

Management of Teachers' Soft Skills Development and Flexible Learning Environment as a Correlate of Teachers' Effectiveness in Unity Schools in South-Eastern States, Nigeria

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ABSTRACT

This study investigated the management of teachers' soft skills development and flexible learning environment as a correlate of teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. The correlational research design was adopted for the study. Two research questions were answered while two hypotheses were tested. The population of the study comprised all the 901 teachers of the 14 Unity schools in the 5 South-Eastern states of Nigeria. Stratified and disproportionate sampling techniques were used to select 399 sample size that was determined from the population using Taro Yamane Formula. Two sets of instruments titled; "Management of Seamless Technology Integration Questionnaire" and "Teachers' Effectiveness Questionnaire" were used for data collection. Face and content validity was ensured by five experts including the researcher's supervisors. The reliability coefficients of the two instruments were calculated to be 0.79 and 0.81 using Cronbach Alpha method. Multiple and simple regressions were used to answer the research questions. Analysis of variance associated with multiple regression and t-test associated with simple regression were used to test the null hypotheses at 0.05 alpha level. It was found that management of: teachers' soft skills development and flexible learning environment positively correlate (0.92 and 0.86 respectively) to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. Based on the findings, it was concluded that management of seamless technology integration is positively and highly significant to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. It was therefore recommended among others that school administrators in the 14 Unity schools in the South-Eastern states should immediately embark on self-development in the management of seamless technology integration.

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Background to the Study

Unity schools, located across the thirty six states of Nigeria, are Federal Government secondary schools established to foster national unity and integration by bringing students from different parts of the country to acquire advanced basic and post-basic education. Unity schools were designed as melting points for the binaries of gender in their formative years, from different parts of Nigeria, to live together in boarding secondary schools in order to obliterate any stereotyped bias or suspicion of any culture or creed (Umeghalu, 2021). More so, Unity schools are expected to be archetypal secondary school across the federation in moral and academic excellence (Okunfolami, 2017). While the students are expected to serve as the depiction of the core values of the Unity schools, the teachers are expected to be the pace setters. Hence, the emphasis on teachers' effectiveness in Unity schools (Umeghalu, 2021).

Teacher effectiveness can be described as the extent teachers are able to model their students in self-discipline, integrity, compassionate self and goal-setting and goal-getting (Nworgu & Oluwuo, 2019). Conventionally, assessing teachers' effectiveness is primarily an administrative task which involves the evaluation of teachers' aptitude to produce gains on students' achievement scores, taking account of a

baseline measure of students' prior attainment and other characteristics of students' intake. It requires teachers to be dexterous and act smartly in gaining students' confidence on all assigned tasks per day through the seamless application of concepts (Muijs & Reynolds, 2017). Also, it is imperative to note that for teachers and students to measure up to outlined educational goals in Unity schools, the process of teaching and learning is expected to be: tailored according to the scheduled time, employ hands-on-activity, involve comments with real examples and real life experiences, make up experiences the learner is able to reflect on, and basically, deploy any of the learning styles- visual (pictures), aural (sound and music), verbal (words both in speech and in writing), physical (using your body, hands and sense of touch), for the enhancement of pedagogy. This is the drive for the management of seamless technology integration in Unity schools in South Eastern Nigeria (Nelson, 2020; Conway & Andrews, 2016).

Ordinarily, seamless technology integration is the logical utilisation of technological resources such as computers, mobile devices like smartphones and tablets, digital cameras, social media platforms and networks, software applications and the internet daily in school management and classroom teachers' effectiveness (Oluwuo & Enefaa, 2016; Guzey & Roehrig, 2012). However, for the benefit of this study, management of seamless technology integration can be described as the consistent adaptation of computer applications in conjunction with internet services to eliminate existing and noticeable barriers relating to the impartation of knowledge in the process of teaching and learning in Unity schools. Put simply, management of seamless technology integration is captured in the systematic transformation of Unity schools through the adaptation of contemporary technological resources and techniques for schooling (Umeghalu, 2021).

