Managing Teachers' Productivity in a Depressed Economy: Implications on Sustainable Development Goal 4 (SDG4) in Public Secondary School in Rivers State

Alexander, Faith
Email: faithalex2020@gmail.com

Abstract

This paper examined managing teachers' productivity in a depressed economy: Implications on Sustainable Development Goal 4 (SDG4) in public secondary schools in Rivers State. The study was guided by three objectives, with corresponding research questions and null hypotheses. The study adopted a correlational research design. The population of this study comprised of all the 6,893 teachers of 291 public senior secondary schools in Rivers State. A proportionate stratified random sampling technique was adopted to select a sample of six hundred and eighty-nine (689) teachers representing 10% of the entire population. Two questionnaire instruments titled: Managing Teacher Productivity in a Depressed Economy Questionnaire (MTPDEQ) and Sustainable Development Goal 4 Questionnaire (SDG4Q) were used for this study. Cronbach alpha reliability test was conducted to ascertain the reliability of the instruments, of which the reliability coefficients of Managing Teacher Productivity in a Depressed Economy and Sustainable Development Goal 4 Scale were 0.82 and 0.85 respectively. The research question 1 to 3 were answered using simple regression, while hypotheses 1 to 3 were tested with t-test associated with simple regression at 0.05 level of significance. The findings of the study showed that in-service training of teachers and provision of work-life balance for teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent, while recognition of teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a low extent. Based on the findings, it was recommended among others that school management should constantly organise in-service training for teachers for attainment of sustainable development goal four considering the fact that such training is achievable in a depressed economy. Also, school administrators should always recognize the efforts of teachers whenever they do well in other to improve job productivity in their day-to-day responsibilities at school for achievement of quality education which is the hub of SDG4.

Introduction
One of the most important components of education is the teacher. A teacher is the facilitator of learning; this means, a teacher is an individual who consciously directs the teaching/learning processes in a school, to achieve sustainable leaning outcomes. A teacher is an individual who impacts knowledge, attitudes, and values, to the learners in a morally acceptable manner. The teacher can also be seen as the pivot on which the learning expectations and objectives of the educational system are hinged upon. A teacher productivity is also hinged on the physiological, and mental strength as well as the physical environment in which he finds himself. Physical environment

here refers to both material and financial resources in the workplace environment which is the school that enable him discharge his duties effectively. But unfortunately, these resources are not or adequately provided due to financial crunch.

The world's leading economies are experiencing the worst financial crunch since the COVID-19 pandemic. Output has shrunk, jobs have been lost, and unemployment has been mounting, causing untold misery and pushing millions of people below the poverty line. The leading economies in the world are experiencing a financial crisis that is considered to be the worst since the Great Depression of the 1930s. In simple terms, depressed economy (also known as a cash squeeze or credit crisis) is a reduction in the general availability of cash (or credit) or a sudden tightening of the conditions required to obtain cash or a loan from the banks in a country. A cash crunch generally involves a reduction in the availability of cash (Ezuwore & Alio, 2014). In such situations, cash rationing occurs which many times affects the budgetary allocation of the educational sector. Its impact in the education sector could lead to poor quality service delivery in these institutions, some of which are already lying belly up, owing to multi-faceted challenges.

Furthermore, many schools have been able to cut their expenditures with minimal impact on students by deferring maintenance and construction projects. Some schools have had to make cuts that affect students more directly. These cuts include: laying off teachers, which in turn increases class size, cutting extracurricular activities, cutting subjects not required for graduation, eliminating field trips, cutting instructional programmes, cutting professional development for teachers and staff. Some schools have managed to trim personnel costs while minimizing teacher layoffs by instituting furlough days, freezing salaries, and reducing other benefits. But the financial handwriting is still on the wall. In upcoming years, more cuts will be necessary. School boards that evaluate possible cuts on the basis of research and data will be more likely to minimize the impact on students, at least in the short term. Some states view education as an investment in their economic future, so it is usually the last area to be cut. But today, many states have slashed their own budgets to the bone in public schools. Lastly, rising costs, coupled with no substantial increase in funds, will challenge schools as never before.

