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Editorial Preface

This is the *First* Issue of Volume *Three* of Innovative Studies: International Journal (ISIJ). The Journal is published bi-monthly, with papers being peer reviewed to high international standards. The International Journal of Innovative Studies is not limited to a specific aspect of innovation but it is devoted to the publication of high quality papers on all division of computer security in general. ISIJ intends to disseminate knowledge in the various disciplines of the computer security field from theoretical, practical and analytical research to physical implications and theoretical or quantitative discussion intended for academic and industrial progress. In order to position

ISIJ as one of the good journal on Innovative Studies, a group of highly valuable scholars are serving on the editorial board. The International Editorial Board ensures that significant developments in computer security from around the world are reflected in the Journal. Some important topics covers by journal are Case Studies and Change Management, Innovation in SME and R&D Management, Technology Strategy and Planning , Project and Program Management etc.

The coverage of the journal includes all new theoretical and experimental findings in the fields of computer security which enhance the knowledge of scientist, industrials, researchers and all those persons who are coupled with computer security field. ISIJ objective is to publish articles that are not only technically proficient but also contains information and ideas of fresh interest for International readership. ISIJ aims to handle submissions courteously and promptly. ISIJ objectives are to promote and extend the use of all methods in the principal disciplines of computer security. ISIJ editors understand that how much it is important for authors and researchers to have their work published with a minimum delay after submission of their papers. They also strongly believe that the direct communication between the editors and authors are important for the welfare, quality and wellbeing of the Journal and its readers. Therefore, all activities from paper submission to paper publication are controlled through electronic systems that include electronic submission, editorial panel and review system that ensures rapid decision with least delays in the publication processes.

To build its international reputation, we are disseminating the publication information through Google Books, Google Scholar, Directory of Open Access Journals (DOAJ), Open J Gate, ScientificCommons, Docstoc and many more. Our International Editors are working on establishing ISI listing and a good impact factor for ISIJ. We would like to remind you that the success of our journal depends directly on the number of quality articles submitted for review. Accordingly, we would like to request your participation by submitting quality manuscripts for review and encouraging your colleagues to submit quality manuscripts for review. One of the great benefits we can provide to our prospective authors is the mentoring nature of our review process. ISIJ provides authors with high quality, helpful reviews that are shaped to assist authors in improving their manuscripts.

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TABLE OF CONTENTS

Volume 3, Issue 1, December 2020

Pages

1 - 9 Teachers' Capacity Building And Productivity in Secondary Schools in Ondo North Senatorial District of Ondo State, Nigeria *Ayeni, Adeolu Joshua*

Teachers' Capacity Building And Productivity in Secondary Schools in Ondo North Senatorial District of Ondo State, Nigeria

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Abstract

The stakeholders in the education sector has been persistent in expressing concern about the dwindling quality of secondary education in Nigeria, which seems to be attributed to the perceived inadequacies in teachers' capacity building and productivity. This study therefore investigated the level of teachers' capacity building and determined its implication on teachers' productivity in secondary schools in Ondo North Senatorial District of Ondo State, Nigeria. Descriptive research design of the survey type was adopted. The sample comprised 30 principals and 600 teachers randomly selected from 30 public secondary schools. Data were collected using two research instruments titled Teachers' Capacity Building Questionnaire (TCBQ) and Teachers' Productivity Questionnaire (TPQ). Two research questions were raised and one hypothesis was formulated. Research questions were analyzed using frequency count and percentage while the hypothesis was tested using Pearson Product Moment Correlation (PPMC) at 0.05 level of significance. Results revealed that there was a significant relationship between capacity building and teachers' productivity [r-cal=0.606, p<0.05]; It was concluded that in spite of the inadequacies in capacity building, teachers maintained high level of productivity possibly due to their strong commitment to professional duties. However, teachers are still faced with the challenges of excess workloads, large class size and shortage of instructional materials. It is recommended that the State Government should employ adequate number of qualified teachers to ensure manageable workloads and improve classroom management; the State Ministry of Education and other relevant stakeholders in the education sector should provide adequate instructional materials and step up efforts in organizing periodic capacity training workshops and seminars based on the professional needs assessment to update teachers' knowledge and skills in instructional best practices to improve productivity in secondary schools.