Additionally, the management of seamless technology integration is achieved when the application of technology is: routine and transparent; accessible and readily available for each day's task; supporting the curricular goals; and, helping the teachers and their students to effectively reach their goals (Umeghalu, 2021). Thus, the management of seamless technology integration as it relates to Unity schools is ensuring that teachers and students keep setting the pace in academic excellence across the length and breadth of Nigeria in post-primary education without eroding the Nigerian culture across the ethnic divides (Atueyi, 2016). It means not sacrificing our culture because of education while at the same time producing students who are genius when compared to their counterparts in any part of the world. Thus, in the measurement and evaluation of management of seamless technology integration in Unity schools in South Eastern Nigeria, a proportion of the following five (5) components may be of value as identified in extant literature, to wit: teachers' soft skills development; home-school collaboration; school safety; flexible learning environment; and, teachers' technology aptitude (Looi, *et al.*, 2019). Teachers' soft skills development entail the grooming of teachers to recognize their innate or inherent ability in managing the emotions of students in the course of onboarding them into the nature of interacting with technology during the process of teaching and learning. Ensuring that the traditional classroom system of dissemination of knowledge is seamlessly transformed into an advanced system of teaching and learning will require soft skills such as intellectual engagement of students, their behavioural engagement, social engagement, cultural engagement as well as their emotional engagement (Umeghalu, 2019). Home-school collaboration implies that the school manager need to put measures in place that will ensure that all parents are in the know on the modality of harnessing technological resources in the dissemination of knowledge to their wards (Alexander, *et al.*, 2013).

School safety has to do with seamlessly turning our learning space in Unity schools to smart classroom which demands that the management demonstrate the capacity to provide real assurance that will ward off vandals, disallow the mismanagement of the school financial resources, protect the school from incidents of cyber-insecurity, and ensuring that the parents, teachers and students' data are kept from the reach of unauthorized persons (Rodriguez, 2019). Flexible learning environment implies that the school adapts the use of technological resources to existing resources to best support the students and their teachers to systematically ascertain relevant steps in the teaching and learning process, and to advance in areas of strength (Neill and Etheridge as cited in Byers, *et al.*, 2014). In a nutshell, for existing schools such as the Unity schools in South Eastern Nigeria, flexible learning environment as a management of seamless technology integration component calls for school renovation that is patterned by flexible learning space (Umeghalu, 2021). Teachers' technology aptitude has to do with the intrinsic yearning of teachers to

consistently impart knowledge through the adaptation of technology. Teachers' technology aptitude focuses on how better can Unity school teachers' attune to the integration of technology for seamless teaching and learning (United Nations Educational, Scientific, and Cultural Organization (UNESCO) in Abuli & Odera, 2013).

It is therefore imperative to note that teachers' job roles in our Unity schools may not satisfy the expected condition of meeting academic goals in Nigeria if proper management structures are not in place even when the adapting technology might have been talked about or put into use. Based on the foregoing, a good number of management approaches to seamless technology integration have been briefly explained. However, the study considered the management of teachers' soft skills development and flexible learning environment to be investigated as the independent variables of this study. Hence, the study was geared towards investigating management of teachers' soft skills development and flexible learning environment as a correlate of teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Statement of the Problem

Nearly six decades that Unity schools came into existence in Nigeria, little is left to be seen of its *pro unitate*. *Pro unitate* is the motto of all Unity schools in the federation which is a Latin word for unity. Teachers in Unity schools have been found to be performing below capacity in their job role of teaching and learning as parents decried collapse of quality education in Unity schools across the country. The current Level of management of Unity schools across the federation were also found to be struggling on the way forward coupled with the issue bordering on lean resources.

