



NEEDED COMPETENCIES OF TVET EDUCATORS IN TVET TERTIARY INSTITUTIONS, BAUCHI STATE IN PERSPECTIVE

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ABSTRACT

This research is intended to investigate the TVET educators' perceptions on competency needs in Bauchi State TVET tertiary institution based on Malaysian Human Resource Development Practitioners (MHRDP) Competency model for workplace learning and performance (WLP). Competency is an essential element of determining the quality of technical and vocational education and training (TVET) educators. Due to the poor training of educators that led to produce quack graduates which resulted to poverty and idleness amongst the TVET graduates in the society. This study employed a full quantitative research approach. A total of 218 questionnaires were administered out of which 205 were retrieved and subsequently used for analysis. Descriptive mean ranking was conducted to analyse the data. The research found that the Bauchi State TVET educators perceived all the 25 constituents of competency components from the three categories of competency as important. A research of this kind should be conducted to the Non-TVET educators in other tertiary institutions.

Keywords: *TVET, Competency, Perception, TVET Educators, TVET Tertiary Institutions*

Introduction

Nigeria as developing country in the world, needs to have competent TVET educators by ensuring effective education, training and preparation are in place. In order to be among the world players, tertiary institutions need to

provide competent educators with a new advance skill so that to meet the challenges of real time in tertiary institutions.

Background of the study

Education plays a vital role in supporting the economic development for both developed and developing nations (Dufera, 2008). The educational system in Nigeria is based on six, three, three, four system. This system consists of six years for primary school, three for junior secondary school, three for senior secondary school and four for higher or tertiary institutions. The tertiary institutions consist of Universities, Polytechnics, and Colleges of Education with their academic staff. Academically, educators are the backbone of training and education system either in general education or TVET (Schulze, Gryl & Kanwischer, 2014). Furthermore, educators are the key players of any nation's educational setting and their competencies matters a lot. Indeed, the education sector cannot be under estimated, since no country can rise above the quality of its educational system, is the same as no educational system can rise above the competency of its educators (Akhuemonkhan & Raimi, 2013; Oni, 2007).

Competency is an area of skills and knowledge that is vital for making key output as posited by McLagan in 1989, who conducted the first research on competency (McLagan, 2002). Competencies have become the primary source of organisations' means of assessing employees' knowledge, skills and abilities (Boyadzis, 2008). The usefulness and the competency of TVET educators should be given more concern in order to ensure the productivity of human capital accomplishes the prerequisite of job market and industries (Hanimastura, Hairulliza & Meriam 2016). Nowadays, competency is no longer realised as instrument used to conduct teaching and learning processes but has becomes a necessity and compulsory knowledge every educator must have (Mishra & Koehler, 2008; Tang, Wong, & Cheng, 2016). TVET educators were lacking competencies which had led to an unproductive teaching and learning process besides failure to link the entire learning process (Kigwilu & Githinji, 2015).

The challenges related to TVET educators' competencies are common in the upcoming or developing countries in which Nigerian is among (Hamisu, Salleh, Sern & Adamu, 2017). It is accurate, to note that challenges relating to competency affect many institutions worldwide and most especially in Bauchi

State TVET tertiary institutions. However, the competency model has been used as a veritable tool for minimizing these unconditional challenges (Billett, 2001). A lot of institutions are adopting or adapting competency framework with the intention or purpose of achieving their goals (Berge, de Verneil, Berge, Davis, & Smith, 2002). Therefore, much has been done about poor facilities and other equipment in the Bauchi educational landscape, but there is insufficient information on the competencies of TVET educators in Bauchi State.

This research is intended to investigate the TVET educators' perceptions on competency needs in TVET tertiary institutions of Bauchi state, based on Malaysian human resource development practitioners (MHRDP) competency model for workplace learning and performance (WLP) developed by Salleh, (2012).

Research Objectives

1. To investigate the TVET educators' perceptions on competency needs in Bauchi State.

Research questions

1. What are the TVET educators' perceptions on competency needs in Bauchi State?

Scope of the study

The midpoints of this study focused specifically on determining the perceptions of TVET educators on competency constituents. In this research, three dimensions of competency were focused, namely; organisational competency, thinking competency and application competency. This research investigated the competency needs of TVET educators in Bauchi State tertiary institutions based on MHRDP competency model developed by Salleh, (2012). In addition, TVET educators who work in TVET institutions were selected as the respondents of this research. Therefore, other TVET educators in the same tertiary institutions were excluded because their works are not directly related to TVET.