Keywords: Capacity Building, Principal, Teacher, Productivity, Secondary School.

1. INTRODUCTION

Teachers' capacity building is the process by which teachers acquire in-depth content knowledge, innovative pedagogical skills, professional ethics and experiences as they interact thoughtfully with professional experts and colleagues on the theories, techniques, practices and challenges involved in the implementation of curriculum and resource management in educational institutions. Capacity building programmes are usually organized for teachers at a designated training centre within or outside an educational institution depending on the nature of the training, time and work locations of the participants. Teachers' capacity building aimed at advancing teachers' knowledge and pedagogical skills for best practices and efficiency in instructional inputs and processes for better learning outcome in schools.

In Nigeria, teachers' capacity building at the secondary school level is organized in form of cluster training by The Federal and State Ministry of Education, The Universal Basic Education Commission (UBEC), State Universal Basic Education Board (SUBEB), the Teaching Service Commission, and Professional Bodies in education sector. The training also involved facilitators who are research experts selected from the consulting tertiary institutions that provide professional expertise for the training programme in each of the 36 States and Abuja, the Federal capital territory. Participants interact professionally by cross-fertilizing ideas on theories, principles and practices relating to instructional planning, pedagogical styles, evaluation process, time management, class management, record keeping and so on. Participants are expected to replicate the training by sharing knowledge, skills and experiences gained with their colleagues in their respective schools.

Teachers' capacity building cannot be over-emphasized because of its immense contribution and far reaching positive implication on the quality of teaching-learning process. It is a vital tool for achieving and sustaining quality education. This underscores the relevance of teachers' capacity building since no education system can rise above the quality of teachers who translate the curriculum to reality in institutions of learning.

However, it appears that school principals are much occupied with administrative duties which make them to give little attention to teachers' capacity building, while the government seems not to provide adequate training facilities and funds for teachers' participation in periodic seminars, workshops and conferences. This situation often create gaps in teachers' competence and inadequacies in the quality of instruction, which has perhaps been responsible for the low level of students' academic performance in the West African Senior School Certificate Examinations (WASSCE) conducted between 2016 and 2018 in Nigerian secondary schools which reflected 52.92% in 2016, 59.22% in 2017 and 49.98% in 2018 (Adenipekun, 2018).

Similarly, in Ondo State, the performance levels of students' who obtained five credits and above in subjects including English Language and Mathematics in WASSCE reflected the following percentages in 2015 (30.29%), 2016 (61.64%), 2017 (46.17%) and 47.20% recorded in 2018 (Ministry of Education, 2018). The students' academic performance in WASSCE which is often below 50% in Nigeria could be partly attributed to the perceived inadequacies in teachers' competence. This study therefore investigated the level of teachers' capacity building and determined its implication on productivity in secondary schools in Ondo North Senatorial District of Ondo State, Nigeria.

It is expected that the findings of the study would create more awareness and serve as reference point to the government, educational planners, policy makers, school administrators (principals), school based management committee, and researchers to identify the areas that needed improvement in teachers' instructional tasks and therefore organize seminars/workshops to update teachers' knowledge and skills in instructional tasks performance to achieve educational goals and improve students' academic performance in secondary schools.

2. TEACHERS' CAPACITY BUILDING AND PRODUCTIVITY

The United Nations Development Programme: UNDP (2007) defines capacity building/capacity development as the process through which individuals, organizations and societies obtain, strengthen and maintain the capabilities to set and achieve their own development objectives over time. The UNDP identified five steps that are involved in capacity building policy analysis and programming process as follows: engage stakeholders on capacity building, assess capacity assets and needs, formulate a capacity building response, implement a capacity building response, and evaluate capacity building process to improve productivity.

