Perception of Teachers on Capacity Building in Public Secondary Schools in Delta State, Nigeria

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ABSTRACT

This study examined perception of teachers on capacity building in public secondary schools in Delta State, Nigeria. Three research questions and two hypotheses guided the investigation. The study employed stratified random sampling technique in selecting the sample. The stratification was on the basis of the three Senatorial Districts of Delta State. The population from which the sample was selected comprised all the 11, 472 teachers of public secondary schools in the state. A sample of 680 was selected. Questionnaire was the instrument used to solicit information from the teachers namely: an inventory format known as Extent of Capacity Building Attended by Teachers (ECBAT), Extent of Capacity Building across Subject Areas (ECBASA), Teachers Preferred Capacity Building Type (TPCBT). The instruments were face and content validated by two professors who are experts of educational administration and planning of Delta State University. Cronbach's reliability test of the instrument yielded 0.80, 0.82 and 0.85 respectively Findings of the study showed that urban teacher's extent of capacity building is moderate and rural teachers' extent of capacity build is low. Science teachers attended capacity building more than teachers in other subject areas. Teachers prefer capacity it is clear that science teachers are more exposed to capacity building than applied science and arts teachers in public secondary schools in Delta State, Nigeria. 64 %, 37 % and 29 % of science, applied science and arts teachers respectively have often been exposed to capacity building. But 8 %, 41 % and 53 % respectively of science, applied science and arts teachers have never been exposed to capacity building. The most preferred capacity building by teachers are: training in-service training, workshops, seminar, pep talks by experts, conferences, mentoring and refresher courses. The study recommends that Delta State government should that all teachers irrespective of their subject areas are given equal opportunity to attend capacity building programmes.

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INTRODUCTION

Educational provision worldwide is taking a new dimension as changes are continuously taking place in the society. Technological advancement and global emergent issues call for strengthening and empowering of teachers to ensure that quality products who will meet the demands of the society are produced

from the educational system. The teacher capacity building must necessarily take the central stage for attainment of meaningful development in the education industry. Teachers must be updated with the necessary skills and knowledge to meet the needs of the ever changing society. Trained teacher are expected to be able to effectively translate and transform



knowledge, skills and theory into practice. This necessitates continuous capacity building of teachers. Truphena (2014) noted that continuing staff development is an essential condition for effective technology integration since technology keeps changing. It is a known fact that to enter the teaching profession, one must be a qualified teacher having undergone pedagogical training and specialized in an area of study in tertiary institutions, but knowledge is dynamic just as the society is dynamic and the knowledge acquired during undergraduate days may not stand the test of time. Curriah (2016) averred that after selection, most companies have to engage in training to prepare the new employees for the job, noting that even though many employees are highly qualified they do not possess the skills needed to perform competently on the job. Afshan; Sobia; Kamran and Nasir (2012) emphasized that the quality of the teaching workforce needs to be improved to enhance the education standards and those standards require improvement through training and professional development of teachers amongst other factors. Thus, post employment training is needed in the education sector for teachers to be competent. Hence Okorie cited by Ayeni (2000) emphasized that regardless of a teacher's pre-service training, there is need to constantly renew, upgrade and update the teacher's knowledge, skill and capabilities so as to keep pace with the rapidly changing societal needs. Training and retraining of teachers is therefore necessary to bridge their knowledge gap. Odu (2011) asserted that a teacher who is not currently in tune with modern trend is dangerous to the system. He equally maintained that staff development in terms of continuing education appears rather very poor, haphazard, politicized and lack continuity. Capacity building is therefore a desideratum to meeting the challenging situations in the school system so that education can respond to the needs of the society at large. Federal Republic of Nigeria (2013:57) in the National Policy on Education (NPE) emphasized that educational support services shall be provided for teachers and they include amongst others:

- The development, assessment and promotion of educational programmes;
- ii. enhance teaching and improve the competence of teachers:
- iii. Provision of conducive environment for learning, and make learning experiences more meaningful and realistic for students; and
- iv. promotion of in-service education.