The research was carried out in Bauchi State, North eastern Nigeria within the five TVET tertiary institutions in the state (Abubakar Tafawa Balewa University (ATBU) Bauchi, College of Education (COE) Kangere Bauchi,

Abubakar Tatari Ali Polytechnic (ATAP) Bauchi, College of Education (COE) Azare and Bauchi Institute of Education and Islamic Studies (BIEIS) Bauchi, Bauchi State, Nigeria. Bauchi State was chosen because it is the only State in the North east that has a high number of TVET tertiary institutions in the region as mentioned above.

Conceptual framework

Conceptual framework is a process that lead the researcher during the research circle and to guide the researcher toward achieving the aim and objective of the research (Creswell, 2012). It also guides the readers to understand the relationship between all the research variables. In specific, this conceptual framework applied in this study is based on the MHRDP competency model for workplace learning and performance developed by Salleh, (2012).

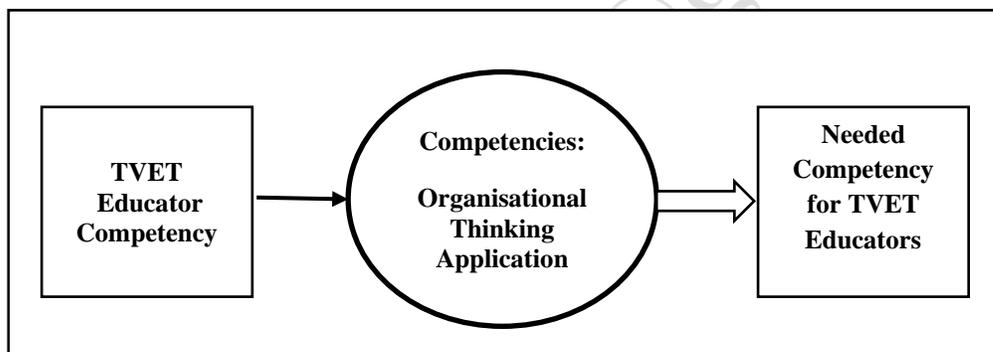


Figure Error! No text of specified style in document.1: Conceptual framework Adapted from Salleh, (2012)

Figure 1.1 present the conceptual framework of this study which shows the relationship between the competency components thus, organisational competencies, thinking competencies and application competencies. Therefore, the goals of this research conceptual framework is to describe the recent direction of TVET educators and to investigate the needed competencies which is related to their respective institutions, based on the 25 constituents of competencies out of three different components which is derived from MHRDP competency model and the explanations of these variables are in the literature review.

LITERATURE REVIEW

Education is a powerful instrument for growth and development of municipal, state and the entire nations NPE (Federal Republic of Nigeria, 2004). Indeed for a nation to be successful in terms of security, economic growth and development it has to give education more priority. Esene, (2010) it will be the highest investment in the country to make rapid development economically, socially, politically, sociologically and in human resource. Similarly, the economic growth and development of any nation depends on the knowledge and skills which remains the main processor in national development (Ayonmike et al., 2015).

The main purpose of TVET is to impart skills and knowledge of the labour market at sub-specialized levels. It is unlike other educational sector because it delivers both in the workplace and the classroom and it is well organised in different ways globally or internationally (Karmel, Anlezark & Org, 2006). TVET educators develop individuals not only with vocational or technical skills but equip people with extensive skills, attitude and knowledge that are now considered as a well significance for participation in the workplace and entire life (Anlezark et al., 2006).

According to UNESCO, (2014;) and Schulze, Gryl, and Kanwischer, (2014) TVET educators are the backbone of education and training system either in general education or in TVET. TVET Educator is an individual whose aims is to impart knowledge and know-how to train students, learners or trainees in TVET institutions or vocational training centre. The functions of the TVET educators resemble with that of the trainers who work in school situation and give both practical training and related instructions (Linten, Prustel, Woll, Roth & Wurdak, 2014), Therefore, there is a need for the government to invest in education especially in TVET and to ensure students learn when they go to school in order to achieve the desired objective of producing well competent and motivated manpower for job market.