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. Barth (1990) stated that nothing in a school has more impact on students in terms of skills development, self-competence and classroom behaviour than personal and professional growth of the teacher. In similar vein, Okorie (1999) argued 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 society. Obike (2007) added that one should not be satisfied that one is a trained teacher; in order to excel in the teaching profession, one must continue to update one's knowledge and skills so as to cope with the problems and innovation in education. Obike (2007) further argued that teacher development is necessary because many teachers appear to be professionally trained but occupationally incompetent.

The effectiveness of an educational system depends on the quality of the teaching staff and where qualified and competent people are given the appropriate training, quality will result. Teachers' quality encompasses both paper qualification, job competence and an up-to-date knowledge of the principles and practice of education. In Nigeria, it is aptly stated in Section 5, sub-section 92(b) of the National Policy on Education, that "The minimum qualification for entry into the teaching profession shall be the Nigeria Certificate in Education" (NCE) at the basic education level (Federal Republic of Nigeria,

2013). However, it could not be disputed that there are still incompetent teachers in those subjects they are said to have been specialized in many secondary schools in Nigeria (Mohammed, 2001). In view of this, there is apparently the need to reappraise from time to time teacher education and training, as entrenched in the National Policy on Education, no education system can rise above the quality of its teachers (Federal Republic of Nigeria, 2013),

Achuonye (2007) stated that no matter how well organized an education system and how well equipped a school, not much will be realized in the absence of adequately trained and motivated teachers. The study by Oluwakemi (2011) revealed that teachers needed to acquire more knowledge through in-service training such as seminars, conferences and regular workshops in order to improve their competences and productivity.

It need be mentioned that every step taken to train teachers to enhance their productivity must take into cognizance the five-point value objectives/goals of teacher education, as enshrined in Section 5, sub-section 93(a-e) of the National Policy on Education (Federal Republic of Nigeria, 2013). The five goals of teacher education are to:

- a. Produce highly motivated, conscious and efficient classroom teachers for all levels of the educational system;
- b. further encourage the spirit of enquiry and creativity in teachers;
- c. help teachers fit into the social life of the community and the society at large and enhance their commitment to national goals;
- d. provide teachers with intellectual and professional background adequate for their assignment and to make them adaptable to changing situations; and
- e. enhance teachers' commitment to the teaching profession;

In furtherance of the above goals, section 5, sub-section 97(b) of the National Policy on Education, 6th edition, 2013 stipulates that "In-service training shall be an integral part of continuing teacher education, and it is mandatory that all school proprietors provide in-service education for teachers". It is therefore expected that government being the proprietor of public schools will provide appropriate stimulation for teachers' capacity building so as to improve their knowledge and skills for best practices in the performance of their tasks for the maximum benefits of the students, while the school principals are expected to ensure proper deployment of teachers based on their area of specializations, and continuously mentor, monitor, supervise and evaluate teachers' performance in order to improve their skills and experiences for better performance, and achieve educational goals and improve productivity in secondary schools.

Afolakemi and David (2007) investigated the quality of the teaching personnel on students' academic performance in Nigeria. The result showed that the higher the quality of teaching personnel, the better the school academic performance of students. It is positive if the school continues to retain good and competent teaching personnel, but negative if incompetent personnel are allowed to teach the students. The findings also showed that teachers' competence contributes to effective teaching-learning process and lead to long term success of secondary schools' administration and accomplishment of educational goals.

Ogunbamerun (2012) investigated the professional and technical competences needed by teachers in junior secondary school in Ondo State, Nigeria. Findings showed that teachers needed more capacity building for improvement in instructional planning, effective teaching and learning process, and evaluation skills to facilitate the achievement of the educational goals. In a study conducted by Ezeugbor (2017) on the application of total quality management principles for continuous improvement of secondary schools in Anambra State. The study revealed among others, that principals provided the opportunity for teachers to acquire on the job training principles that enhanced continuous improvement in secondary schools in Anambra State. However, the study further revealed that teachers are not sponsored for conferences in their area of specializations. This could dampen teachers' morale and impede productivity in secondary schools.