Based on the foregoing, students have been at the receiving end of whatever the outcome of the structure and process of these Unity schools have to offer while their parents keep lamenting on the need to put a nail on this chagrin due to how sensitive it is in our national life. Hence, what bothered the researchers is whether the management of teachers' soft skills development and flexible learning environment has a relationship with teachers' effectiveness in Unity schools? Simply put, does management of teachers' soft skills development and flexible learning predict teachers' effectiveness in Unity schools in South-Eastern states of Nigeria?

Aim and Objectives of the Study

This study was aimed at investigating the management of teachers' soft skills development and flexible learning environment as a correlate of teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. Specifically, the objectives were to:

1. find out the extent management of teachers' soft skills development independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria;
2. determine the extent management of flexible learning environment independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria; and,
3. Ascertain the extent management of seamless technology integration (teachers' soft skills development and flexible learning environment) jointly correlate to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Research Questions

1. To what extent does management of teachers' soft skills development independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria?
2. To what extent does management of flexible learning environment independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria?
3. To what extent does management of seamless technology integration (teachers' soft skills development and flexible learning environment) jointly correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria?

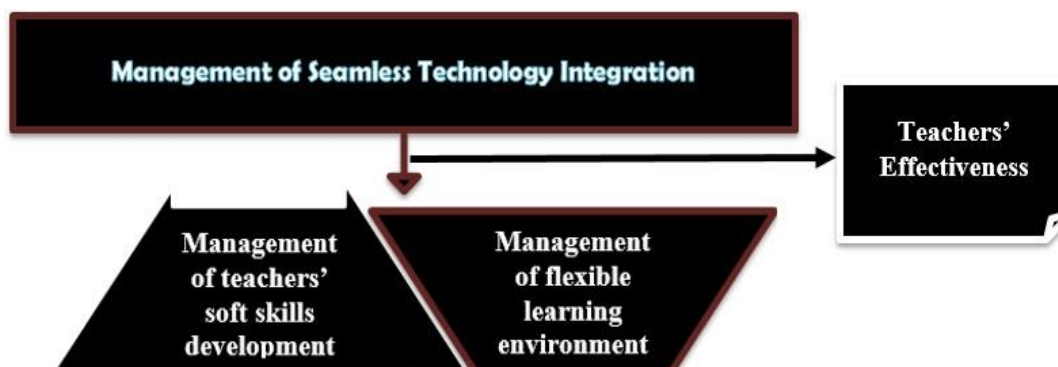
Hypotheses

The following three (3) null hypotheses were tested at 0.05 level of significance

1. Management of teachers' soft skills development does not significantly independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.
2. Management of flexible learning environment does not significantly independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.
3. Management of seamless technology integration (teachers' soft skills development and flexible learning environment) does not significantly jointly correlate to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Conceptual Framework

The concepts of this study is anchored on teachers' soft skills development and the impact of flexible learning environment on management of seamless technology integration in the effectiveness of teachers in Unity schools as diagrammatically represented below in figure 1.



Source: Researchers' conceptualization (2021).

Conceptual Review

Concepts of Management of Seamless Technology Integration and Teachers' Effectiveness

Management is the art of getting things done through and with the people in formally organized groups and the science of principles in addressing change to meet pre-determined organizational goals (Armstrong & Taylor, 2020; Koontz, *et al.*, 2020; Oluwuo & Nwabueze, 2016). Likewise, Luther Gullick conceptualised a keyword known as POSDCORB in articulating management as both an art and science where 'P' stands for Planning, 'O' for Organizing, 'S' for Staffing, 'D' for Directing, 'C' for Co-ordination, 'R' for reporting and 'B' for Budgeting (Chalekian, 2013). But the most widely accepted are concepts of management provided by Koontz and O'Donnell which are: (POSDC) Planning, Organizing, Staffing, Directing and Controlling (Sumaryanto, 2018; Hassan, 2017). In the enhancement of teachers' ability to create a learning context as a definition of 'management in relation to teachers' effectiveness'. Abdullahi (2019) perceived it as a system of managing teaching and learning process in an 'appropriate manner' to raise the level of the educational product quality with the least possible effort and cost toward the realization of educational objectives.

