Staff Development Initiatives in Nigerian TVET System: The Mentoring and Collaborative Approaches

Asogwa Japel O[1], Nwangwu Emmanuel C[2*], Eze, Ogbonnaya Okorie[1], Nnamani Vitus Sunday[3], Edozie Chinwendu Jennifer[2], Mathias Chukwuma Nwande[3], Ibe Cynthia[1], Shetima Abdullahi[1], Ikenwa Maduka[1], Ozioko Obiora[1], Nwaru Felix[1]

[1*]Department of Industrial Technical Education, University of Nigeria, Nsukka
[2]Department of Computer and Robotics, University of Nigeria, Nsukka
[3]Department of Public Administration and Local Government, University of Nigeria, Nsukka
Corresponding author: Nwangwu Emmanuel C.
Department of Computer and Robotics, University of Nigeria, Nsukka,
Email: emmauel.nwangwu@unn.edu.ng

ARTICLE INFO	ABSTRACT
	The study was conducted in the two public universities (University of Nigeria, Nsukka – UNN and Enugu State University of Science and Technology - ESUT) in Enugu State, Nigeria. The two institutions offer Vocational and Technical Education programmes. The population comprised 173 academic staff. There was no sampling because the population is manageable. The study employed questionnaire instrument in gathering data from respondents. The questionnaire responses were graded according to a four-point scale mean of 2.50 and above answered the research questions. The reliability of the questionnaire instrument was determined using the Cronbach alpha formula for internal consistency, and reliability coefficient of 0.87 was obtained. Furthermore, t-test statistic was used to test the two null hypotheses formulated for the study at 0.05 level of significance. Findings shows that educators prefer informal mentoring to formal mentoring; Incentives should be attached to mentoring programmes; collaborate with educators outside my school; TVET staff seek for whom to collaborate with on their own without the faculty support and joining online communities will greatly improve my research skills as TVET educator. Therefore, recommendations that Government should attach incentives to mentoring programmes; Educators should prefer to collaborate with educators outside my school and TVET staff should seek for whom to collaborate with on their own without the faculty support were made. **Keywords:** Education, Staff Development, Unemployment/underemployment, mentoring, collaboration, TVET, Competency-based education/training.

Introduction

Education a process through which learners acquire knowledge, skills and attitudes (KSAs) that enables individuals to become useful and responsible citizens in the contemporary society. It is a means to empower children and adults alike to become active participants in the transformation of their societies. According to Hazlina, Jusoh and Kamaruzaman (2009), is not just making a student literate but adds rational thinking, knowledge ability, and self-sufficiency. This alignment with the aim of Nigerian education system, which is to prepare individuals to become productive citizens geared towards national development. Alam (2007) notes that investment in education and training produces benefit both tothe individual and to society as a whole. The return on investment for society will be as killed workforce that will enable global competitiveness and economic growth, while the return of the individual will be a better career path, increased earning and a better quality of life. Experts have identified the quality of graduates and job skill mismatch as one of the major concerns of unemployment/underemployment. The graduate unemployment in Nigeria is attributable to the fact that employees' education and skills acquired are inadequate to meet the demands of modern day jobs. (Ashcroft & Rayner, 2011).

Staff development is one of the identified strategies for combating the poor quality of educational system of any nation as well as the inadequate or possession of irrelevant skills required for employment and excelling in the ever-changing technological knowledge-driven labour market. Staff development helps build and maintain morale of staff members, and is thought to attract higher quality staff to an institution of higher learning. It also helps to upgrade the competencies, knowledge and skills of staff especially in the TVET sector where skilled manpower is highly needed to drive the economy of nations. Secondly, this approach will be of immense benefit to academic institutions/organizations (both formal and informal TVET establishments) for improved image, quality and standards. Staff development has also been linked to increase student academic achievement and proficiency in manipulative skills in the TVET system. Based on these facts, institutions all over the world seek for better, efficient and realistic strategies for improving staff development. Lu, Loyalka, Shi, Chang, Liu & Roselle, 2017) However, studies have faulted academic institutions for their inability to provide staff with long-term training and development programmes while some institutions do not see it as worth implementing due to factors such as funding/budgeting, time limitation, disruption of normal school calendar, and lack of interest on the part of the management. (Steiner, 2004). Based on these limitations, the present study seeks to determine the staff development initiatives in Nigeria TVET system through mentoring and collaborative approaches