In a study by Jepketer, Kombo and Kyalo (2015) on the relationship between teachers' capacity building and students' performance in Nandi County, Kenya, it was found that majority of the teachers are well-trained and qualified in teaching but in some instances where teachers needed refresher-training courses to improve on their teaching performance, a few number of teachers get opportunity

for capacity development which is tailored in most cases to mathematics and science subjects leaving out other critical subjects. It was further revealed that 68% of teachers who attended capacity building programmes in Kenya felt that seminars, workshops and conferences assisted them to acquire extra teaching skills in their teaching subjects. Despite the strategy adopted for teachers' capacity development in Kenya, students still performed poorly in some public secondary schools, which implied low productivity of teachers. This was partly attributed to shortage of teachers, inadequate textbooks and other learning equipment among others.

Productivity is the ability to do the right thing (effectiveness) and do something well or achieves the desired result without wasted effort (efficiency) in the organization (Ayeni, 2018). Productivity reduces wastages and brings about sustainable quality through capacity building and motivation to induce workers to realize the organization's objectives. It is generally accepted that productivity measure indicates the rate of growth in capabilities of respective organizations to accomplish their mission/goals and ensure quality service and products. Nwachukwu (2006) viewed productivity as the relationship between output of goods and service, and resource inputs (human and material) which are utilized in the production of goods and services.

In the school system, productivity is a measure of how efficiently a given set of resources is optimally utilized to achieve educational objectives. It is a continuous process, taking into consideration, the input, process and output phases of education (Ayeni, 2018). Teachers' productivity is the rate or extent to which teachers meet or achieve expected educational goals. Teachers are expected to demonstrate sound knowledge and technical know-how in the transmission of content-knowledge, usage of instructional materials, class management, evaluation of learners and performance feedback to enable students acquire desirable knowledge, skills and values, and fulfil the educational goals.

3. STATEMENT OF THE PROBLEM

Teachers' capacity building has an important influence on teachers' productivity and play crucial role in the attainment of educational goals. Teachers are responsible for translating educational policies and curriculum into action during teaching–learning process. Teachers are therefore expected to be effective in the discharge of their duties and this depends largely on their capacity building. However, there are still noticeable gap in teachers' competence which has perhaps been attributed to the perceived inadequacies in capacity building in Nigerian public secondary schools.

The implication of teachers' capacity building on teachers' productivity is worth investigating when one looks at the multiplicity of roles performed by teachers. There has been general outcry by the stakeholders that the standard of education in public secondary schools is below expectation. In most cases teachers are blamed for the poor academic performance in schools, alleging that they are not as dedicated to the cause of education as expected while teachers as a group blamed parents and students for the decline in quality of education. Teachers also blamed the government for unattractive condition of service which capacity building is inclusive.

In Nigeria, secondary school teachers are incapacitated by funds to attend periodic seminars, workshops and conferences to improve their competence in instructional tasks performance. It is also not uncommon that capacity training programmes organized by government's agencies on many occasions are unduly influenced by key government officials as few teachers/trainees are sometimes selected on the basis of personal relationship while ignoring the majority of the teachers. In most cases those who attended training programmes do not replicate the knowledge and skills gained in their respective schools. This is very inimical to efficiency because it often results in low level of performance. It is upon this backdrop, the study investigated the level of teachers' capacity building and the implication on teachers' productivity in secondary schools in Ondo North Senatorial District of Ondo State, Nigeria.

3.1. Research Questions

The following research questions were raised to guide the study:

- 1. What is the level of teachers' capacity building in secondary schools in Ondo North Senatorial District of Ondo State?
- 2. What is the level of teachers' productivity in secondary schools in Ondo North Senatorial District of Ondo State?