In the face of financial crunch in Nigeria, education is adversely affected. There is a growing concern for the state of the educational system. Education is usually one of the last budget areas to be cut, but most schools today are suffering declines in tuition fee payment by parents and guardians. At the same time, many are also facing dramatic increases in costs ranging from utilities. With decreasing revenues and rising costs, schools are forced to make tough decisions if they are to balance their budgets and still meet the needs of their students and staff. We live in an economy where the cost of living is often on the increase. Because of the effects of the market forces, both the government and the citizens have become weary of the effects it is having on the cost of funding and acquiring education for attainment of Sustainable Development Goal 4 (SDG4).

Sustainable Development Goal Four (SDG4) is geared towards all-inclusive and equitable quality education and promotion of lifelong learning opportunities for all. The emphasis under this goal has worldwide coverage of quality education from pre-school through at least secondary education, and then on to more advanced, skills training (Sachs, 2015). The ambition of the goal is to build a nation that will facilitate a realization of the full potential of each child in order that he/she can contribute to building a just, tolerant and egalitarian society. The vision of an inclusive quality education reflects on the idea of education for all, principally for those groups who are seen to be vulnerable. Particular emphasis is on equal access to all and lifelong education. It then means that those who lead education in several countries must give attention to all forms of education, both formal and non-formal irrespective of their financial state. Education, predominantly the all-inclusive and quality education is the focus of SDG4, and is critical to all of the other SDGs and sustainable development in general (Buckler & Creech, 2014 as cited in Hanachor & Wordu, 2021). SDG4 is therefore a wise decision because education is the bedrock of any society that is willing to open up employment opportunities for all which help in bringing out individuals from the shackle of unemployment and poverty; reduces societal inequalities and provide the knowledge and skills needed to live supportive lifestyles. However, this cannot be achieved without the teacher being productive. Productivity, to Robert et al (2014) is described as an act of accomplishing, or executing a given task. Productivity can however, be described in various ways. Teacher productivity is determined by the teachers' level of participation in the day-to-day running of the school. However, since teachers behave differently under different situations, it rests on the school principal and other stakeholders to encourage effective performance of teachers through identification and satisfaction of their needs. Indices of teacher productivity include competence in subject, adequate lesson presentation, effective supervision of student, participation in extra curricula activities, acting as in-loco-parentis to students, disciplinary ability among others.

However, it could be observed that, teacher productivity has declined in recent times in public senior secondary schools due to lots of factors such as; poor remuneration, poor conditions of service, and poor recognition of teachers' worth in society which is necessitated by financial crunch, a factor that really needs to be taken into consideration. The teachers, who are the repository of knowledge, must not only have a compliment of teaching aids and other materials, but must be motivated through appropriate remuneration and training in order to achieve SDG4. It is on this premise that this study examined the topic 'managing teachers' productivity in a financial crunch economy as predictor of Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State'.

Statement of the Problem
Teachers play a pivotal role in the actualization of educational goals and objectives and therefore require maximum attention and appropriate management for the actualization of greater result in the educational sector. The unproductive nature of teachers has posed a greater challenge in previous efforts to reposition teaching profession to enhance teacher's productivity. The syndrome of "no money" is no longer news, and the education system is suffering the worst hit presently due to the renewed and sustained financial crunch in Nigeria. There has been increasing evidence of financial

constraints coupled with the low proportion of government budget available to the education industry. The resources available to education have failed to cope with the growth and demands of the sector in recent times, especially in terms of motivating teachers to be productive for the attainment of SDG4. It has been reported that secondary schools in Rivers State in recent times seems to have witnessed a number of challenges such as lack of commitment on the part of teachers due to poor teacher management brought about by depressed economy. Therefore, depression in an economy may eventually have some effect on managing teachers' productivity for Sustainable Development Goal 4 (SDG4). Based on this, the study sought to examine managing teachers' productivity in a depressed economy as predictor of Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State'.

Aim and Objectives of the Study

The aim of the study was to examine the extent managing teachers' productivity in a depressed economy predict Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State. Specifically, the objectives of the study sought to:

1. Ascertain the extent in-service training of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State.
2. Determine the extent recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State.
3. Identify the extent provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State.

