# ASSESSMENT OF ATTITUDINAL COMPETENCIES POSSESSED AND DEMONSTRATED BY CRAFTSMEN EMPLOYED IN TERTIARY INSTITUTIONS IN ANAMBRA STATE, NIGERIA

BY

ENGR. EZEABIKWA MATTHEW EJINDUNAKA, FNATT, FCAI.

Phone; 08034306275 E-mail; bikwas1953@gmail.com

SCHOOL OF INDUSTRIAL TECHNICAL EDUCATION,

FEDERAL COLLEGE OF EDUCATION (TECHNICAL)

UMUNZE, ANAMBRA STATE.

#### **Abstract**

The study focused on the assessment of the attitudinal competencies possessed and demonstrated by technical college Auto-Mechanics craftsmen employed in tertiary institutions in Anambra State, Nigeria. One research question and one hypothesis were used in the study which was carried out in all the accredited tertiary institutions in Anambra State. Survey research design was used due to its relevance in descriptive study, audience research and programme monitoring. The population of the study was made of 110 heads of academic and non-academic departments who served as supervisors of the products in their places of work. The population of 110 was considered manageable and no sample. Competency questionnaire validated by three experts from University of Nigeria Nsukka was used for data collection. Data collected were analyzed using mean and standard deviation while the null hypothesis was tested using t-test statistics at 0.05 level of significance. The study revealed that five out of the eight attitudinal competency traits studied were possessed and demonstrated by the products. Based on the findings it was recommended that government and stake holders should improve on provision of appropriate resources inputs to encourage and sustain the programme among others.

# **Background of the Study**

Every educational programme has specific goals and objectives which if actualized will result to changes in behaviours of the beneficiaries of the programme. Technical college programmes are offered at the upper secondary education to provide the recipients with appropriate technical/occupational skills, knowledge, and attitude to meet job requirements in deferent occupational areas (FRN,2004).. The programme train the bulk of craftsmen and women needed in industries, commerce and other social circumstances and thus meets the manpower requirements needed for national technological development, personal emancipation and self-reliance. If the technical college programmes are satisfactorily implemented, it will impart certain attitudinal competencies in the beneficiaries of the training programme or the products. Products of the technical college programmes are the craftsmen and women. The terms craftsmen, technical college products and the beneficiaries of the programme will be used interchangeably in this study. The low level of technological, economic and social development of the nation cast doubts concerning the occupational competences, (knowledge, skills and attitudes) acquired by the students while undergoing training. Technical college products who are the graduates of the training programme are the work force to ensure rapid technological, economic and social development of the states and the nation at large (Momoh.2010). It is necessary to assess and ascertain the extent the craftsmen, acquired the required (attitudinal) competencies required for employment and growth in the world of work. while undergoing training as required in the goals and objectives of the national policy on education (FRN,2004) and the job specifications of the Federal Ministry of education(FME,1989).

The goals and objectives of the technical and vocational education are:

- a. to provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technicians levels;
- b. to provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development;
- c. to give training and impart the necessary skills to individuals who shall be self-reliant economically (FRN, 2004).

The policy further stated that "Trainees completing technical college programmes shall have three options:-

- 1. Secure employment either at the end of the whole course or after Completing one or more modules of employable skills;
- 2. Set up their own business and become self-employed and be able to employ others;
- 3. Pursue further education in advance craft/technical programme in post-secondary (tertiary) technical institutions such as science and technical colleges, polytechnics or colleges of education (Technical), and the Universities".

In vocational and technical education, we train for skills, knowledge and attitude. Attitude is the personal behaviours of individuals required to live at peace with one another both at home and the place of work. A skilled worker without the right attitude cannot work in harmony with his colleagues in work relations.

Ulinfun (1988) stated that whatever the trade areas of specialization of the technical college products may be, they should be able to:-

- 1. Develop and manufacture simple (easy to use) technologies which majority of Nigerians can afford.
- 2. Produce spare parts for industries, offices, equipment and effect repairs on basic house hold utilities, on mechanical and electrical components and equipment as the case may be. The study noted with interest that despite over 37 trade areas of specialization, the goals and objectives are the same. This means that the products (craftsmen and technicians) perform similar operations but in different occupational areas of specialization. The Scheme of Service of the Federal Ministry of Education for the Federal Colleges of Education and the Federal Polytechnics (1989) specified the job roles of the craftsmen to include:
- Performing lead hand duties that requires fabrication, processing, installation, maintenance or repairs of buildings, furniture, electrical –mechanical system, vehicles, mobile and stationery machines, and materials and equipment on a specific task and procedure basis.
- Checking and allocating materials for work to assistant craftsmen and preparing simple job reports.
- Performing routine individual trade jobs.
- Performing any other job as may be assigned.