3.2. Research Hypothesis

The following hypothesis was formulated to guide the study:

Ho_{1:} There is no significant relationship between capacity building and teachers' productivity in secondary schools in Ondo North Senatorial District.

4. RESEARCH METHOD

The study adopted the descriptive research design of the survey type. Multi-stage sampling technique was used to randomly select three (3) Local Government Areas out of the existing six (6) LGAs in Ondo North Senatorial District. Ten (10) secondary schools were randomly selected from each of the three (3) LGAs sampled for the study. Respondents comprised 600 teachers and 30 principals selected from 30 sampled secondary schools. Twenty (20) teachers were randomly selected from each of the 30 sampled secondary schools. All the 30 principals of the sampled schools were included in the study.

Two (2) research questions were raised and one (1) hypothesis was formulated to guide the study. Data were collected using self-structured questionnaires titled "Teachers; Capacity Building Questionnaire" (TCBQ) and Teachers' Productivity Questionnaire (TPQ). The research instruments were subjected to face and content validity. The research instruments had reliability coefficient of 0.85 and 0.97 for the TPQ completed by principals and TCBQ completed by teachers respectively. The research questions were answered using Frequency counts and Percentage. The Hypothesis was tested using Pearson Product Moment Correlation (PPMC) at 0.05 level of significance.

The research instruments were administered on the respondents personally by the researcher and two research assistants were engaged to help in the administration of the questionnaires in the sampled schools. Respondents were requested to complete the questionnaires and return them to the researcher on the same day. The researcher clearly explained procedures for completing the questionnaire to the respondents. A total of 600 teachers' questionnaires and 30 principals' questionnaires were distributed and administered on the respondents in the three (3) LGAs sampled in Ondo North Senatorial District. Five hundred and eighty six (586) teachers' questionnaires representing 97.7% and 27 principals' questionnaires representing 90% were properly filled and retrieved successfully while 14 teachers' and 3 principals' did not return their questionnaires.

5. RESULTS

The results and discussions of data analyses are presented in order of the research questions and hypotheses as indicated in Tables 1- 3 and Figure 1 - 2. The research questions were analyzed descriptively using frequency counts and percentage while the hypothesis was tested using Pearson Product Moment Correlation (PPMC) at 0.05 level of significance. The responses on strongly agreed and agreed were classified as agreed, while disagreed and strongly disagreed were classified as disagreed for easy description of data.

5.1. What is the Level of Teachers' Capacity Building in Secondary Schools?

The analysis of data presented on Table 1 and figure 1, showed the level of teachers' capacity building as reflected in the following percentage points: opportunity for in-service training (41.3%), financial support (42.2%), exempted from teaching workload during in-service training (40.8%), full salary benefit during in-service training (67.7%), innovative in-service training (56.6%) and less stressful in-service training (26.7%). These were reflected in the percentage points of strongly agreed and agreed responses combined. The summary of responses by percentage average showed that 45.9% of the teachers enjoyed opportunity of capacity building and a majority of the teachers (54.1%) did not enjoy the opportunity of capacity training in secondary schools in Ondo North Senatorial District of Ondo State.

S/N	Items		SA	Α	D	SD
1	Teachers are given opportunity of in-service training within	Freq.	120	122	150	194
	the last 5 years.	%	20.5	20.8	25.6	33.1
2	Teachers are given financial support by the government	F	99	148	166	173
	during in-service training.	%	16.9	25.3	28.3	29.5
3	Teachers are exempted from teaching workload during in-	F	74	165	166	181

Table 1: Teachers' Capacity Building

	Percentage/Grand Mean	%	20.5	25.4	24.6	29.5
	consuming.	%	10.8	15.9	26.1	47.3
6	Teachers found the in-service training stressful and time	F	63	93	153	277
	impactful on their teaching skills.	%	23.5	33.1	20.1	23.2
5	Teachers found in-service training more innovative and	F	138	194	118	136
	training.	%	38.7	29.0	19.1	13.1
4	Teachers enjoyed full salary benefit during in-service	F	227	170	112	77
	service training.	%	12.6	28.2	28.3	30.9