Research Questions

The following research questions guided the study:

1. To what extent does in-service training of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State?
2. To what extent does recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State?
3. To what extent does provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State.

Research Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

Ho_1. In-service training of teachers in a depressed economy does not significantly predicts Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Ho_2. Recognition of teachers in a depressed economy does not significantly predict Sustainable Development Goal 4 (SDG4) in Rivers State.

Ho_3. Provision of work-life balance for teachers in a depressed economy does not significantly predict Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Methodology

This study adopted a correlational research design to ascertain if there is a relationship or co-variations among the variables using a quantitative method of research. The population of this study was made up of all the 6,893 teachers (i.e. 3,490 male and 3,403 female) of 291 public senior secondary schools in Rivers State. The sample size for this study was six hundred and eighty-nine (689) teachers representing 10% of the entire population. Kpee (2015) considered such percentage appropriate to serve as an acceptable sample for a population running into thousands. The sample size was drawn from the entire population using the proportionate stratified random sampling technique. This ensured that all members of the population are given equal opportunity of being selected. The research instrument titled: Managing Teachers' Productivity in a Depressed Economy (MTPDES) and Sustainable Development Goal 4 Scale (SDG4S) were used for this study. The instruments have two sections (A and B). Section A elicited demographic information from the respondents, while section B elicited information on Managing Teachers' Productivity in a Depressed Economy and Sustainable Development Goal 4 Scale. The instruments were structured on four-point Likert-scale of Very High Extent (4), High Extent (3), Low Extent (2) and Very Low Extent (VLE) respectively. Cronbach Alpha reliability statistics was used to test the reliability of the two instruments. Reliability coefficients of 0.82 and 0.85 where obtained for both instruments respectively. Simple regression was used to answer research questions one to three, while t-test associated with simple regression was used to test hypotheses one to three at 0.05 level of significance.

Results and Analysis

Research Question One: To what extent does in-service training of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State?

Table 1: Simple regression on the extent in-service training of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State.

Model	R	R Square	Adjusted R Square	Extent of Prediction	Decision
1	.714a	.513	.511	51%	High Extent

Decision Rule: 100%- 75% =Very High Extent, 74% - 50% = High Extent, 49%-25% = Low Extent and 0% - 24% = Very Low Extent

Table 1 revealed that the regression (r) and regression square (r^2) coefficients are .714 and .513 respectively. The extent of prediction (coefficient of determinism) is 51.3% (.513 ×100). The result indicated that in-service training of teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent by 51%.

Research Question 2: To what extent does recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State?

Table 2: Simple regression on the extent recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State.

Model	R	R Square	Adjusted R Square	Extent of Prediction	Decision
1	.611[a]	.454	.445	45%	Low Extent

Decision rule: 100%- 75% = Very High Extent, 74% - 50% = High Extent, 49%-25% = Low Extent and 0% - 24% = Very Low Extent.

Table 2 revealed that the regression (r) and regression square (r^2) coefficients are .611 and .454 respectively. The extent of prediction (coefficient of determinism) is 45% (.454 $\times$ 100). The result showed that recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State to a low extent by 45%.

Research Question Three: To what extent does provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State?

Table 3: Simple regression on the extent provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State.

Model	R	R Square	Adjusted R Square	Extent of Prediction	Decision
1	.723a	.564	.563	56%	High Extent

Decision rule: 100%- 75% =Very High Extent, 74% - 50% = High Extent, 49%-25% = Low Extent and 0% - 24% = Very Low Extent

Table 4 revealed that the regression (r) and regression square (r^2) coefficients are .723 and .564 respectively. The extent of prediction (coefficient of determinism) is 56.4% (.564 $\times$ 100). The result showed that provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent by 56%.