Therefore, to position secondary school teachers for effective teaching, these services especially in-service and other forms of teacher capacity building ought to be provided as often as possible for all teachers irrespective of subject that they teach in Delta State secondary schools. This study investigates teacher capacity building among public secondary schools in Delta State, Nigeria.

Research Questions

The following research questions were raised and answered

- What is the extent of the capacity building of teachers in rural and urban public secondary schools in Delta state?
- Which is the extent of capacity building exposure of science, applied science and arts teachers in Delta State public secondary school?
- What is the ranking of the forms of capacity building teachers in Delta state public secondary schools prefer to undergo?

Hypotheses

1. There is no significant difference in the capacity building of public secondary school teachers in urban and rural areas in Delta state.

Statement of the Problem

It is worrisome that many teachers in public secondary schools in Delta state may not have undergone capacity building since they were employed in the teaching profession. This could have a relationship with their ability to



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teach effectively and produced quality students from the schools into the society. Moreover, most capacity building programmes seem to be selective and skewed towards certain subjects like: Mathematics, English, Physics, Chemistry and Biology thereby making some subject area teachers to be backwards in knowledge and skill wise. If this situation persists, some of the teachers may never have access to professional development through capacity building and this could affect their performance in schools which will eventually affect the quality of the products from secondary school education in Delta state. It also seems that teachers in rural areas do not have access to capacity building programmes as those in urban areas and this could have relationship with teacher performance in rural secondary schools.

Stakeholders have decried about the poor products of the educational system in terms of quality of school products as most of them are not able to perform task expected of recipients of secondary school education in work place. The poor performance in West African Examination Council (WAEC) in many schools are pointers to the need to constantly update teachers with requite knowledge to meet the need of learners. For example, in 2016-2018 sessions, according to National Bureau of Statistics (2019), the percentage of candidates who enrolled in WAEC and passed with 5 Credits and above including Mathematics and English Language were 62.3%, 64.86% and 51.83% respectively. This may seem statistically pleasing, but the rest percentage of students that did not pass the examination has constituted education wastage.

LITERATURE REVIEW

Capacity building in education is the process of updating teachers' knowledge and skills with current educational development in consonance with the dynamic, social and economic environment of the school system that the output must fit into. Capacity building of teachers is a motivational factor for improvement of skills, knowledge, competence and greater system efficiency (Asiyai, 2016). Capacity building is the empowerment of individuals so that they are able to perform core functions, solve problems, and achieve objectives by

individuals, groups, organizations, institutions and societies (Osuji, 2014). This is to say that capacity building enhances the capability of the teacher to perform her/his responsibilities in the school system effectively, efficiently and sustainably. Capacity building is a means of strengthening achieving results by organization's ability to fulfill its mission in promoting sound management. governance, and persistent rededication through intervention (Lammert, Johnson & Fiore 2015; Grantmakers for Effective Organizations, 2003). definition plays premium on the administration and management of organizations like the school to ensure capability of the human resource in the system through various means of optimum productivity. empowerment for Therefore the onus rests on the government who is the manager of secondary schools as well school principals to facilitate capacity building of teachers in public secondary schools to ensure that quality products are produced in the school system. Hence UNESCO (2009) defines capacity building as approaches strategically developed to enable people improve education outcomes by addressing determinants of standards. Capacity building can be regarded as a means of ensuring standards in education which can be achieved through training of teachers to meet particular expectation of the learners.

Franklin, Richard and Anis (2014) emphasized that the more the investment on workers training, the more they are likely to perform better, and the more the improvement in their capability of giving the organization its competitive edge. Capacity building of teachers on a regular basis would be a best practice for proper skills building, update of knowledge for quality assurance in secondary education (Asiyai, 2020). Ayeni (2020) maintained that the school system being a formal organization also requires effective capacity building programme to keep teachers abreast of the latest trends in digital technology. research process. innovative teaching. networking, instructional tasks performance. interactive communication strategies, knowledge dissemination process, skills development, resource coordination and sustainable improvement in productivity in secondary schools.