Management of Teachers' Soft Skills Development and Teachers' Effectiveness

Soft skills are the inherent characteristics also known as hidden traits which are vital to effectiveness at work and it can be: acquired or imbibed, developmental, measurable and evaluated (Umeghalu, 2019; Subramaniam, 2013). These dimensions of soft skills also account for managing soft skills in an academic work environment in the 21st century (Umeghalu, 2019). In academic work environments, soft skills are purposefully required to imbue professionalism among teachers which is targeted at preparing students who are not just academically sound but perspicacious and sagacious and these soft skills can be acquired through the grooming of both the teachers and the students (Umeghalu & Obi, 2020; Kpee & Umeghalu, 2019; Umeghalu, 2019). The teachers are groomed through professional programmes and administrative support to recognize their innate or inherent abilities in managing the emotions of students while the students are groomed by their teachers in the use of soft skills through intellectual, behavioural, social, cultural and affective engagements in classroom instructional teachers' effectiveness (Kpee & Umeghalu, 2019; Mbah, 2019; Umeghalu, 2019). The integration of soft skills amongst students is highly dependent

on the skills and competence of the teacher. This is akin to Kpee and Umeghalu (2019) who stated that soft skills are generic finesse but are indispensable for teachers in the 21st century to improve on their productivity. In essence, the soft skills concept is closely related to the marketability of the students in the workforce-- soft skills acquisition has been observed by researchers to mould positive changes in students in their character building, control of feelings, self-motivation, and the ability to think critically and creatively, in interacting with others as well as the ability to work as a team (Kpee & Umeghalu, 2019; Umeghalu, 2019; Subramaniam, 2013).

Similarly, Kpee and Umeghalu (as cited in Umeghalu & Obi, 2020) averred that soft skills in the secondary school are very crucial for teachers because they require these skills when it comes to communicating with their colleagues and students in working as a proper system. Most importantly, classroom teachers in the course of sparse, basic, comfortable and mainly, seamless technology integration in secondary schools require not just the hardware and software skills but also, presentation skills in order to effortlessly engage the students: intellectually, behaviourally, socially, culturally and affectively towards their individual learning goals through the use of computer applications (Horzum, 2013; Ratnapala, 2013; Sampaio, 2013)..

Management of Flexible Learning Environment and Teachers' Effectiveness

Flexible learning is a pedagogical approach that is sound, purposefully selected delivery approach resulting from fundamental moves and changes in the socio-economic contexts of the times we live in (Onaleye, 2020; Akinbobola, & Asagha, 2015; Deakin University, 2013). The management of flexible learning environment refers to the ability of school managers to customize students' pace, place and mode of learning (Umeghalu, 2021; Oluwuo & Asodike, 2016; Deakin University, 2013). With pace, for example, students may take accelerated programs or engage in part-time learning to ensure they have time to engage in other interests. For instance, vocational skills acquisition mostly for students in the South-Eastern part of Nigeria (Odumody, 2018). In terms of 'place organization' to mirror flexible learning environment that can accentuate teachers' effectiveness, Mehrbach and Beingessner (2018) averred that the management of flexible learning environment goes beyond the physical space. While it is true that the space needs to be flexible in nature, there is much more to a flexible learning environment than just the physical floor plan or furniture choices. Contemporary flexible learning environments also address other elements of the learning environment such as how students are grouped during learning and how time might be used more flexibly during the day (Kariippanon, *et al.*, 2019; Mehrbach & Beingessner 2018; Benade, 2017; Glatter, *et al.*, 2016). That is why Umeghalu (2021) pointed out that there is need for flexibility in classroom seating arrangement taking into consideration the varieties of teaching and learning activities for the day. Other characteristics of flexible learning include student collaboration with peers and/or practitioners in the field (Darling-Hammond, *et al.*, 2020); provision of ample resources (Masaviru, 2020; Kariippanon, *et al.*, 2019); a context-sensitive learning experience (Deed, *et al.*, 2019); greater emphasis on generic skills such as thinking, metacognition, and problem-solving (Joan, 2013); and a shift of the teacher's role from a source of knowledge to a facilitator throughout the student's learning journey (Mashhadi & Kargozari, 2011). Flexible learning moulds the learner to plan their activities according to their interest and enthusiasm (Joan, 2013). Flexible learning also keeps the mind of learner in a pleasant situation that is out of external fear (Joan, 2013). More on this point, Ijioma (2013) acknowledged that flexibility must be a key design requirement within the brief which is needed to allow for different activities within the classroom and/or the needs of different users.