The expected outcome of the training programme and the expected job roles specifications of the Federal Ministry of Education for the craftsmen implicate the need for enhanced attitudinal competency to be effective and productive and work in harmony in their duties.

Assessment of attitudinal competencies acquired and demonstrated by technical college products is a process of getting an opinion for judgment, or ascertaining the worth or value of the attitudinal skills acquired by the products while they were undergoing training. In asserting that assessment is a pre-requisite to evaluation, Orji (2005) stated that assessment involves the process

of investigating the status of an individual or group, usually with reference to expected out come. Expected outcomes in this study are the goals and objectives of the technical college programme as stated in the National Policy on Education and consequently the job role specifications of the Federal Ministry of Education conditions of service for the tertiary institutions. Ascertaining the level or adequacy of the attitudinal competencies is very necessary to determine the extent of the achievement of the goals and objectives of the technical and vocational education programmes at the technical colleges which will serve as an up-to-date feedback to the stake holders.

Technical and Vocational Education (TVE) is used as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (FRN, 2004; UNESCO, 2010). Okoro (1999) refers to technical/vocational education as a form of education which aims at preparing learners for employment in various recognized occupations. Technical college programmes produce the workforce with the appropriate understanding, knowledge, skills and attitudes for self-reliance and technological development (Momoh, 2010; Ezeabikwa, 2011). Technical college products (craftsmen and technicians), equipped with the appropriate occupational and attitudinal competencies have the answers to the national technological, economic and social underdevelopment; unemployment and poverty alleviation (Orji, 2005).

FRN (2009) expresses the fear that the performance of the technical college products in the world of work might not measure up with the requirements of the Millennium Development Goals and Vision 20:2020 dreams, which would want Nigeria to be ranked with the first 20 developed nations of the world, thus the need to assess the attitudinal competencies demonstrated by those products employed with the tertiary institutions in Anambra State, Nigeria. Attitudinal Competency

Attitude is defined as the way people think and feel about others and something; the way someone behaves towards others and other things that shows how one thinks and feels. Attitudinal competency refers to the attitude that people have which makes them acceptable to others (Okeke, 1988). These refer to competencies that are required by employees in terms of behaviours which enables them work with one another cooperatively as a team. Teamwork and negotiation, group effectiveness, interpersonal, organizational, and leadership are some skills that have enhanced attitudinal competency in modern establishments. Okeke (1988) developed a list of critical human behaviour requirements that can contribute to successful occupational adjustment for beginning workers to include:

- 1. interest in self-improvement and job performance
- 2. adaptation to work/organizational environment
- 3. willingness to substitute for or help co-workers
- 4. maintenance or defense of organizational image
- 5. Self-esteem and willingness to learn and improve.

These behavioral skills are musts for craftsmen and technicians for entry and retention of jobs in an establishment. The world of work of the 21<sup>st</sup> century is a social system and technical college products must demonstrate behavioral or attitudinal competencies to make them contributive and productive employees. Anyone who is alive to the requirements of technological era will agree that workers need more than the technical/occupational competency to fit in or be an effective worker.

Assessment of possession and demonstration of these attitudinal competencies by the craftsmen will best be done by heads of academic and non-academic departments of tertiary

institutions who are the immediate supervisors of the products under their employment. In tertiary institutions, heads of academic and non-academic departments are the supervisors of the technical support staff and other staff under them on daily basis; they complete their Annual Performance Evaluation (APE) Forms, and are in the best position to ascertain the level of, or adequacy of the attitudinal competencies demonstrated by the craftsmen and women on their day-to-day performances of their duties (Okoro, 2005). Also by the positions they occupy in the society, feedbacks from supervisors in tertiary institutions on the performances of the products will be valued and respected by the stake holders.

Assessment of attitudinal competencies possessed and demonstrated by the craftmen and women employed in tertiary institution in Anambra State is imperative to give the required feedback to the Government and other stake holders in technical education on the state of the art of technical education programmes. The feedback resulting from the study will help the Government and the stakeholders to take appropriate remedial actions to bridge the gap between the competencies possessed and demonstrated by the graduates of the programme and the demands of the labour market to ensure rapid technological, economic and social development of the nation and economic emancipation of the people.

# **Purpose of the Study**

The main purpose of the study is to ascertain the level of the attitudinal competencies acquired and demonstrated by the cratmen employed in tertiary institutions in Anambra State.

# **Research Questions**

The only research question used for the study is; what is the level of the attitudinal competencies possessed and demonstrated by the technical college products employed in the tertiary institutions in Anambra State?

## **Research Hypothesis**

One null hypothesis guided the study and was tested at 0.05 level of significance which is there is no significant difference between the mean responses of the academic and nonacademic heads of departments on the adequacy of the attitudinal competences possessed and demonstrated by the technical college products employed in tertiary institutions in Anambra State, Nigeria.