Rural and Urban Dichotomy in Capacity Building

Delta State is located in South- South Geopolitical zone in Nigeria and the state capital in Asaba. There are 25 local government areas in Delta State. Secondary schools are located in both urban and rural areas within the state. Most rural areas are characterized with large expanse of land used for agricultural production like farming, fishing and others and less dense population. Urban areas are characterized with industries, heavy commercial activities, dense population as well as being seat of government activities. Secondly, the residents of rural areas are largely dependent (directly or indirectly) on these primary production activities as their principal, if not their only source of livelihood. Robinson (2008) observed that rural teachers when compared with their urban counterparts tend to be recipients of lower quality in-service training provision. Likewise, Adedeji and Olaniyan (2011) berated the lack of career development opportunities in rural settings, which often combine to make teachers' effectiveness difficult in rural areas when compared to their urban counterparts. Robinson (2008) equally observed that urban teachers enjoy professional development activities like participating in activities conducted at another school, even schools abroad or conducted by someone outside their own school besides the utilization of while rural teachers professional ICT: development activities are mostly taken in their own school—such as through the peer experience. The study examined capacity building of secondary schools teachers in Delta state, Nigeria.

METHODOLOGY

The study employed a descriptive survey research design to solicit data from public secondary school teachers in Delta State, Nigeria. The population of the study comprised 12,734 teachers of 463 public secondary schools in the 25 local government areas of the three Senatorial districts of Delta State, Nigeria.

Stratified sampling technique was adopted in selecting 680 teachers from twelve out of the twenty-five local government areas. The teachers were selected from urban and rural secondary schools. Urban school teachers were 360 and rural school teachers were 320. The teachers were further categorized by their subject areas. Science teachers (Biology, Chemistry, Physics and Mathematics) were 280, arts teachers (English, Civic education, history, commerce, fine and applied arts, economics, religious studies) were 250 while applied science teachers (Agricultural science, geography, home economics) were 150.

Questionnaire was the instrument for data collection. It was divided into three parts. The first part concerned the Extent of Capacity Building of Teachers' (ECBTQ). The second part is on Extent of Capacity Building among Science, Science and Arts Applied teachers (ECBSASAQ)' The third part contain Most Preferred Capacity Building Type (MPCBTQ).. The instruments were validated by two experts in the Department of Educational Management and Foundations in Delta State University, Abraka, Nigeria. Their corrections and observations were used to improve on the instrument. The reliability of the Questionnaires (TCBJPQ) and (MPCBT); were determined using test re-test method on 30 teachers who were not among the sampled schools. Pearson correlation coefficient of the items were 0.80, 0.82 and 0.85.

The questionnaire were on a rating scale of: Strongly agree (4) Agree (3), Disagree (2) strongly disagree (1) for (MPCBT). Data were analyzed using mean and standard deviation with decision point of 2.50 for the research questions while the hypotheses were tested using t-test.

RESULTS

Analysis of the research questions

What is the extent of the capacity building of teachers in rural and urban public secondary schools in Delta state?



Table 1: Extent of capacity building of teachers in public secondary schools in Delta State, Nigeria

S/N	ITEMS	Urban		Remark	Rural		Remark
		Mean	SD		Mean	SD	,
1	Mentoring	2.682	0.556	ME	2.620	0.884	ME
2	Workshop	2.004	1.009	LE	1.864	1.201	LE
3	Seminar	2.664	0.732	ME	2.633	1.111	ME
4	Travel Tour	2.373	1.116	LE	1.895	1.009	LE
5	Pep talks by Experts/Specialist	2.290	1.023	LE	1.765	1.113	LE
	persons						
6	Conferences	2.880	0.462	HE	2.530	0.886	ME
7	Distance learning	2.482	0.900	LE	2.330	0.764	LE
8	In-service programmes	2.663	0.912	ME	2.342	1.311	LE
9	Coaching	2.430	1.018	LE	2.211	1.226	LE
10	Refresher course	2.608	0.883	ME	2.453	0.802	LE
	Weighted Mean	2.507	0.861		2.264		LE

