lecturers had a good mastery of the subject matter. In response to the open ended question, some respondents, therefore, proposed that lecturers should go on industrial attachment at least every two years to update their knowledge and skills. The results indicate that the majority of lecturers incorporated a variety of training methods, such as field trips and simulations to help students learn.

Recommendations

Based on the results and discussion in the literature review, several recommendations are made. The government should increase funding to institutions involved in TVET teacher training since TVET teacher training is a worthwhile investment. Funding provisions and level of funding adequacy influence the quality of graduates. Funding is needed to finance TVET trainee teachers work-based learning durations and teaching practice supervision, ensure TVET instruction in the training colleges is not compromised by lack of adequate resources of latest technologies and workshop equipment, infrastructure, training materials and consumables and; attracting and retaining highly skilled and qualified teaching personnel in the TVET teacher training colleges.

The college should ensure that the policy on industrial linkages is effectively implemented, so that teacher trainees are attached to competent companies for them to get practical hands-on experience. Since findings suggested that the generality of TVET teachers with all paper qualifications lack the requisite hands-on experience, it is recommended that staff development for such TVET teachers becomes imperative. This will allow TVET teachers to transfer both knowledge, technical skills and apply proper and versatile teaching techniques to produce

competent TVET graduates. This can be achieved through college trainers-industry attachments to learn specific skills and use of new equipment and, hiring guest lecturers/demonstrators to colleges to share skills and current knowledge. This can be done with emphasis on strengthening collaboration partnerships between the colleges and employers to create opportunities for TVET teachers to keep abreast with current workplace skills where necessary.

The college should also endeavour to enrol students with a background in the subject they want to study. To achieve this, TVET teacher training can opt to enrol experienced industry professionals and give them the skills to design, train and assess skills training. This will ensure that relevant technical skills are passed on from experienced artisans cum TVET teachers with industry experience to their TVET students. This can be more effective than constantly up-skilling the professional trainer. However, to improve inclusiveness; training of new entrant professional instructors/teachers/trainers can run alongside for knowledge sharing during training with experienced recruits from industry.

Above all, TVET lecturers should embrace information and communication technology, especially on programmes related to their subject areas. It is imperative, especially with the advent of COVID 19 pandemic for TVET lecturers to embrace the use of digital technologies and innovations for them to effectively deliver their mandate in the new normal. In turn, the TVET teachers will need to capacitate and transform TVET learners to a culture of digitisation and automation needed for the future of work in the fourth industrial revolution (4IR). The buck should start with the TVET trainee teachers in the training colleges. Moreso, acquainting TVET trainee teachers to digital tools will enable them to facilitate online classes since many institutions and organizations around the globe are switching to electronic distance learning based on internet and online media.

The limitations of the study were that, the study specifically focussed on challenges faced in the training of TVET teachers for secondary schools in one teacher-training institution in Zimbabwe. Equally, the study did not include some universities where TVET lecturers are trained and have a direct impact on TVET teacher trainees. For further research, a similar study on a larger scale involving TVET lecturer trainers, policymakers and industrialists could be carried out.

Conclusion

The study has been able to systematically gather data on TVET teacher training in a Zimbabwean context, which will provide a useful reference for those that wish to conduct similar studies in education and other fields. Possible strategies to resolve these challenges were illuminated by this study. While the proposed policies offer interesting insights into addressing the challenges faced in TVET teacher training in Zimbabwe, the study does not offer them as a panacea for challenges encountered in other countries. From literature it has been established that a successful training programme for TVET teachers should be multi-faceted and offer an opportunity for both pedagogical knowledge and technical skills. Any efforts to improve TVET teacher education have to be grounded in and tailored to a specific context. The study calls for the Zimbabwean Government to ensure that TVET teacher training is a priority, in tandem with the new curriculum.

References

Afeti, G. (2014). *Technical and Vocational Education and Training for industrialisation in Africa.* Nairobi: The African Research and Resource Forum.

African Union. (2007). *Strategy to revitalise Technical and Vocational Education and Training (TVET) in Africa.* Meeting of the Bureau of the Conference of Ministers of Education of the African Union (COMEDAF). Addis Ababa: Ethiopia.

Ahmed, H.A.E. (2010). *Building capacity of teachers and trainers in Technical and Vocational Education and Training (TVET) in Sudan: Case of Khartoum State.* Unpublished PhD Dissertation. Dresden: University of Dresden.

Bukit, M. (2012). *Strengthening TVET teachers' education through teacher-industry-linkages.* Paper presented at the 2nd UPI International Conference on Technical and Vocational and Training. Bandung, Indonesia.

Bünning, F. & Zhao, Z. Q. (2006). *TVET teacher education on the threshold of internationalisation.* Internationale Weiterbildung und Entwicklung. gGmbH Capacity Building International.

Bvekerwa, S.T., Chavunduka, D., Absalom, J. & Chinyemba, F. (2011). Appraisal of resources for technical and vocational subjects in secondary schools: A study of Makonde District, Zimbabwe. *Journal of Innovative Research in Education,* 1(1): 114-131.