Hypothesis 1: In-service training of teachers in a depressed economy does not significantly predicts Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Table 4: t-test associated with simple regression on the extent in-service training of teachers in a depressed economy significantly predicts Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value	Alpha level	Decision
		B	Std. Error	Beta				
1	(Constant)	2.642	.197		16.176	.000	0.05	Hypothesis is Rejected
	In-Service Training	.109	.072	.092	1.851	.001		

a. Dependent Variable: Sustainable Development Goal 4

Table 4 revealed that standard beta value and t-test are .092 and 1.851. The p-value of 0.001 is less than the level of significance of 0.05. Therefore, the null hypothesis is rejected. By implication, In-service training of teachers in a depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Hypothesis 2: Recognition of teachers in a depressed economy does not significantly predict Sustainable Development Goal 4 (SDG4) in Rivers State.

Table 5: t-test associated with simple regression on the extent recognition of teachers in a depressed economy significantly predict Sustainable Development Goal 4 (SDG4) in Rivers State.

Model		Unstandardized Coefficients		Standardized Coefficients	t	p-value	Alpha level	Decision
		B	Std. Error	Beta				
1	(Constant)	1.676	.172		9.672	.000	0.05	Hypothesis is Rejected
	Recognition	.298	.063	.351	4.582	.000		

a. Dependent Variable: Sustainable Development Goal 4

Table 5 revealed that standard beta value and t-test are .351 and 4.582. The p-value of 0.000 is less than the level of significance of 0.05. Therefore, the null hypothesis is rejected. By implication, recognition of teachers in a depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in Rivers State.

Hypothesis 3: Provision of work-life balance for teachers in a depressed economy does not significantly predict Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Table 6: t-test associated with simple regression on the extent provision of work-life balance for teachers in a depressed economy significantly predict Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Model	Unstandardized Coefficients		Standardized Coefficients	t	p-value	Alpha level	Decision
	B	Std. Error	Beta				
(Constant)	1.663	.188		8.765	.000		
1 Work-Life Balance	.319	.077	.315	4.489	.000	0.05	Hypothesis is Rejected

a. Dependent Variable: Sustainable Development Goal 4

Table 6 revealed that standard beta value and t-test are .315 and 4.489. The p-value of 0.000 is less than the level of significance of 0.05. Therefore, the null hypothesis is rejected. By implication, provision of work-life balance for teachers in a depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Discussion of Findings

The first finding of the study revealed that in-service training of teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent by 51%, while the remaining 49% can be predicted by other variables that are not considered in this study. In-service training is very crucial and important in the enhancement of teachers' skills and competencies. It has the ability to increase teachers' proficiency in lesson delivery, classroom management and control. It can also help the teachers to be of best international practices and standards for attainment of Sustainable Development Goal Four (SDG4). To Maclean (2018) there is a strong positive and significant relationship between teacher learning, teacher growth, teacher needs, teachers' collaboration and job performance in public senior secondary schools in Rivers State. Similarly, Ekpoh, et al (2013) carried out a study on the influence of staff development programmes on Secondary School teachers' job performance in Uyo Metropolis, Nigeria. In their study, Ekpoh et al found that when in-service training are organized for teachers not minding the school financial status it makes them more effective in their job performance than those who did not, in terms of knowledge of subject matter, classroom management, teaching methods and evaluation of student's work. Still in support of the findings of this study were Obadara, (2015) who examined teachers performance incentives: a panacea for improving teachers' productivity in Nigerian secondary schools. The findings revealed that there was a significant relationship between teachers' performance incentives and increased teacher effort, teacher behaviour in the classroom, teacher attendance, teaching methods, teacher retention, and student learning outcomes respectively. This is evident in the hypothesis tested which revealed that in-service training of teachers in a

depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

The second finding of the study revealed that that recognition of teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in Rivers State to a low extent by 45%. This is in consonance with Danish and Usman (2010) who in their study observed that when organizations fail to recognize the specific contributions of their employees, the employees will lack the willingness to express creativity and dare challenging task. The scholars further lamented that the reason why most schools fail to recognize their teachers is due to financial crunch, and this has stalled the attainment of SDG4. Teachers are likely to be productive if they perceive that the administration of the school is likely to take recognition of their creative contributions towards the accomplishment of the goals of the school. Concurring to the above, Njanja et al. (2021) opined that without recognition in schools, achievement of sustainable development goal four will be a mirage. Hanushek (2012) discussed the lack of recognitions that exists for most teachers who are accomplishing excellence in teaching for their students. Teachers who elicit academic gains from their students are not recognized for their achievements. Most teachers are hardworking and doing the best they can, but in the absence of recognition, additional resources are not directed to maximizing student output. Hence, recognition of teachers in a depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in Rivers State.