KEY: HE = High Extent, ME = Moderate Extent, LE = Low Extent

Data in Table 1 shows the extent of capacity building of urban and rural secondary school teachers in Delta State, Nigeria. From the data in the Table, urban secondary school teachers have received capacity building in terms of conference attendance is to a high extent., mentoring, in-service training and seminar and refresher courses are to a moderate extent. The weighted mean score is 2.507 which reflect moderate extent of exposure to capacity building programmes by urban secondary school teachers in Delta State. For rural secondary school teachers, the data in Table 1 shows that

only mentoring, seminar and conference attendance recorded moderate extent. The other areas of capacity building rural school teachers recorded low extent. The weighted mean score is 2.264 for rural secondary school teachers and this indicates low level of capacity of rural secondary school teachers in Delta State.

Research Question 2: What is the extent of capacity building exposure of science, applied science and arts teachers in Delta State public secondary school?

Table 4: Extent of capacity building exposure of science, applied science and arts teachers in Delta State public secondary schools

Science Teachers (n = 280)			Applied Science Teachers (n = 250)			Arts Teachers (n = 150)		
Often	Sometimes	Never	Often	Sometimes	Never	Often	Sometimes	Never
180	78	22	92	54	104	44	26	80
(64%)	(28%)	(8%)	(37%)	(21%)	(41%)	(29%)	(17%)	(53%)

Data in Table 2 indicates that science teachers are more exposed to capacity building than applied science and arts teachers in public secondary schools in Delta State, Nigeria. 64 %, 37 % and 29 % of science, applied science and arts teachers respectively have often been exposed to capacity building. But 8 %, 41 % and

53 % respectively of science, applied science and arts teachers have never been exposed to capacity building.

Research question 3: What is the ranking of the forms of capacity building teachers in Delta state public secondary schools prefer to undergo?



Table 2: Forms of capacity building teachers of public secondary schools in Delta State prefer to undergo

S/N	Forms of Capacity Building	Mean	Std Dev	Ranking Order
1	Mentoring	2.594	0.664	6 th
2	Workshop	3.006	0.583	2 nd
3	Seminar	2.884	0.904	3 rd
4	Travel Tour	1.883	0.990	9th
5	Pep talks by Experts/Specialist persons	2.788	1.002	4 th
6	Conferences	2.764	0.770	5th
7	Distance learning	1.708	0.623	10 th
8	Coaching	2.443	0.752	8 th
9	In-service programmes	3.221	0.494	1 st
10	Refresher course	2.522	0.885	7 th

The data in Table 3 indicated that the order of capacity building preference by public secondary school teachers in Delta State is inservice training (mean = 3.221, SD = 0.494), workshops (mean = 3.006, SD = 0.583), seminar (mean = 2.884, SD = 0.752), pep talks by experts/specialist (mean = 2.7884, SD = 1.002), conferences (mean = 2.764, SD = 0.770), mentoring (mean = 2.594, SD = 0.664), refresher courses (mean = 2.522, SD = 0.885), coaching (mean = 2.443, SD = 0.904) and distance learning (mean = 1.708, SD = 0.623). The most

preferred capacity building by teachers are: training in-service training, workshops, seminar, pep talks by experts, conferences, mentoring and refresher courses. The teachers did not prefer capacity building through travel tour and distance learning.

Hypotheses Testing

Hypothesis One: There is no significant difference in the capacity building of public secondary school teachers in urban and rural areas in Delta State, Nigeria.

Table 3: Independent t-test analysis of the difference between the capacity building of urban and rural teachers in public secondary schools in Delta State, Nigeria

Variables	N	Mean	Std. Dev	Df	t-cal	t-crit	Decision	_
Urban	360	27.916	8.611	158	2.151	1.960	Significant	
Rural	320	22.264	10.415				-	

Level of significance = 0.05

The calculated t-value of 2.151 is greater than the critical t-value at degree of freedom 158, and 0.05 level of significance. Therefore, the null hypothesis is not accepted while the alternate hypothesis is accepted. Hence there is a significant difference between the capacity building of urban and rural public secondary school teachers in Delta State, Nigeria.