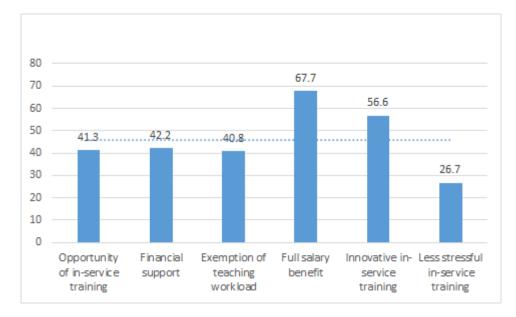


FIGURE 1: Bar Graph on the Level of Teachers' Capacity Building.

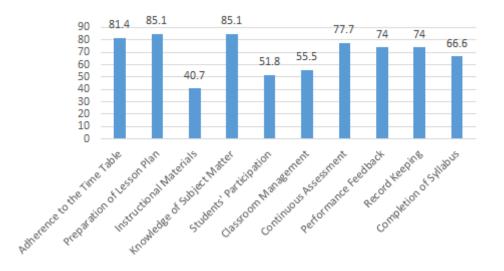
5. 2. What is the Level of Teachers' Productivity in Secondary Schools?

The analysis of data presented on Table 2 and figure 2, indicated that when the percentage points of strongly agreed and agreed are combined, teachers' maintain high level of productivity in the following tasks: adhering strictly to the school time table (81.4%), preparation of lesson plan in line with the syllabus (85.1%), demonstration of sound knowledge of the subject matter (85.1%), prompt conduct of continuous assessment (77.7%), providing performance feedback (74.0%), keeping of accurate and adequate records (74.0%) and completion of the syllabus within the stipulated time (66.6%). However, the usage of instructional materials (40.7%) was relatively low, while classroom management (55.5%) and ensuring adequate participation of students (51.8%) were found to be at the average level of productivity in secondary schools in Ondo North Senatorial District.

S/N	Items		SA	Α	D	SD
1.	Teachers adhered strictly to the school time-table.	Freq.	12	10	3	2
		%	44.4	37.0	11.1	7.4
2.	Teachers prepare lesson plan in line with the syllabus.	F	12	11	2	2
		%	44.4	40.7	7.4	7.4
3.	Teachers make effective use of instructional materials	F	5	6	9	7
	during teaching-learning process.	%	18.5	22.2	33.3	25.9
4.	Teachers demonstrate sound knowledge of the subject	F	11	12	2	2
	matter.	%	40.7	44.4	7.4	7.4
5.	Teachers ensure adequate participation of students in	F	6	8	6	7
	learning activities.	%	22.2	29.6	22.2	25.9
6.	Teachers are effective in classroom management.	F	5	10	6	6
		%	18.5	37.0	22.2	22.2
7.	Teachers conduct regular continuous assessment and mark	F	10	11	3	3
	tests/assignments promptly.	%	37.0	40.7	11.1	11.1
8.	Teachers give performance feedback to students promptly.	F	8	12	4	3
		%	29.6	44.4	14.8	11.1

TABLE 2: Level of Teachers' Productivity

9.	Teachers' keep accurate and adequate records of instructional activities.	F %	9 33.3	11 40.7	3 11.1	4 14.8
10.	Teachers complete the syllabus in their subjects within the stipulated time.	F %	8 29.6	10 37.0	6 22.2	3 11.1
	Percentage/Grand Mean		31.9	37.4	16.3	14.4





5. 3. Relationship between Capacity Building and Teachers' Productivity in Secondary Schools The weighted average of data generated from 586 respondents on capacity building was correlated against teachers' productivity in 27 public secondary schools as presented in table 3.