Mentoring refers to a staff development strategy employed by organizations such as higher institutions to ensure that less experienced or new (including old) employees/staff are adequately and properly guided, advised and coached so as to key into the vision of such organization as well as increase staff retention rate. Mathews (2008) refers to mentoring as a personal enhancement strategy through which one person facilitates the development of another by sharing known resources, expertise, values, skills, perspectives, attitudes and proficiencies. Tomar (2012) sees mentoring as a mutual learning partnership in which individuals assist each other with personal and career development through coaching, role modeling, counseling, sharing knowledge, and providing emotional support. Mentoring is usually a formal or informal relationship between two people— a senior mentor (usually outside the protégé's chain of supervision) and a junior protégé. Mentoring has been identified as an important influence in professional development in both the public and private sector (United States Office of Personnel Management, 2008). The person who is mentored is called a "Protégé", "Mentee", or "Mentoree", whereas the person who guides, advises, directs, coaches, teaches, inspires, and corrects is called "Mentor". A mentor helps to develop the career of mentee. The difference between coaching and mentoring is that coaching is short-term while mentoring is long-term; coaching is task-oriented, performance driven while mentoring is relationship-oriented and development collaboration in education driven.

There are two major forms of collaboration in education: collaborative teaching and collaborative learning. Collaboration can also occur between students and teachers, public and private sectors (Public Private Partnership – PPP), and between national and international agencies. Collaborative learning is based on the view that knowledge is a social construct. Collaborative activities are most often based on four principles: (i) The learner or student is the primary focus of instruction, (ii) Interaction and "doing" are of primary importance, (iii) Working in groups is an important mode of learning, (iv) Structured approaches to developing solutions to real-world problems should be incorporated into learning (Cornell University, 2012). Collaborative learning activities can include collaborative writing, group projects, and other activities learning (Sydney School of Education and Social Work, 2002-2017). On the other hand, collaborative teaching, sometimes called cooperative teaching or team teaching, involves educators working in tandem to lead, instruct and mentor groups of students. Collaboration most often occurs among professionals from various disciplines including core and interdisciplinary subjects (Top Education Degrees, 2017). Collaboration can be implemented across all instructional levels and subject areas because it is a process of shared creation: two of more individuals interacting to create a shared understanding of a concept, discipline or area of practice that none had previously possessed or could have come to on their own professional development.

Professional development refers to formal in-service training to upgrade the content knowledge and pedagogical skills of teachers. It is widely viewed as important means of improving teaching and learning (Quint, 2011). In recent times, most institutions of higher learning including the TVET systems plan, develop and implement staff development initiatives that best suit their goals and objectives at a particular point in time. In Nigeria, some of the staff development initiatives include the establishment of the Tertiary Education Trust Fund (TETFund), STEP-B World Bank Assisted Projects, African Development Fund (ADF), and the internal training and development programmes organized by institutions themselves. Some of these projects/schemes have been concluded while some are still on-going for example the TETFund scheme. Staff development initiatives include but not limited to on-the-job training, pre-service and in-service training, Peer-coaching/observation and mentoring, symposia, training trainers/lead teachers, professional portfolios, collaboration and video conferencing, courses and workshops, education conferences and seminars, professional development network, individual and collaborative research, qualification programmes, group discussions and tutorials, personal development, among others (Norton, 2008; OECD, 2009; Vinesh, 2010; Yusuf & Fashiku, 2016; The Alberta Teachers Association, 2017). However, this study focused on the mentoring and collaborative approaches to staff development in the TVET system.

Strategies to staff development in the TVET system should be competency-based so as to ensure that TVET educators perform at a very high standard which in turn will benefit students who are the future technicians,

technologists and employers of labour. For example, in a mentorship and collaborative setup, the evaluation of activities of members and what they have been able to learn and master, over time, should be performance-based. In computer based training system the unit of progression is mastery of specific knowledge and skills and is learner-or participant-centered. Staff development in the TVET system should also be extended to consultation with industry to design skills-enriched qualifications that are sure desirable in the industry in which students plan to work. In assessing performances in the mentoring and collaborative settings, educators do not get grades and do not fail but however they are deemed competent or not, and may be required to retake assessments until they achieve a competent standard. This is a sure way of improving the overall quality of the TVET system of education in Nigeria. Therefore, competency education is a response to all of the calls for higher education change to improve quality, accessibility, and affordability for all students (Davis, 2016). However, this study focused on the mentoring and collaborative approaches to staff development in the TVET system

Statement of the problem
Collaborative learning activities can include collaborative writing, group projects, and other activities learning (Sydney School of Education and Social Work, 2002-2017). Structured approaches to developing solutions to real-world problems should be incorporated into learning (Cornell University, 2012). Although TVET offers opportunities for individuals to further their careers and earning power; seeks to create competent and self-reliant citizens to contribute to the economic and social development of the country, aims at reducing poverty by improving the livelihoods of all citizens, it faces a lot of challenges. Just like the problems of graduate unemployment that has been associated with the inability of tertiary general education to adequately prepare graduates for the world of work, TVET has a case to answer in this regard.