DISCUSSION

Data in Table 1 shows the extent of capacity building of urban and rural secondary school teachers in Delta State, Nigeria. From the data in the Table, urban secondary school teachers have received capacity building in terms

of conference attendance is to a high extent., mentoring, in-service training and seminar and refresher courses are to a moderate extent. The weighted mean score is 2.507 which reflect moderate extent of exposure to capacity building programmes by urban secondary school teachers in Delta State. For rural secondary school teachers, the data in Table 1 shows that only mentoring, seminar and conference attendance recorded moderate extent. The other areas of capacity building rural school teachers recorded low extent. The weighted mean score is 2.264 for rural secondary school teachers and this indicates low level of capacity of rural secondary school teachers in Delta State. From the finding, it is clear that teachers have not been



well or sufficiently exposed to capacity building for upgrade of skills, knowledge and competences for effective delivery of services. Urban school teachers however are more exposed to capacity building than rural school teachers in Delta State. This finding aligns with Jepketer, Kombo and Kyalo (2015) who documented that only few teachers get the opportunities for capacity development and emphasized that to improve on teaching performance, teachers needed refresher-training courses. The finding is also in line with Adedeii and Olaniyan (2011) who noted that lack of career development opportunities in rural settings, made teachers' effectiveness difficult in rural areas when compared to their urban counterparts

The second research question the finding revealed that the extent of capacity building exposure of science, applied science and arts teachers in secondary schools in Delta State, Nigeria. From the Table for science teachers, 180 which represent 64 % of the teachers expressed that they often attended capacity building programmes. 78 of the science teachers which represent 28 % responded that they have sometimes been exposed to capacity building. 22 which represent 8 % of the science teachers said that they have never been exposed to capacity building. For applied science teachers, 92 which represent 37 % responded that they have often been exposed to capacity building, .54 teachers which represent 21 % said that they have been exposed to capacity building sometimes while 104 applied science teachers which represent 41 % said that they have never been exposed to capacity building. For arts teachers, 44 which represent 29 % expressed that they have often been exposed to capacity building. 26 arts teachers which represent 17 % responded that they sometimes attended capacity building programmes but 80 arts teachers which represent 53 % are of the opinion that they have never been exposed to capacity building. The conclusion drawn is that science have more teachers capacity building opportunities than applied science and arts teachers. This finding is in tandem with Jepketer, Kombo and Kyalo (2015) who found that mathematics and sciences teachers are more

opportune in capacity building, leaving out other critical subjects.

The third research question, the finding indicates that the most preferred capacity building by teachers are: in-service training, workshops, seminar, pep talks by experts, conferences, mentoring and refresher courses. This finding has the support of Jusoff et al (2011) who found that capacity building of teachers through workshops, seminars and courses are beneficial for knowledge and skills update in their subject areas.

CONCLUSION

The study concludes based on the finding that urban and rural teachers in Delta State have not been sufficiently exposed to capacity building. Science teachers are more favoured with capacity building than applied science and arts students. Teachers' order of preference of capacity building they would like to attend is in-service training, workshops, seminar, pep talks by experts, conferences, mentoring and refresher courses.

RECOMMENDATIONS

The following are recommended based on the findings:

- Government of Delta State should place priority on capacity building of teachers to enhance their skills, knowledge upgrade and competences for school improvement.
- 2. Government should that all teachers irrespective of their subject areas are given equal opportunity to attend capacity building programmes.

REFERENCES

Adedeji, S.O. and Olaniyan, O. (2011). Improving the conditions of teachers and teaching in rural schools across African countries. UNESCO: International Institute for Capacity Building in Africa

Afshan, S., Sobia, I., Kamran, A. and Nasir, M. (2012). Impact of training on employee performance: A case study of telecommunication Sector in Pakistan.



JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 10(4), DECEMBER, 2022 ISSN: 2277-0011; Journal homepage: www.atbuftejoste.net

- Interdisciplinary Journal of contemporary Research in Business. 4(6), 3.
- Asiyai, R. I. (2020). Best Practices for Quality
 Assurance in Higher Education in
 Nigeria: Implications for Educational
 Administration, International Journal of
 Leadership in Education, 25(5), 843854
- Asiyai, R. I. (2016). Relational study of in-service training, teaching effectiveness and academic performance of students. *Journal of Teaching and Education*, USA, 5(2), 205-216.
- Ayeni, A. J. (2020). Teachers' capacity building and productivity in secondary schools in Ondo North Senatorial District of Ondo State, Nigeria. Innovative Studies: International Journal (ISIJ), 1 (3): 1-9
- Federal Government of Nigeria (2013). *National Policy on education*. Lagos: NERDC
- Franklin, D. K., Richard, C. and Anis, M. K., (2014). The impact of training and development on employee performance: A case study of Escon Consulting. Singaporean Journal of Business Economics and Management Studies 3 (3), 72-105.
- Gimba, M. B., 2010. Building teacher capacity in classroom assessment to improve student learning in basic education level. Proceedings of the 1st International Technology, Education and Environment Conference of African Society for Scientific Research (ASSR)
- Grantmakers for Effective Organizations (2003).
 Grant makers for Effective
 Organizations: Theory of change.
 Prepared by Steven La France and
 Rick Green.lkeoji, C.N., Agwubike, C.
 C. and Ideh, V. (2007). The role of
 sandwich in-service program in
 developing agricultural science
 teachers in Delta State, Nigeria.

 Journal of Agricultural Education. 48
 (1), 97–105. DOI:
 10.5032/jae.2007.01097
- Jepketer, A., Kombo, K. and Kyalo D. N. (2015). Relationship between Teacher capacity

- building strategy and students' performance in public secondary schools in Nandi County, Kenya. *International Journal of Humanities and Social Science Invention 4 (10)*37-50
- Jusoff, K., Omar, K., Khaun, B. & Awang, M. (2011). Teacher capacity building in teaching and learning: The changing role of school leadership. *Academic Leadership*, 9(1), 1339-1250.
- Lammert, J. D., Johnson, L., & Fiore, T. A. (2015). *Conceptualizing capacity building*. Rockville, MD: West.
- National Beaureau of Statistics (2019). WAEC Results Statistics (2016-2018). https://education.gov.ng/wp-content/uploads/2019/10/WAEC_RES ULTS_STATISTICS_2016-2018.pdf
- National Bureau of Statistics (NB) (2020)
 Unemployment in Nigeria.
 https://www.nigerianstat.gov.ng/
- Odu, O.K. (2011). Human capital development in science and technology education: challenges and new responsibilities of the teacher. Proceedings of the 1st International Technology, Education and Environment Conference African Society for Scientific Research (ASSR0 International Technology, Education and Environment Conference (TEEC2011), September 5-8, 2011,
- Ogwu, C., Ikeoji, C.N. and Nwakor, E.K. (2021).
 Skill gaps and training needs of
 teachers for implementing fishery
 trade subject in secondary schools in
 Delta State. Elementary Education
 Online 20 (1) 1789-1798
- Okenjom, G. P., Akoloh, L.; Ikurite, N and Ihekoronye, J. (2017). Capacity building programme needs for school administrators in secondary schools in Cross River State, Nigeria. Saudi J. Humanities Soc. Sci.; 2, (7): 476-482
- Osuji, C. U. (2014). Capacity building of teachers as a strategy in bridging the gap in Nigerian educational system. *African Education Indices* 7 (1) 1-15.
- Robinson, B. (2008). Using distance education and ICT to improve access, equity and the quality in rural teachers'



JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 10(4), DECEMBER, 2022 ISSN: 2277-0011; Journal homepage: www.atbuftejoste.net

professional development in western China. The International Review of Research in Open and Distance Learning, 9(1): Centre for Comparative Education Research

Truphena, E.M. (2013). Integration of ICT into teacher training and professional development in Kenya. *Makerere Journal of Higher Education* 5(1) 3–21

UNESCO (2009). EPSSim: Experience and Lessons of Capacity Building Activities. Available from:
http://inesm.education.unesco.org/en/share/experiences/epssim-experienceand-lessons-capacity-building-activities#tabs-tabset-1. Accessed 21 December 2012.