The TVET Educator programme is offered in tertiary institutions. Students who enrol in this programme are prepared in different areas of studies in technical and vocational education and they become TVET educators in TVET schools after graduation from the tertiary institutions (Spöttll, 2009). Similarly, Uwaifo, (2010) and Maclean, (2011) assert that TVET educators are trainers of technically oriented persons who are to be the initiators, facilitators and implementers of technological development of a nation by

adequately training its citizenry on the need to be technologically literate, leading to self-reliance and sustainability. Therefore, TVET educators equip individuals not only with technical and vocational skills, but with a broad range of knowledge, skills and attitudes that are now recognized as indispensable for meaningful participation in the world of work and entire life. However, Coyner & McCann, (2004) posited that provision of competent TVET Educator will become one of the major challenges in this 21st century. Therefore, the TVET educators who imparted the vocational knowledge and technical skills their competencies need to be considered.

Competency

The word competency come from Latin word *competere* literally means competent, competence or expertise which means individual to have quality or physical and intellectual qualification in carrying out specific task or job. (Sulaiman et al., 2015). Competence was popularized first by Hamel and Prahalad in 1990 at Harvard Business Review and it was adapted by different Researchers in different fields of studies giving it different perceptions or meanings in their fields based on the context in which it was applied.

For more than three decades, the term “competency” is defined by different researchers with different perceptions and perspectives and in different ways. Based on the definitions given by different researchers, this will help the reader comprehend and also to see the perception of the researcher is similarly the same with that of other researchers such as McLagan, 1989; Boyatzis, 2007; Rycus & Hughes, 2000; Hughes and Rycus, 2000. McLagan, (2002) defined competency as a centre for knowledge or skills that is so vital in producing key outputs in 1989. Boyatzis, (2008) refer competency as the capability and ability of individual skills, knowledge and behaviour to complete the task assigned to them.

Nowadays there is a highly competitive labour force environment in the world, and the driving catalyst is the competency. Competency was first discussed and assessed by David McClelland a Professor of Harvard University in the early 1970s, as a significant forecasters of employee performance and success which is relatively important as a person’s academic ability and knowledge as indicated by examination or test results or scores (Lucia & Lepsinger, 1999; McClelland, 1973; Timpson, Venneberg & Unnithan, 2012). While, McLagan, (2002) one who conducted the first research on competency

in 1989 and came out with the human resource development model for American Society for Training and Development who opined that competency is an area of skills and knowledge that is vital for making key output.

Recently, competencies have become the primary source of organisations in terms of evaluating the workers skills and abilities. It has become one of the most review instruments for measuring and evaluating proficiency in soft and hard skills of workers. Salleh and Sulaiman, (2013) competencies of workers are very vital instrument in determining organisational development and it has been proven to be an instrument to improve human resource development and institutional performance that concentrate on individual's performance.

Malaysian human resource development practitioners (MHRDP) competency model for workplace learning and performance

MHRDP competency model for WLP developed by Salleh (2012) was based on the American Society for Training and Development (ASTD) which was developed by Rothwell, Soper and Saunders in 1999. The ASTD contains 6 components and 52 different constituents of competencies. The MHRDP competency model is made up of three different constituents with 25 constituents. The difference in the number of constituents between the original ASTD model and the MHRDP model was linked to the socio-cultural differences between the countries where the two models were applied in the study of competencies in WLP (Salleh, 2012). This is justifiable because the competency model has been shown to undergo several reviews over the years since its development (Dubois & Rothwell, 2004). The majority of previous research related to competency were based on ASTD model which was tested in the industrial setting (Chen, 2003; Peeraporn, 1999; Salleh, 2012; Yang, 1994; Yoo, 1999), whereas the MHRDP competency model was tested in educational institutions as shown in Table 1.1.