## **Design of the Study**

The researcher used survey research design. The appropriateness of this method is based on the fact that survey research design is a descriptive study which has the nature of collecting data and describing same in a systematic manner; finding out the conditions and relationships that exist; opinions that are held and features and facts about a given population (Akuezuilo and Agu, 2003). Survey research design is a very good technique of audience research and programme monitoring (Calhoun, 1976; Hillestead, 1977).

# Area of the Study

The study was conducted in all the tertiary institutions in Anambra State namely; Nnamdi Azikiwe University (NAU), Awka, Anambra State University of Science and Technology (ASUTECH), Uli; Madona University, Okija; Federal Polytechnic, Oko; Federal College of Education (Technical), (FCET), Umunze; and Nwafor Orizu College of Education, Nsugbe.

# **Population of the Study**

The population of the study is 110 made up of 80 heads of academic departments and 30 heads of non-academic departments who are immediate supervisors of the craftsmen who serve as technical support staff in the departments. The record of the departments was obtained from Industrial Training Fund (ITF) area office Awka.

## Sample and Sampling Technique

The population of 110 was considered manageable and the need for sample and sampling technique was obviated.

## **Instrument for Data Collection**

Data used for the study was collected by means of structured questionnaire developed by the researcher titled *Competency Questionnaire*.

#### **Validation of the Instrument**

The instrument was validated by three experts of the department of Vocational Teacher Education of University of Nigeria Nsukka. Suggestions and corrections made by the experts were included to produce the final copy of the instrument.

# **Reliability of the Instrument**

Data collected during pilot test were used to ascertain the reliability of the instrument. The responses from 10 respondents from Enugu State College of Science and Technology were subjected to Cronbach Alpah Co-efficient of internal reliability (CA) which is best because of the number of data and nature of the variables. The reliability coefficient of 0.81 calculated after the analysis of the pilot test gave the researcher the confidence that the method of data analysis used for the study was suitable.

## **Method of Data Collection**

The researcher engaged the services of 5 research assistants who distributed the questionnaire directly to the offices of the heads of departments who were the supervisors that worked on daily basis with the (craftsmen).

The research assistants were selected based on their knowledge of the areas of the tertiary institutions. This strategy ensured that all the 110 questionnaire distributed were completed and returned. Some of the respondents completed and returned the questionnaire on the spot.

## Method of data Analysis

Data collected from the study was analysised using mean ( $\overline{X}$ ) and standard deviation (SD) computed for each item and the null hypotheses (H<sub>O</sub>) was tested using t-test statistics at 0.05 level of significance.

#### PRESENTATION AND ANALYSIS OF DATA

#### **Research Question 1**

Table 1: This shows that the Mean Responses of the Respondents on the Level of Attitudinal Competencies Possessed and Demonstrated by the Technical College Products Employed in Tertiary Institutions in Anambra State N=110

S/N	Item Statements	Mean	SD	Remarks
1	Interest in self-improvement and job performance	1.91	0.59	Not possessed and Demonstrated
2	Loyalty to organization and willingness to work beyond working hour	1.84	0.53	Not Possessed and Demonstrated
3	Integrity, honesty and reliability	1.96	0.48	Not Possessed and Demonstrated
4	Acceptance of responsibility/adaptation to work environment	2.05	0.50	Possessed and Demonstrated
5	Cooperation with co-workers and those in authority	2.05	0.52	Possessed and Demonstrated
6	Ability to keep self and working environment clean	2.12	0.45	Possessed and Demonstrated
7	Willingness to learn and follow instruction	2.10	0.51	Possessed and Demonstrated
8	Work-habit in terms of regularity to work	2.17	0.49	Possessed and Demonstrated

The above table revealed that five out of eight competencies have their mean values ranged from 2.05 to 2.17. This showed that the mean value of each item was above the cut-off point of 2.00, indicating that the technical college graduates possessed and demonstrated five attitudinal competencies in tertiary institutions in Anambra State. The Table also showed that the standard deviations (SD) of the items are within the range of 0.45 to 0.59 and are positive. This indicated that the respondents were not very far from the Mean or from one another in their responses.

## **Hypothesis 1**

There is no significant difference between the mean responses of the academic and non-academic supervisors on the level of satisfaction of the attitudinal competencies demonstrated by the craftsmen employed in tertiary institutions in Anambra State.