The graduate unemployment in Nigeria is attributable to the fact that employees' education and skills acquired are inadequate to meet the demands of modern day jobs. Research findings have shown that frequent complaint by employers bothers on graduates not suitably prepared for the world of work because a large mismatch appears to exist between university output and labour market demand (Ashcroft & Rayner, 2011). UNESCO (2016) expressed that rising youth unemployment is one of the most significant problems facing economies and societies in today's world, for developed and developing countries alike. This development calls for immediate attention of educational stakeholders and the employers of labour to seek for strategic and realizable means of tackling this problem. Also selfishness of TVET educators to work alone; Some mentors are not approachable; school management do not pay much attention to TVET programmes and therefore do not provide sufficient funds for effective implementation; proliferation of ICT because everybody depend on the internet to solve their problems Experts have lamented that a lot of factors lead to the poor quality of TVET graduates such as image problem, poor funding, and large gap between the skills obtained from school and that which is required in the labour market, shortage of qualified TVET educators, among other range of challenges.

Purposes
1. Mentoring approaches to staff development initiatives in the Nigerian TVET system
2. Collaborative approaches to staff development initiatives in the Nigerian TVET system

Research Questions
3. What are the mentoring approaches to staff development initiatives in the Nigerian TVET system?
4. What are the collaborative approaches to staff development initiatives in the Nigerian TVET system?

Hypotheses
Ho_1: There is no significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the mentoring approaches to staff development in the Nigerian TVET system.

Ho_2: There is no significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the collaborative approaches to staff development in the Nigerian TVET system

Methodology
The study was conducted in the two public universities (University of Nigeria,, Nsukka – UNN and Enugu State University of Science and Technology - ESUT) in Enugu State, Nigeria. The two institutions offer Vocational and Technical Education programmes. The population comprised 173 academic staff. There was no sampling because the population is manageable. The study employed questionnaire for data collection. The questionnaire responses were graded according to four-point scale mean of 2.50 and above answered the research questions. The reliability of the questionnaire instrument was determined using the Cronbach alpha formula for internal consistency, and reliability coefficient of 0.87 was obtained. Furthermore, t-test statistic was used to test the two null hypotheses formulated for the study at 0.05 level of significance.

Results
Research Question 1

What are the mentoring approaches to staff development initiatives in the Nigerian TVET system?
Table 1: The Mean Responses of Respondents on the Mentoring Approaches to Staff Development Initiatives in the Nigerian TVET System

N=173

S/N	Item	Mean	Std. Dev.	Remark
1.	Mentoring is a welcome approach to staff development in my school	2.73	0.93	Agree
2.	I prefer informal mentoring to formal mentoring	3.09	0.74	Agree
3.	The type of mentoring provided in my school is exciting and satisfying	2.48	0.95	Disagree
4.	Mentors in my school are always approachable and are ready to mentor	2.28	0.99	Disagree
5.	Mentors in my school do not divulge confidential information obtained from the mentee	2.19	0.90	Disagree
6.	I would prefer to have more than one mentors	2.93	0.92	Agree
7.	I prefer to choose my own mentor/mentee	2.85	0.94	Agree
8.	Incentives should be attached to mentoring programmes	3.05	0.84	Agree
9.	I am confident that mentoring can improve my level of productivity	2.58	0.91	Agree
10.	I want my school to assign mentors to mentees on employment	2.26	0.91	Disagree
11.	I hate everything about mentoring	2.00	0.98	Disagree

Table 1 reveal that items range from 2.00 to 3.09 items numbers 1, 2, 6, 7, 8, and 9 were above the cutoff point of 2.50 this shows that TVET educators agreed with six items out of the 11 items. While items numbers 3, 4, 5, 10 and 11 had mean below 2.50, this shows that TVET educators agreed with five items From table 1, it can be seen that responders prefer informal mentoring to formal mentoring and incentives is one of the strategies that can help improve and sustain mentoring programmes in TVET institutions as presented in items 2 and 8. However, the respondents hate everything about mentoring.