Table 1.1: Competency model used by previous researchers

Competency model	Researcher	Year	Location	Organisation
ASTD	Chen	2003	Taiwan	Industries
ASTD	Peeraporn	1999	Thailand	Industries
ASTD	Salleh	2012	Malaysia	Industries
ASTD	Yang	1994	South Korea	Industries
ASTD	Yoo	1999	North Korea	Industries

MHRDP	Ahmad	2015	Malaysia	Community college
MHRDP	Ahmad	2015	Malaysia	Skills institute
MHRDP	Mohamad	2016	Malaysia	Public sector

Table 1.1 shows the competency models used by different researchers from different part of the world in different organisations or institution. Most of the researchers used an ASTD competency model for WLP which focused only on industries and corporate organisations. On the other hand, the MHRDP model has been used in different work environments such as educational institutions and public sector (Ahmad, 2016; Ahmad, 2015; Mohamad, 2016; Salleh, 2012). Therefore, the MHRDP competency model for WLP was chosen for this research because the model proved to be reliable, and appeared more suitable for the area of research since both Nigeria and Malaysia are developing countries.

Therefore, the MHRDP competency model was used to determine TVET educators' competency needs in Bauchi State tertiary institutions. Many institutions are adapting and adopting competency model in order to develop and achieve their needs and goals (Berge et al., 2002). Therefore, the MHRDP model has been doctored to work in line with the tertiary institutions policies and vision because it is aimed at determining the TVET educators' competencies as well as serving as a tool for measuring current and future for the development of TVET educators in Bauchi State TVET tertiary institutions. Devoting to improving the competency level is one of the most powerful ways to prove to the TVET educators that they are honourably valued, respected and trusted (Black, 2001).

Workplace learning and performance (WLP)

WLP is the combination of skills, knowledge, attitude and behaviour use relating to learning and other interventions for the aim of improving workers and institutional or organisational performances (Morlock, Kreggenfeld, Louw, Kreimeier, & Kuhlenkötter, 2017). Therefore, an individual worker or TVET educators need to possess such sets of technical skills, knowledge, attitude, and behaviours which can be transferred technically to their students in the tertiary institutions who might become TVET educators in the near future while learning. It can be observed from the viewpoint of learning as the instrument of development (Salleh, 2012). Similarly, WPL is a

systematic process of analysing individual or organisational performance and responding to their needs (Ruthwell et al., 1999). Furthermore, the main aim of workplace learning is to improve vocational practice (Billett, 2007). Nevertheless, Lindell & Stenström, (2005) point out that the organisations, institutions or even a country, their desire of having workplace learning can be social, economic, cultural or educational. Therefore, workplace learning implementation will not be only beneficial to organisation but also to the workers, employees or TVET educators.

According to Dubois et al., (2004); Rosenholtz, (1989) workplace that encourage and motivate learning and competence improvement positively influence's the wellbeing and personal development of their workers. Therefore, organisations can be a workplace or tertiary institutions where the individuals or TVET educators work which their performances can be assessed and measured as defined by McClelland, in 1973.

Categorization of competencies based on MHRDP competency model

Based on the MHRDP competency model for WLP developed by Salleh (2012), three competencies categories were identified, namely: organisational competency, thinking competency and application competency. These competency groupings constitute of various number of constituents as presented in the following sections.

Organisational competencies

The term organisational competencies have been in use for the performance of organisations for many years in the world (Ennis, 2008). It is one of the most misinterpreted and misused concept in organisations because many organisations face difficulties when they try to assess and identify those competencies (Wilcox King & Zeithaml, 2003). Meanwhile, competencies are recognised skills, knowledge, abilities, attitudes and capabilities which can be measured based on demonstrated behaviours of workers that can contribute positively to the success of organisation as well as the worker's role and position (Salleh, et al., 2015). Therefore, in order to meet the standard performance, which is the precise outcome of what is expected, employee's skills, knowledge and attitude are required.

Rothwell et al., (1999) asserted that inadequate skills and knowledge can contribute to substandard performance in organisation. However, the

individual's perceptions about organisational competencies may differ significantly because of misinterpretation and confusion (Kunjiapu & Yasin, 2010). Moreover, Sulaiman, Frederiksen and Salleh, (2014) reported that many organisations have their own working and organisational culture globally. Furthermore, McClelland, (1998) and King, et al., (2001) pointed out that the technical learning and operational competencies can be regarded as organisational competencies.