Theoretical Review

Lean for Education Theory

The trio of Paul G. LeMahieu (An American Academician), Lee E. Nordstrum (a global research education analyst) and Patricia Greco (An American Educationalist) reinvigorated the lean for education theory in 2017. The theory averred that all school and district employees should identify and solve problems that prevent students and others who benefit from education from achieving the highest quality outcomes possible through continuous problem solving, learning and making quality improvements with Plan-Do-Check-Act cycles (Umeghalu, 2021).

Most importantly, the coinage that engineered Lean for Education theory are: continuous improvement

and respect for people. Specifically, the Lean for Education theory with Plan-Do-Check-Act cycles approach deals with the problem of improving technology supports and services for instructional purposes in a school system (Umeghalu, 2021; LeMahieu, *et al.*, 2017). Lean offers a set of tools and techniques as well as overarching principles for thinking about organizational improvement. While the method is fundamentally about achieving efficiency and quality, it also emphasizes the importance of relationships. Service providers (school managers and teachers) must know what their customers (students and parents) need and value as it aligns with global best practices. At the heart of the model is the Plan-Do-Check-Act (PDCA) cycle as diagrammatically represented below.

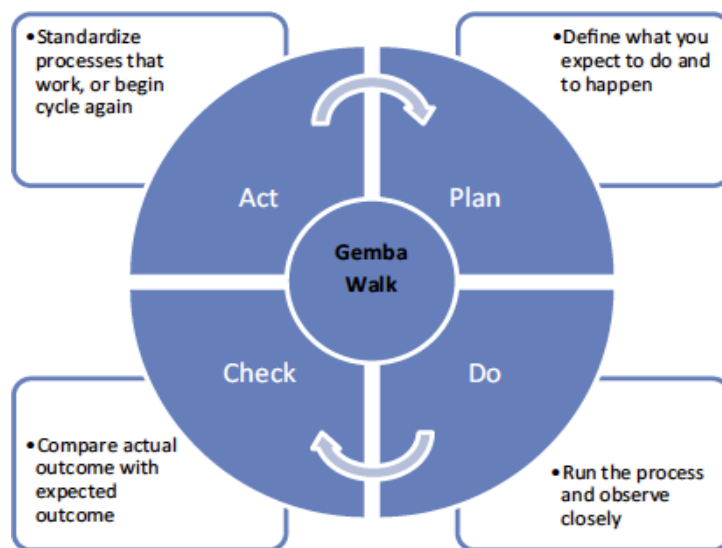


Figure 2: Integration of Plan-Do-Check-Act cycle into school management
 Source: Adapted from LeMahieu, *et al.* (2017)

In application to this study, a replica of the PDCA is diagrammatically represented below