TABLE 3: Relations	mp betweel	n Capacity E	suliding and	reachers	Productivi	iy.
Variables	Ν	Mean	SD	Df	r	Sig.
Capacity building	586	2.444	1.013			
				611	0.606	0.001
Teachers' productivity	27	2.701	1.003			
P < 0.05						

TABLE 3: Relationship between Capacity Building and Teachers' Productivity.

The result on table 3 indicated that r-cal (0.606) was greater than the critical-value (0.001) at p<0.05 was significant. Hence, the null hypothesis of no significant relationship was rejected. This implied that there is a significant relationship between capacity development and teachers' productivity in secondary schools in Ondo North Senatorial District of Ondo State.

5.4. Discussions

The study examined the level of teachers' capacity building and implication on productivity based on the indices of in-service training, financial support, exemption from teaching workload during in-service training, full salary benefit during in-service training, innovative in-service training and less stressful in-service training.

Analyses of data presented on the level of teachers' capacity building on Table one (1) indicated that 45.9% of the teachers enjoyed opportunity of capacity building and 67.7% enjoyed full salary benefit during in-service training while 56.6% found in-service training innovative. However, 54.1% of the teachers did not enjoy opportunity of capacity building. This implied that the level of teachers' capacity development is below average in secondary schools in Ondo North Senatorial District of Ondo State. This finding corroborated the finding by Ezeugbor (2017) on secondary schools improvement in Anambra State, Nigeria, that lack of sponsorship of teachers for conferences in their areas of specializations dampened their morale and impeded productivity in secondary schools. The finding further agree with Jepketer, Kombo and Kyalo (2015) who found that a few number of teachers get

opportunity for capacity development which is tailored in most cases to mathematics and science subjects leaving out other critical subjects, which contributed to low productivity as reflected in low quality education and poor academic performance of students in some public secondary schools in Nandi, Kenya.

The data presented on Table 2 indicated that teachers' maintain high level of productivity as reflected in strict adherence to the school time table (81.4%), preparation of lesson plan in line with the syllabus (85.1%), knowledge of the subject matter (85.1%), conducting continuous assessment (77.7%), performance feedback (74.0%), record-keeping (74.0%) and completion of the syllabus within stipulated time (66.6%). The findings are in agreement with Afolakemi and David (2007) who found that teachers' competence contributed to effective teaching-learning process and ensured long-term success of secondary schools' administration and accomplishment of educational goals.

The result of data presented on Table 2, also indicated that the usage of instructional materials (40.7%), classroom management (55.5%) and ensuring adequate participation of students (51.8%) were the least performed tasks. The viewpoints of teachers interviewed revealed that there are shortage of teachers in their subjects which imposed heavy workloads coupled with the large class sizes made classroom management stressful and thereby finding it difficult to complete the syllabus within the stipulated time in secondary schools. This finding is in agreement with Jepketer, Kombo and Kyalo (2015) who found that shortage of teachers, inadequate textbooks and other learning equipment among others contributed to poor academic performance of students in Nandi, Kenya.

The result presented on the testing of the research hypothesis on table 3 revealed that there was a significant relationship between teachers' capacity building and productivity. It could be deduced from the finding that, in spite of the inadequacies in capacity building, teachers still maintained high level of productivity in the performance of most of the instructional tasks. This might possibly be attributed to the strong commitment of teachers to professional ethics and duties. However, the inadequacies in capacity building might have contributed to the inadequate coverage of the syllabus in secondary schools. This finding confirm the assertion by Achuonye (2007) that no matter how well organized an education system and how well equipped a school, not much will be realized in the absence of adequately trained and motivated teachers. The finding also buttresses the importance of the finding by Ogunbamerun (2012) that improvement in capacity development enhances teachers' instructional planning, teaching techniques and evaluation skills, which also improves productivity in secondary schools.