Organisational competencies are those features of organisations that bring about the quality in the arena of work (Garavan & McGuire, 2001). Thus, the main aim of competencies in organisations is to authenticate the skill levels of workers in order to recognize the new combination of skills and knowledge which need to be transferred to the workplace. Hence organisations demand higher competency levels of skills and knowledge that can easily respond to the specific requirements within the professional practices (Sauber, McSurely, & Tummala, 2008). Moreover, Rychen and Salganik, (2001) posited that the purpose of organisation is to apply competency in order to facilitate the process of assessing the suitability and expertise of individual workers in completing the task assigned to them.

According to Sulaiman et al., (2015) organisational competencies are more related to the worker's understanding, comprehension, articulation, knowledge, attitude, employee behaviour and a combination of skills needed in the organisation by the workers. Salleh (2012) itemized the constituents of the organisational competencies as follows:

- i. Identification of critical entrepreneurial Issues: Determining key entrepreneurial issues and force for change and applying that knowledge to performance improvement strategies in TVET teaching.
- ii. Communication: Applying effective verbal, nonverbal and written communication method to achieve desired results in TVET teaching.
- iii. Group dynamics: Assessing how group of students function and evolve, as they seek to meet the needs of members of public.
- iv. Work environment analysis: Examining the work environment for issues or characteristics that affect TVET educator's performance. Also understanding characteristics of a high-performance in educational institutions.

- v. Goal implementation: Ensuring that goals are converted into efficient action in TVET teaching. Also getting results despite conflicting priorities, lack of resource or ambiguity.
- vi. Buy-in/ Advocacy: Building ownership and support for educational institutions initiatives.
- vii. Consulting: Understanding the results that stakeholders (educational institutions, TVET educators, students or trainees) desire from a process and providing insight into how they can best use their resource to achieve goals.
- viii. Negotiating/Contracting: Organizing, preparing, monitoring and evaluating work performed by both TVET educators and students.
- ix. Systems thinking: Recognizing the interrelationship among events by determining the driving forces that connect seemingly isolated incident within the educational institutions. Also taking a holistic view of performance problems in order to find the root causes.
- x. Visioning: Seeing the possibilities of 'what can be' and inspiring a shared sense of purpose within the educational institutions (Salleh, 2012).

Thinking competencies

Thinking competencies are also more related to knowledge and skills (Rycus & Hughes, 2000). They still maintained that it is the combination of skills and knowledge that help workers to perform their duties effectively and efficiently in organisation. Therefore, thinking competencies are the most effective in terms of supporting long term plans in regards to the workers' career development process and professionalism in an organisation. Thinking competencies can also help workers to create, develop, initiate, process and generate good ideas or approach that can shape the organisation. (Salleh, 2012). Thinking competencies can be categorize as follows:

- i. Workplace performance, learning strategies and intervention evaluation: Continually evaluating and improving interventions of training qualification of TVET educators before and during implementation.
- ii. Competency identification: Identifying the skills, knowledge, attitude and methodology of teaching that are required to perform work.

- iii. Facilitation: Helping both TVET educators and students to discover new insights.
- iv. Standard identification: Determining what constitutes success for educational institutions and processes.
- v. Questioning: Collecting data via pertinent questions asked during surveys, interviews and focus group for the purpose of performance analysis.
- vi. Model building: Conceptualizing and developing theoretical and practical frameworks that describe complex data.
- vii. Analytical thinking: Clarifying complex issues by breaking them down into meaningful components and synthesizing related items.
- viii. Leadership: Leading, influencing and coaching others to help them achieve desired results (Salleh, 2012).

Application competencies

Application competencies as the name implies is more or less about behaviours and attitudes of individual workers that can be applied in the workplace. These competencies will help the individual worker to realize and understand the needed attitude, values, morale and behaviour required by them to apply in organisation. (Salleh, 2012). Similarly, Suhairom, Musta'amal, Amin, and Johari, (2014) posited that a set of competencies which are more related to behaviour and attitude of workers can easily influence the main aspect of job in organisation by applying such competencies. The application competencies can be categorized as follows:

- i. Staff selection theory and application: Understanding the theories, techniques and appropriate application of staff selection interventions as they are used for performance improvement.
- ii. Training theory and application: Understanding the theories, techniques and appropriate application of training interventions as they are used for performance improvement.
- iii. Feedback: Providing performance information to the appropriate people.
- iv. Reward system theory and application: Understanding the theories, techniques and appropriate application of reward system intervention as they are used for performance improvement.