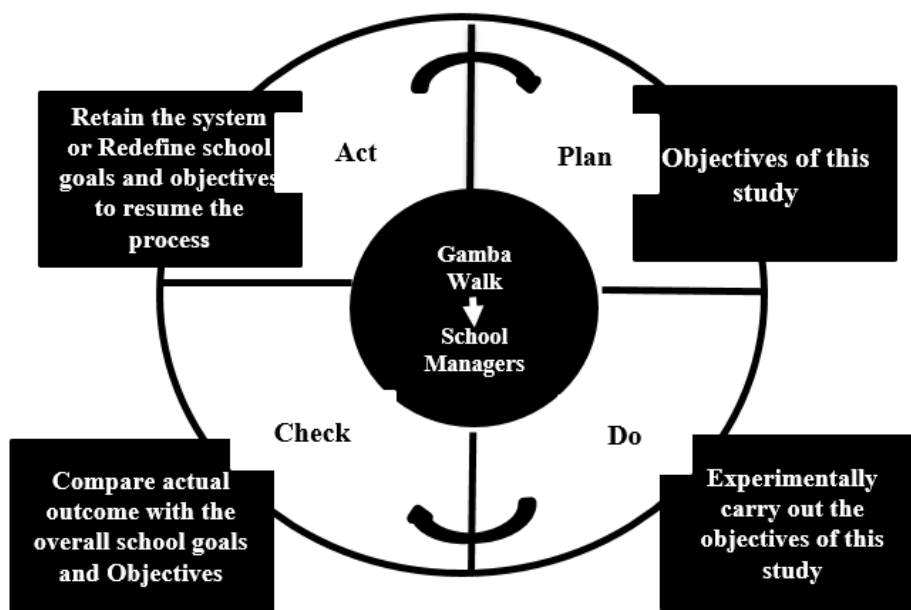


Figure 3: Improvised cycle of PDCA as a framework in the management of seamless technology integration in education

Source: Researchers' Conceptualisation (2021).

Review of Related Empirical Studies

Arop, *et al.* (2018) investigated management of school related variables and teachers' job effectiveness in secondary schools in Calabar south Local Government Area of Cross River state, Nigeria. The descriptive survey design was used. A questionnaire was used as instrument for data collection. It was found that; managing class size, school management style, and school location has a significant influence on teachers' job effectiveness respectively in Calabar South Local Government Area of Cross River State. It was recommended amongst others that; school principals should ensure that they adopt a more contingent management style where different situations will warrant the use of different technique; and the recommended teacher-pupils' ratio of 1:35 should be maintained.

Nwangwu, *et al.* (2014) examined the extent to which information communication technology (ICT) is integrated into various school subjects. A descriptive research design was adopted for the study. Questionnaire was used for the collection of data from 105 Form 2 Junior Secondary School students in four Federal Unity Schools (FUS) in South Eastern Nigeria. It was found that except for computer studies, ICT was not integrated into other school subjects in the curriculum. Based on the findings, it was concluded that low utilization of ICT in teaching and learning in the Federal Unity Schools in Nigeria were as a result of low level of access to ICT facilities. Therefore, it was recommended that government should put more effort in equipping FUS with adequate facilities, teacher preparation towards ICT usage as well as monitoring and assessment of ICT utilization.

Umeghalu and Obi (2020) investigated new teachers' soft skills and productivity in senior secondary schools in Rivers State, Nigeria. The study adopted a correlational research design. The population comprised all of the 268 government owned Secondary Schools in Rivers State with 8452 teachers. Two sets of questionnaire were used for data collection. It was found that emotional intelligence and creative and critical thinking as well as creative and critical thinking and productivity have significant positive moderate and high relationships of 0.50 and 0.64 respectively in Public Senior Secondary Schools in Rivers state. It was recommended among others that; teachers should mostly use exploration teaching method in order to allow the students to critically think out of the box.