Research Question 2
What are the collaborative approaches to staff development initiatives in the Nigerian TVET system?
Table 2: The Mean Responses of Respondents on the Collaborative Approaches to Staff Development Initiatives in the Nigerian TVET System

N=173

S/N	Item	Mean	Std. Dev.	Remark
1.	Collaborative exercises organize by my school have positive impact on staff	2.26	0.91	Disagree
2.	I would prefer to collaborate with educators outside my school	3.19	0.76	Agree
3.	TVET staff seek for whom to collaborate with on their own without the faculty support	3.05	0.84	Agree
4.	I have not been into any kind of collaboration since I was employed	2.28	0.99	Disagree
5.	My faculty regularly organizes workshops on effective collaboration strategies	2.19	0.90	Disagree
6.	I prefer e-collaboration to face-to-face collaboration	2.91	0.92	Agree
7.	Joining online communities will greatly improve my research skills as TVET educator	3.51	0.67	Strongly Agree
8.	Collaboration programmes in my school are realistic	2.27	0.92	Disagree
9.	I would like to be participating in team teaching	2.00	0.98	Disagree
10.	I prefer peer-to-peer or group collaboration to one-to-one collaboration	2.65	0.91	Agree

11.	I am confident that collaborating with colleagues can improve my level of productivity	2.58	0.91	Agree

Table 2 reveal that items range from 2.00 to 3.19 items numbers 2, 3, 6, 10, and 11 were above the cutoff point of 2.50 this shows that TVET educators agreed with five items out of the 11 items. While items numbers 1, 4, 5, 7, 8 and 9 had mean below 2.50 50 this shows that TVET educators agreed with five items From table, it can be seen that responders prefer to collaborate with educators outside my school, TVET staff seek for whom to collaborate with on their own without the faculty support and Joining online communities will greatly improve my research skills as TVET educator as presented in items 2, 3 and 7. However, the respondents like to be participating in team teaching

Hypothesis 1
There is no significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the mentoring approaches to staff development in the Nigerian TVET system

Table 3: The t-test on TVET Educators Mean Responses by School (UNN vs ESUT)

School	N	X	SD	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Decision
UNN	97	2.69	0.58	9.291	0.003	2.79	298	0.006	0.283	Significant
ESUT	76	2.41	0.35							

The data presented in Table 3 revealed that the significant value (0.006) is below the 0.05 level of significance indicating that there was a significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the mentoring approaches to staff development in the Nigerian TVET system. Therefore, the null hypothesis of no significant difference was rejected. The UNN respondents recorded a higher mean of 2.69 against 2.41 of their ESUT counterparts.

Hypothesis 2
There is no significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the collaborative approaches to staff development in the Nigerian TVET system

Table 4: The t-test on TVET Educators Mean Responses by School (UNN vs ESUT)

School Type	N	X	SD	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Decision
UNN	97	3.03	0.86	45.79	0.000	3.67	298	0.000	0.465	Significant
ESUT	76	2.57	0.39							

The data presented in Table 4 revealed that the significant value (0.000) is below the 0.05 level of significance indicating that there was a significant difference in the mean responses of TVET educators in University of Nigeria, Nsukka and TVET educators in Enugu State University of Science and Technology on the collaborative approaches to staff development in the Nigerian TVET system. Therefore, the null hypothesis of no significant difference was rejected. The UNN respondents recorded a higher mean of 3.03 against 2.57 of their ESUT counterparts.

Findings
1. I prefer informal mentoring to formal mentoring
2. Incentives should be attached to mentoring programmes
3. I would prefer to collaborate with educators outside my school
4. TVET staff seek for whom to collaborate with on their own without the faculty support
5. Joining online communities will greatly improve my research skills as TVET educator

Discussion of Findings

The findings revealed that educators admitted that mentoring is a welcome approach to staff development in their institutions but however, the kind of mentoring session provided in their schools are not exciting or satisfying. This could be as a result of the unapproachable nature of the mentors as well as their inability to keep secret discussions between them and their mentees. In addition, the respondents categorically stated that they prefer to have more than one mentors and would like to choose who will be their mentors. From table 1, it can be seen that responders prefer informal mentoring to formal mentoring, and incentives administration is one of the strategies that can help improve and sustain mentoring programmes in TVET institutions as presented in items 2 and 8. However, the respondents hate everything about mentoring

The findings also reveal that TVET educators agreed with five items out of the eleven while they strongly agreed with item number six. From table 3, it can be deduced that collaborative exercises organized for TVET educators in these institutions have prefer to collaborate with educators outside my school, TVET staff seek for whom to collaborate with on their own without the faculty support and Joining online communities will greatly improve my research skills as TVET educator This is evident with the result shown in item 2 and 3 where they stated that they have been into one kind of collaboration or the other. The respondents also prefer not to be participating in team teaching

Conclusion

The study examined the staff development initiatives in the Nigerian TVET system: Mentoring and Collaborative approaches. The study found out that TVET educators welcome the concepts of mentoring and collaboration as viable approaches to staff development. They also presented some factors that could affect the effective implementation of mentoring and collaborative approaches to staff development initiatives. On the way forward, the study recommended that the government and school management should pay adequate attention to TVET programmes. It is through TVET that the countries objectives of reradiating poverty, increasing employment and improving the quality of TVET graduates can be achieved.