Lastly, the finding of the study revealed that the provision of work-life balance for teachers in a depressed economy predicts Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent by 56%. This finding is in tandem with Lau and May (2018) who observed that provision of work-life balance for teachers in a cash crunch economy can be perceived as an important factor for quality education delivery. However, when such is lacking teachers will tend to decline effective service delivery. According to Lau and May (2018), it involves strategies that increase satisfaction of employees and aims to improve working conditions in the organizations. Vedder (2005) asserted that balancing teachers work life can improve their overall health and general well-being, and most importantly, it improves their commitment, leading to the realization of the full potential of each student in order that he/she can contribute to building a just, tolerant and egalitarian society. This is apparent in the hypothesis tested which showed that provision of work-life balance for teachers in a depressed economy significantly predicted Sustainable Development Goal 4 (SDG4) in public secondary school in Rivers State.

Conclusion
Based on findings of the study, it was concluded that in-service training of teachers and provision of work-life balance for teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a high extent, while recognition of teachers in a depressed economy predict Sustainable Development Goal Four (SDG4) in public secondary school in Rivers State to a low extent

Recommendations

Based on the findings and the conclusion of the study, the following are hereby recommended.

1. School management should constantly organise in-service training for teachers for attainment of sustainable development goal four considering that fact that such training is achievable in a depressed economy.
2. School administrators should always recognize the efforts of teachers whenever they do well in other to improve job productivity in their day-to-day responsibilities at school for achievement of quality education which is hub of SDG4

3. Government at all levels through appropriate agencies should promulgate laws that will improve work-life of teachers. Where such law exist, efforts should be made to ensure proper implementation of it.

References

Danish, R. Q., & Usman, A. (2010). Impact of reward and recognition on job satisfaction and motivation: An empirical study from Pakistan. *International Journal of Business and Management, 5*(2):159-169.

Ekpoh, U. I., Edet, A. O., & Nkama, V. I. (2013). Staff development programmemes and secondary school teachers' job performance in Uyo Metropolis, Nigeria. *Journal of Education and Practice, 4*(12), 217-222.

Ezuwore, C. N. O., & Alio, F. C. (2014). Impact of credit crunch on the Nigerian economy. *Journal of Business and Management (IOSR-JBM)*, *16*(4), 32-35.

Hanachor, M. E., & Wordu, E. N. (2021). Achieving sustainable development goal 4 in Nigeria: Problems and prospects. *International Journal of Education, Learning and Development*, *9*(2), 10-25.

Hanushek, E. A. (2012). Teacher quality. In L. T. Izumi and W. M. Evers (Eds.), *Teacher quality*. Hoover Institute Press.

Kpee, G. G. (2015). *Research methods in education. A made easy approach.* Uzopietro Publishers.

Lau, R. S., & May, B. E. (2018). A win-win paradigm for quality of work life and business performance. *Human Resource Development Quarterly*, *9(3), 211-226*.

Maclean, I. F. (2018). In-service training and teachers' job performance in public senior secondary schools in Rivers State. *International Journal of Scientific Research in Education*, *11*(3B), 493-520.

Njanja, W. L., Mama, R. N., Kebet, L. N., & Njagi, (2013). Effect of reward on employee performance: A case of Kenya power and lighting company Ltd. Nakuru, Kenya. *International Journal of Business and Management*, *8(21)16-25*.

Obadara, O. E. (2015). Teacher performance incentives: A panacea for improving teachers' productivity in nigerian secondary schools. *Journal of Humanities*, *1*(1), 19-23.

Robert, W., & Tim, P. (2014). *Competency-based recruitment and selection.* John Witey and Sons.

Sarchs, G. (2015). The challenge of implementing the sustainable development goals in Africa: The way forward. *African Journal of Reproductive Health*, *20*(3), 13-18.

Vedder. R. (2005). *The high cost and low productivity of our higher education system; what it means for America.* Paper delivered at the annual pope center conference. http://www.popecenter.org.