#### Table 2

The t-test Analysis of the Mean Responses of Academic and Non-Academic Supervisors on the Level of Satisfaction of the Attitudinal Competencies possessed and Demonstrated by the Craftsmen Employed in Tertiary Institutions in Anambra State

S/N	<b>Attitudinal Competencies</b>	$\mathbf{X}_{1}$	$S^2$ 1	$X_2$	$S^2_2$	t- cal	Remarks
1	Dependability in terms of working beyond working hour	1.93	0.58	1.83	0.64	0.77	NS
2	Loyalty to organization	1.88	0.55	1.70	0.46	1.57	NS
3	Integrity, honesty and reliability	2.00	0.45	1.87	0.56	1.25	NS
4	Acceptance of responsibility	2.07	0.50	2.00	0.52	0.71	NS
5	Cooperation with co-workers and those in authority	2.05	0.53	2.06	0.51	0.12	NS
6	Ability to keep self and working environment clean	2.12	0.43	2.12	0.49	0.02	NS
7	Willingness to learn and follow instruction	2.05	0.50	2.25	0.51	1.31	NS
8	Work-habit in terms of regularity to work	2.18	0.45	2.12	0.56	0.58	NS

Data presented in Table 2 above revealed that each of the eight attitudinal competencies had their calculated t- values ranged from 0.02 to 1.57 which were less than t-table value of 1.98 at 0.05 level of significance and at 108 degree of freedom (df). This indicated that there was no significant difference between the mean responses of the academic and non-academic supervisors on the level of satisfaction of the attitudinal competencies demonstrated by the technical college graduates employed in tertiary institutions in Anambra State. Therefore, the null hypothesis was upheld.

# Finding of the Study

- A. The following are the Attitudinal Competencies Possessed and Demonstrated by the Technical College Graduates Employed in the Tertiary Institutions in Anambra State
- 1. Acceptance of responsibility
- 2. Cooperation with co-workers and those in authority
- 3. Ability to keep self and working environment clean
- 4. Work-habit in terms of regularity to work
- 5. Willingness to learn and follow instruction

## **Discussion of Findings**

The findings of this study revealed that five attitudinal competencies were possessed and demonstrated by the craftmen employed in tertiary institutions in Anambra State. These findings are in inline with opinion of Johnson (1982) that attitudinal competencies such as ability to keep self and working environment clean promote quality of technical college graduates in the workplace.

There was no significant difference between the mean responses of the academic and non-academic supervisors on the level of satisfaction of the attitudinal competencies demonstrated by the technical college graduates employed in tertiary institutions in Anambra State. The implication of this finding is that the graduates actually demonstrated the required attitudinal competencies.

#### **Implication of the Study**

The implication of the study is that adequate resource inputs must be improved upon to encourage and sustain the programmes of the technological colleges.

#### Conclusion

The study was carried out to ascertain the attitudinal competencies possessed and demonstrated by the technical college products employed in Tertiary Institutions in Anambra state, Nigeria. The study revealed that the products possessed only five out of the eight attitudinal competency traits studied as they performed their duties in the places of work.

## Recommendations

- 1. It is recommended that government and stake holder in Vocational Technical education should improve in the provisions of relevant recourse inputs to encourage both the teachers and the students of the programme
- 2. Workshops seminars and short time training should be organized for the technical teachers to improve their competencies on the job.
- 3. Appropriate study incentives should be provided for the students of vocational and technical education.

#### REFERENCES

- Akuezuilo, E.O. and Agu, N. (2003). *Research and Statistics in Education and Social Sciences*. Ezi-Abba Awka. Nuel Conti Publishers and Academic Press Ltd.
- Calhoun, C.C. (1976). An Overview of Research Design. In NBEPI. A Guide Research in Business Education. Reston Virginia 3-9
- Ezeabikwa, M.E. (2011). Challenges of Vocational/Technical Education (VTE) in the New Dispensation. *Journal of Pristine* 3 (1), .101-107.
- FRN, (1989). Scheme of Service for the Federal Colleges of Education and the federal Polytechnics, Lagos NERDC Press.
- FRN, (2004). National Policy on Education. 4<sup>th</sup> Edition. Lagos NERDC Press.
- FRN, (2009). Roadmap for Nigerian Education Sector. Lagos NERDC Press.
- Hillestead, M. (1977). Research Process and Product. Delta P. EPS Lon Service Bulletin No1. http://www.dolets.gov/research/dibdoc.cfm?docn=741 Retrieved 2nd August, 2015.
- Johnson, D.M. (1982). Skills, Knowledge, and Attitude Necessary for Success in Word Processing. Dissertation Abstract International. Humanities and Social Sciences 40(7), 3715A – 3716A.
- Momoh, S.O. (2010). Enhancing Teachers Competence in Research and Development in VTE. A paper delivered at a workshop organized by the Nigerian Association of Teachers of Technology (NATT), Umunze, September 15-18

- Okoro, O.M. (1999). *Principles and Methods in Vocational and Technical Education*. Nsukka, University Trust Publishers.
- Orji, G.C. (2005). An Assessment of Technical College Products by Employer of Technical Labour in Enugu State. An Unpublished M.Sc. Thesis submitted to the department of Vocational Technical Education. University of Nigeria, Nsukka.