- v. Institutional development theory and application: Understanding the theories, techniques and appropriate application of educational institution development interventions, as they are used for performance improvement.
- vi. Career development theory and application: Understanding the theories, techniques and appropriate application of career development interventions, as they are used for performance improvement.
- vii. Process consultation: Using a monitoring and feedback method to continually improve the learning outcome of workgroups (Salleh, 2012).

METHODOLOGY

Research Design

This research work employed a full quantitative research approach because it attempted to investigate the TVET educators' perceptions on competency needs based on their opinion and practice from different TVET tertiary institutions in Bauchi State.

Population of the study

The target population of this research are the TVET educators from TVET tertiary institutions in Bauchi State.

Sample and sampling technique of the study

In the current research, five tertiary institutions in Bauchi State were selected, namely, Abubakar Tafawa Balewa University (ATBU), Abubakar Tatari Ali Polytechnic (ATAP), College of Education (COE) Azare, Adamu Ajiya College of Education (COE) Kangere and Bauchi Institute of Education and Islamic Studies (BIEIS) Bauchi State. All TVET educators (Dean, HOD, Programme coordinators, Head of sections and Lecturers) who serve in the aforementioned institutions were taken as the targeted respondents for this research.

Stratified sampling technique was used in order to distribute the instrument to the respondents from five tertiary institutions with fairness and equal distribution. The detail of sample taken from each institution is illustrated in Table 2.1

Table 2.2: Stratified sampling technique (TVET tertiary institutions)

Institutions	TVET educators	Sample size
ATBU (University)	166	84
ATAP (Polytechnic)	112	57
COE (College of education)	59	30
IOE (College of education)	48	25
BIEIS (College of education)	42	22
Total	427	218

Table: 2.1 shows how the number of respondents selected from different educational institution. Specifically, a total of 218 respondents were selected to participate in this research.

Sample size of the study

The sample size was selected based on 95 per cent confidence level. In specific, the total number of TVET educators from the selected institutions was recorded as 427. Based on this number, the Sample Size Table suggested that the sample size should be at least 217 respondents with 5% margin of error.

Questionnaire administration

The 218 questionnaires were distributed to the TVET educators based on stratified proportionate sampling strategy. A total of 205 questionnaires were returned valid from five TVET tertiary institutions representing 94% response rate.

DATA ANALYSIS

The aim of this research was to investigate the TVET educators' perceptions on competency needs in Bauchi State tertiary institutions. To achieve this, descriptive statistics analysis was performed in which the results of mean, standard deviation and ranking of importance for the components were shown.

Competency Ranking

A five-point rating scale questionnaire was used for data collection and the same ranking scale was used in determining the level of importance of each

competency. The rank of competencies is based on the perception of the TVET educators who ranked the components from one to five. In specific, “1” is considered as not important (NI), “2” is considered as slightly important (SI), “3” is considered as important (I), “4” is considered as very important (VI) and “5” is considered as extremely important (EI). Table 3.1 present the interpretation of mean score and level of importance.

Table 3.1: Interpretation of mean score
(Houwen & Moonen, 2014; Hassan, Alias, Saleh, & Awang, 2017)

< 1.49	Not important
1.50 – 2.49	Slightly important
2.50 – 3.49	Important
3.50 – 4.49	Very important
≥ 4.50	Extremely important

Table 3.1 shows the interpretations of mean values which indicated that if the mean score is less than 1.49, the constituents were considered as “not important”, the mean score that fell in the range of 1.50 to 2.49 was interpreted as “slightly important”, the mean score that fell in the range of 2.50 to 3.49 was considered as “important”, for the range of 3.50 to 4.49, it was interpreted as “very important”, whereas the mean score that was greater than or equal to 4.50 was considered as “extremely important”.

The ranking of importance on competencies’ components was based on mean values which ranked from the highest to lowest mean values. All the information regarding the respondents’ perceptions on competency need in Bauchi TVET tertiary institutions is provided in Table 4.1, Table 4.2 and Table 4.3 which show the ranking of importance (RI), mean (M) and standard deviation (SD) for each measurement item.