Chakamba, J., Jumo, C., Edziwa, X. & Chiweshe, M. (2013). The demise of technical subjects: The case of selected high schools in Harare, Zimbabwe. *International Journal of Education,* 5(3): 172-183.

Chikoore, M. & Museva, S. (2014). Obstacles in the path of implementing Technical/Vocational Education in Zimbabwean secondary schools: How can the situation be helped? *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS),* 5(4):557-565.

Coltart, D. (2012). *Education for employment, developing skills for vocation.* Cape Town: African Brains.

Dickson, M. & Ladefoged, S.E. (2017). Introducing active learning pedagogy into a technical and vocational education and training academy in Kurdistan, Iraq. *International Review of Education*, 63(5): 679-702.

Dubrowski, A. & Morin, M.P. (2011). Evaluating pain education programmes: An integrated approach. *Pain Research and Management Journal.* 16(6): 407-410.

Etuk, A.B. & Usoro, A.D. (2016). Technical Vocational and Training (TVET) Teacher Quality and self-efficacy of TVET students: A case study. *International Journal of Educational Benchmark (IJEB)*, 1(1): 96-106.

European Commission. (2014). *TVET teacher education in Africa: Synthesis report.* European Union: Brussels.

Gwembire, J. & Katsaruware, R.D. (2013). Challenges and reflections of implementing the Technical and Vocational Education policy: A case for secondary schools in rural communities of Rushinga District, Mashonaland Central Province. *Greener Journal of Vocational and Technical Education, 1*(1): 1-10.

ILO. (2015). *Vocational teachers and trainers in a changing world: The imperative of high teacher training systems.* Geneva: ILO.

Khambayat, R.P. & Majumdar, S. (2010). Preparing teachers of today for the learners of tomorrow. *Journal of Engineering, Science and Management Education*, 2(1): 9-16.

Lipsmeier, A. (2013*).* Approaches towards enhanced praxis-orientation in Vocational Teacher Education (VTE). *TVET@Asia*, 2: 1-18.

Lucas, B. (2014). Vocational pedagogy. *What it is, why it matters and how to put it into

practice. Report of the UNESCO-UNEVOC Virtual Conference. Bonn: UNESCO-UNEVOC.

Majumdar, S. (2012). *TVET teachers as backbone for TVET quality breakthrough.* Paper Presented at the International Centre on TVET Teachers –The key for TVET quality breakthrough. Bonn, UNESCO-UNEVOC.

Majumdar, S. (2013). *New Paradigm in Teachers' Education in TVET.* Paper Presented at the International Conference on Preparing TVET Educators for the Next Generation (NEXGEN EDCON). Pasig City, Philippines.

Ministry of Higher and Tertiary Education. (2008). *National Report of Zimbabwe Presented at the 45th UNESCO International Conference on Education.* Geneva, Switzerland.

Murinda, E. (2014). *Skills training and the employment situation of young people in Zimbabwe.* Zimbabwe Country Report for the 2014 Ministerial Conference on youth employment. Abidjan: Cote d'Ivoire.

OECD. (2015). *Skills for Social Progress: The power of social and emotional skills*: OECD Skills Studies. Paris: OECD Publishing.

Paryono, P. (2015). Approaches to preparing TVET teachers and instructors in Asian member countries. *TVET@Asia,* 5: 1-27.

Pavlova, M. (2014). *Reinventing Higher Education: Its contribution to TVET and sustainable development*. 11th UNESCO-APEID International Conference, 12-14 December, 2014. Bangkok.

Reid, K. & Kleinhenz, E. (2015). *Supporting teacher development: Literature review*. Canberra: Australian Council for Educational Research (ACER).

Sirk, M., Liivik, R. & Loogma, K. (2016). Changes in the professionality of vocational teachers as viewed through the experiences of long-serving vocational teachers in Estonia. *Empirical Research in Vocational Education and Training,* 11(3): 1-16.

Sekaran, U. & Bougie, R. (2012). *Research Methods For Businesses: A skill building approach*, 5th Edition. John Wiley and Sons Limited.

Stufflebeam, D. L. (2003). *The CIPP model for evaluation*. In D.L. Stufflebeam & T. Kellaghan (Eds.), The International Handbook of educational evaluation. Boston: Kluwer.

Stufflebeam, D.L. & Shinkfield, A. J. (2007). Evaluation theory, models & applications. San Francisco, C.A: Jossey-Bass.

Tshabalala, T. & Ncube, A.C. (2014). Teachers' perceptions on challenges faced by rural secondary schools in the implementation of the Technical and Vocational Education and Training policy in Nkayi District. *International Research Journal of Teacher Education,* 1(2): 10-15.

Woyo, E. (2013). Challenges facing Technical and Vocational Education and Training institutions in producing competent graduates in Zimbabwe. *Open Journal of Education,* 1(7): 182-189.

Zindi, F. & Matienga, H. (2017). Management strategies for practical skills development instruction in Zimbabwean Polytechnics. *International Journal of Innovative Research and Development,* 6(8).