Recommendetions
1. Government should attach incentives to mentoring programmes.
2. Educators should prefer to collaborate with educators outside their schools.
3. TVET staff should seek for whom to collaborate with on their own without the faculty support.

References

1. Alam,, G.M. (2007). Private HE in Bangladesh: the impact on HE governance & legislation. UnpublishedPhD thesis, University of Nottingham, United Kingdom.
2. Ashcroft, K. & Rayner, P. (2011). Higher Education in development: Lessons from Sub-Saharan Africa. USA: Information Age Publishing, Inc. retrieved from www.infoagepub.com, https://books.google.com.ng/
3. Cornell University (2012). Collaborative Learning: Group Work. Centerfor Teaching Innovation. Retrieved from https://www.cte.cornell.edu/teaching-ideas/engaging-students/collaborative-learning.html
4. Davis, V. (2016). 5 Strategies for Implementing a Cmpetency-based education program. Retrieved from http://blog.blackboard.com/5-strategies-implementing-a-competency-based-education-program/
5. Hazlina, W.N., Jusoh, W., & Kamaruzaman, J. (2009). Using multimedia in teaching Islamic Studies. Journal of Media and Communication Studies, 1(5), 086-094. Retrieved March 3, 2015 from http://www.academicjournals.org/article/article1380031858_jusoh%20and%20Jusoff.pdf
6. Lu, M., Loyalka, P., Shi, Y., Chang, F., Liu, C. & Roselle, S. (2017). The impact of teacher professional development programs and student achievement in rural China. Stanford Center for International Development, Working Paper No. 600. Retrieved from https://www.
7. Mathews, H.L. (2008). Developing an effective mentoring program: The key to future success. Retrieved from https://www.slideshare.net/hleemathews/FBI-Mentoring-Notebook-Slides.
8. Norton, S. (2008). Chapter 7: The staff development and performance evaluation processes. SAGE Publications, 25 Apr 2008. https://www.sagepub.com/sites/default/files/upm-binaries/21423_Chapter_7.pdf
9. OECD (2009). The Professional Development of Teachers. Creating Effective Teaching and Learning Environments: First Results from TALIS – ISBN 978-92-64-05605-3. Retrieved from https://www.oecd.org/berlin/43541636.pdf
10. Quint, J. (2011). Professional development for teachers: What two rigorous studies tell us. Retrieved from http://www.mdrc.org/publication/professional-development-teachers

11. Steiner, L. (2004). Designing effective professional development experiences: What do we know? Learning Point Associates. John Edward Porter Professional Development Center™. Retrieved from https://www.
12. Sydney School of Education and Social Work (2002-2017). Collaborative Learning. Retrieved from http://sydney.edu.au/education_social_work/learning_teaching/ict/theory/collaborative_learning.shtml
13. The Alberta Teachers Association (2017). PD Activities for Professional Growth. Retrieved from https://www.teachers.ab.ca/For%20Members/Professional%20Development/Teacher%20Professional%20Growth/Section%203/Pages/Professional%20Development%20Activities%20for%20Teachers.aspx
14. Tomar, J.S. (2012). Mentoring matters. https://www.slideshare.net/johnsightomar/mentoring-11014773
15. Top Education Degrees (2017). What is Collaborative Teaching? Retrieved from http://www.topeducationdegrees.org/faq/what-is-collaborative-teaching/
16. UNESCO (2016). Strategy for Technical and Vocational Education and Training (TVET) (2016-2021). France: United Nations Educational, Scientific and Cultural Organization.
17. United States Office of Personnel Management (2008). Best practices: Mentoring. United States Office Of Personnel Management, 1900 E Street, NW Washington, DC 20415. Retrieved from https://www.opm.gov/policy-data-oversight/training-and-development/career-development/bestpractices-mentoring.pdf
18. Vinesh (2014). Role of Training & Development in an Organizational Development. International Journal of Management and International Business Studies, 4(2), 213-220. Retrieved from http://www.
19. Yusuf, A. A. and Fashiku C.O. (2016). Professional development progrmme: a veritable tool for