Table Error! No text of specified style in document..1: TVET Educators’ perceptions on organisational competencies (n = 205)

Description	N	SI	I	VI	EI	SD	M	RI
Organisational competency	Percentage %							

Communication	0.0	1.5	16.6	45.4	36.6	0.75	4.17	VI
Vision	1.0	2.9	30.2	43.9	22.0	0.84	3.83	VI
Negotiating	0.0	5.4	38.5	44.4	11.7	0.76	3.62	VI
Consulting	1.0	3.4	47.3	42.0	6.3	0.71	3.49	I
System thinking	2.0	4.9	41.5	46.3	5.4	0.76	3.48	I
Group Dynamic	0.0	2.4	55.1	34.6	7.8	0.68	3.48	I
Work environment	0.0	6.3	50.7	32.2	10.7	0.77	3.47	I
Buy in / Advocacy	2.0	9.3	40.0	42.4	6.3	0.82	3.42	I
Critical	0.5	2.0	62.0	27.3	8.3	0.69	3.41	I
Goal implementation	0.0	3.4	59.5	34.6	2.4	0.59	3.36	I

Table 4.1 reveals the results of the analysis that shows the respondents' perceptions on organisational competency which ranged from the highest to the lowest value. The most important constituents of organisational competency perceived by TVET educators were communication, vision and negotiation these were ranked as very important with mean values of 4.17 (SD =0.75), 3.83 (SD =0.84) and 3.62 (SD =0.76) respectively. While, consulting, system thinking, group dynamic, work environment, buy in/advocacy, critical and goal implementation were also ranked as important with the mean values of 3.49 (SD =0.71), 3.48, (SD =0.76) 3.48, (SD =0.68) 3.47, (SD =0.77) 3.42, (SD =0.82) 3.41 (SD =0.69) and 3.36 (SD =0.59) respectively. Therefore, the result of the analysis revealed that Bauchi State TVET educators perceived communication, vision and negotiation as very important. While, consulting, system thinking, group dynamic, work environment, buy in/advocacy, critical and goal implementation as important constituents of the organisational competency.

Table Error! No text of specified style in document..2: TVET educators' perceptions on thinking competencies (n = 205)

Description	NI	SI	I	VI	EI	SD	M	RI
Thinking competency	Percentage %							
Leadership	0.0	2.0	33.2	42.4	22.4	0.79	3.85	VI
Facilitation	0.0	1.0	29.3	53.7	16.1	0.69	3.85	VI
Competency identification	0.0	2.4	29.3	55.1	13.2	0.69	3.79	VI
Standard identification	0.5	3.9	34.6	45.9	15.1	0.79	3.71	VI
Workplace	0.0	3.9	46.3	34.6	15.1	0.79	3.61	VI
Questioning	0.5	3.9	42.4	43.4	9.8	0.74	3.58	VI
Model building	0.5	8.3	36.1	45.4	9.8	0.80	3.56	VI
Analytical thinking	0.5	6.3	42.0	44.9	6.3	0.73	3.50	VI

Table 4.2 presents the results of the analysis which illustrate the respondents' perceptions on thinking competencies in which the mean values ranged from the highest to the lowest value. The most important constituents of thinking competency perceived by TVET educators were leadership, facilitation, competency identification, standard identification, workplace, questioning, model building and analytical thinking these were ranked as very important with the mean values of 3.85 (SD =0.79), 3.85 (SD =0.69), 3.79 (SD =0.69), 3.71 (SD =0.79), 3.61 (SD =0.79), 3.58 (SD =0.74), 3.56 (SD =0.80) and 3.50 (SD =0.73) respectively. Therefore, the result of the analysis showed that Bauchi State TVET educators perceived all the constituents of thinking competency as very important.