6. CONCLUSION

It could be concluded that, in spite of the inadequate capacity building, teachers maintained high level of productivity in the performance of instructional tasks, which might probably be attributed to their passion and commitment to professional ethics and duties. However, teachers are still faced with the challenges of heavy workloads, large class size, shortage of instructional materials and inadequate coverage of the syllabus, which tend to hamper teachers' productivity in secondary schools.

6.1. Recommendations

Based on the findings of the study, the following recommendations are made;

- 1. Government should employ adequate number of qualified teachers to reduce teachers' workloads to manageable standard in order to ensure effective class management and adequate coverage of the syllabus in secondary schools.
- Government should provide adequate opportunity for teachers to attend seminars, workshops and conferences at least once in a year to update their knowledge and skills in modern teaching techniques to ensure best practices in instructional tasks performance and improve productivity in secondary schools.
- 3. The State Ministry of Education should organize seminars/workshops to improve teachers' skills in the improvisation of instructional materials to stimulate interactive communication, adequate learners' interest and participation in the teaching-learning process for improved productivity in secondary schools.

7. REFERENCES

- [1] O. Adenipekun. (2018, July, 5). WAEC releases 2018 May/June WASSCE result, says there's decline in pass rate. *The Punch*, p.14.
- [2] Ministry of Education. "Analysis of academic achievement in senior school certificate examinations".. Department of Planning, Research and Statistics, Akure, Ondo State, 2018.
- [3] United Nations Development Programme. "Supporting capacity development: The UNDP approach". A publication of The UNDP., 2007.
- [4] R. Barth. "Improving school from within: Teachers, parents and principals can make the difference". San Francisco: Jossy-Bass Publishers, 1990.
- [5] N. C. Okorie. "Organizational setting of leadership". Ogoni: Fredsberg Printers and Publisher, 1999.
- [6] C. U. M. Obike. "Refussing teacher education for sustainable development: A case for continuous teacher development programmes". *Knowledge Review*, 15 (7), pp. 1-5, 2007.
- [7] A. B. Mohammed. "Teaching staff quality and discipline. In O. Nnoli& I. Sulaiman (Eds). Reassessing the future of education in Nigeria". Abuja: ETF Publication, 2001.
- [8] Federal Republic of Nigeria. "*National policy on education* (6th ed.)". Lagos: NERDC Press, 2013.
- [9] K. A. Achuonye. "*Trends in Nigerian educational innovations*". Port Harcourt: Pearl Publishers, 2007.
- [10] A. C. Oluwakemi. "Teacher personnel management as determinant of teacher productivity in Oyo metropolis senior secondary schools". *Pakistani Journal of Social Sciences* 8 (1), pp. 39-42, 2011.
- [11] O. O. Afolakemi & O. O. David. "Supervision and Quality of Teaching Personnel Effects on Students' Academic Performance". *Educational Research and Reviews*, 2(3), pp. 32-35. 2007.
- [12] M. T. Ogunbamerun. "Professional and technical competence needed by teachers of business studies in junior secondary school in Ondo state Nigeria". *International Journal of Academic Research in progressive Education and development* 1(4), pp. 26-34, 2012.
- [13] C. O. Ezeugbor. "Application of total quality management principles (TQMP) for continuous improvement of secondary schools in Anambra State", Nigeria. *International Journal for Social Studies, 3*(12), pp. 19-31, 2017.
- [14] A. Jepketer, K. Kombo & D. N. Kyalo. "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), pp. 37-50, 2015.
- [15] A. J. Ayeni. "Principals' decision making strategies and teachers' productivity in secondary schools in Ondo Central Senatorial District of Ondo State", Nigeria. *Global Journal of Management and Business Research, 18*(10), pp. 21-22, 2018.
- [16] P. O. Nwachukwu. "School effectiveness and quality improvement: Quality teaching in Nigerian secondary schools". Unpublished Master's Thesis (M.Ed). Delta State University Abraka, Nigeria, 2011.

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