Table Error! No text of specified style in document..3: TVET educator perceptions on application competencies (n = 205)

Description	NI	SI	I	VI	EI	SD	M	RI
Application competency	Percentage %							
Feedback	0.0	1.5	46.3	47.3	4.9	0.61	3.56	VI
Training theory	0.0	4.4	45.4	44.9	5.4	0.67	3.51	VI
Institutional development	2.0	1.5	51.7	34.6	10.2	0.78	3.50	VI
Staff selection	0.0	1.5	53.7	39.0	5.9	0.63	3.49	I
Process consultation	0.0	1.5	57.1	33.2	8.3	0.67	3.48	I
Reward system	0.0	6.3	47.8	38.0	7.8	0.73	3.47	I

Career development | 0.5 4.4 55.1 33.7 6.3 0.70 3.41 I

Table: 4.3 shows the results of data analysis which illustrate the respondents' perceptions on application competency where the mean values ranged from the highest to the lowest mean value. The constituents of application competency perceived the most by TVET educators were feedback, training theory and institutional development. These constituents were ranked as very important with mean values of 3.56 (SD=0.61), 3.51 (SD=0.67) and 3.50 (SD=0.78) respectively. While, staff selection, process consultation, reward system and career development were also ranked as important constituents for application competency with the mean values of 3.49 (SD=0.63), 3.48 (SD=0.67), 3.47 (SD=0.73) and 3.41 (SD=0.70) respectively. Therefore, the results of the analysis indicated that Bauchi State TVET educators perceived feedback, training theory and institutional development as very important. While, staff selection, process consultation, reward system and career development as important constituents for application competency.

DISCUSSION

The result of the analysis shows the ranking of importance which indicated that Bauchi State TVET educators perceived communication, leadership, facilitation, vision, competency identification, standard identification, negotiating, workplace, questioning, model building, feedback, training theory, institutional development and analytical thinking which were ranked as very important. While, consulting, staff selection, system thinking, group dynamic, process consultation, work environment, reward system, buy in / advocacy, career development, critical entrepreneurial issues and goal implementation were also ranked as important.

These results contradict those of the previous studies (Chen, 2003; Peeraporn, 1999; Salleh, 2012; Yang, 1994; Yoo, 1999) the aforementioned researchers used American society for training and development (ASTD) competency model that has 6 competency components with 52 constituents of competencies in which their respondents perceived not all the competency components neither the constituents as all important. For example, Salleh, (2012) used ASTD model and came out with three components of competency with 25 constituents. Furthermore, the findings of this research revealed that Bauchi State TVET educator perceived all the competency component as well

as its constituents as important. This confirms the findings of Ahmad, (2015) who suggested that practitioners in public sector organisations perceived all the 25 constituents of competency components as important. Similarly, the finding is supported by Salleh, (2012; 2013; 2015) where it was found that Malaysian human resource development practitioners perceived the competency constituents as important. Rothwell's et al. (1999) remarked that competencies (organisational, thinking and application) change the work environment in any institutions, changing the environments not only involve employees or Educators but also the entire organisation. Thus, institutions need to create a working environment that provides positive change and develops learning opportunities for TVET Educators, because tertiary institutions need to support the linking of TVET Educators with institutional development such as identification of competencies that are aligned with institutional objectives.

The current finding revealed that 25 constituents of competencies were perceived positively by Bauchi State TVET Educators because there are series of communication gap existed between TVET Educators and their students, lack of good leadership, overlapping of regulations from ministry for higher education and other agencies resulted to poor facilitation by NBTE, inconvenience of working place for the TVET Educators have affected their vision and mission of their daily activities. Moreover, insufficient staff consultation, staff selection, analytical and system thinking, competency identification, standard identification, negotiating, workplace, questioning, model building, feedback, training theory, institutional development and, group dynamic, reward system, advocacy, career development, tackling of critical issues and implementation of goals among others. Therefore, these aforementioned competencies are the needed competencies by TVET Educators based on their perceptions (Ismail & Mohammed, 2015; Njati, 2016; Okoye et al., 2015). This could be the reason why Bauchi State TVET Educators perceived all the competency constituents as very important and important.

Conclusion

Competency has become one of the tools for measuring and evaluating the TVET Educators' competency. Competency improve institutional development when jointly implemented by institutions. Therefore, the

research found that TVET Educators perceived all 25 constituents of competency components (organisational, thinking and application competency) as important.

Research limitation

This research is limited to the population of TVET Educators in Bauchi State TVET tertiary institutions. The result should not be generalized beyond the TVET Educators. Therefore, due to the aforementioned limitations, the research does not consider investigating the competency needs of non TVET Educators.

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