Kariippanon, *et al.* (2019) investigated ways in which flexible learning spaces facilitate interaction, collaboration and behavioural engagement in secondary schools. A mixed research design was adopted for the study. Findings revealed that, in the traditional classrooms the teaching style was primarily teacher-led and students had limited reasons or options to stand or move around the room, or find an alternative place to work throughout the lesson or to engage with one another. Based on the findings, it was concluded that adaptable nature of flexible learning spaces and the greater use of student-centered pedagogies, facilitate students spending a greater proportion of class time engaging, interacting and collaborating. Therefore, it was recommended that further research should be carried out on unpacking the complexity of the interplay between the built environment and the pedagogical approaches and how best to support teachers' environmental competencies to maximise the benefits that flexible learning spaces can offer adolescents.

Summary of Reviews

The theoretical review on Lean for Education theory apply to this study owing to the fact that the management of seamless technology integration and teachers' effectiveness involves the active role of school managers, the teachers' competence and students' adaptation. It goes beyond the current schooling system in our Unity schools across the federation. Our Unity school system at the moment, just like most of the state-owned secondary schools, are still looking at modernizing the traditional school system where processes are fixed and difficult to rejjig. As a matter of fact, the current global outbreak has necessitated the need for embracing seamless technology integration but how can it be managed effectively that it will not become counterproductive for the teachers has remained a serious question which this study is bound to address. In providing understanding on practicability of this study in Unity schools in Nigeria, a total of three (3) concepts were reviewed, to wit: management of seamless technology integration and teachers' effectiveness, management of teachers' soft skills development and teachers' effectiveness, as well as management of flexible learning environment and teachers' effectiveness.

Each of the concepts was discussed in the light of understanding scholars' experience with management of teachers' soft skills development and flexible learning environment as a correlate of teachers' effectiveness across the globe. Information was sourced from both quantitative and qualitative researches carried out on each of the concepts. However, in the course of the empirical reviews, there is a paucity of literature on the management of teachers' soft skills development and flexible learning environment as a correlate of teachers' effectiveness globally. To the best of the researchers' knowledge, no work has been done on the correlates of management of teachers' soft skills development and flexible learning environment to teachers' effectiveness in unity schools in South-Eastern states, Nigeria and this is the gap the study has attempted to fill.

Methodology

A correlational survey design was adopted for this study. The study population comprised 901 teachers of the 14 Unity schools in the 5 South-Eastern states of Nigeria [Source: Federal Ministry of Education, 2021]. A sample of 399 respondents representing 44.28% of the population using the Taro Yamane formula was drawn using a two-stage sampling technique of stratified and disproportionate sampling techniques. The instruments titled, Management of Seamless Technology Integration Questionnaire (MSTIQ) and Teachers' Effectiveness Questionnaire (TEQ) were used for this study. This was coded in the four-point likert type scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE) with values 4, 3, 2 and 1 respectively. Face and content validity was ensured by experts. The reliability coefficients of the MSTIQ and TEQ were calculated to be 0.79 and 0.81 respectively with the use of Cronbach Alpha. Multiple and simple regressions were used to answer the research questions. ANOVA associated with multiple regression and t-test associated with simple regression were used to test the null hypotheses at 0.05 alpha level. The following index showed the extent of correlation to the independent variable via:

- 0 - 25% (i.e. 0 - 0.25) = Low
- 26 - 50% (i.e. 0.26 - 0.50) = Moderate
- 51 - 75% (i.e. 0.51 - 0.75) = High
- 76 - 100% (i.e. 0.76 - 1.00) = Very High

(Source: Umeghalu, 2019; Worika, 2019)

Results

Answer to Research Questions

Research Question 1: To what extent does management of teachers' soft skills development independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria?

Table 1: Model summary of simple regression on the correlate of management of teachers' soft skills development to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Model	r	r ²	Adjusted r ²	Std. Error of the Estimate
1	.922 ^a	.849	.849	.315
a. Dependent Variable: Teachers' Effectiveness				
b. Predictors: (Constant), Management of Teachers' Soft Skills Development				

Research Question 2: To what extent does management of flexible learning environment independently correlates to teachers’ effectiveness in Unity schools in South-Eastern states of Nigeria?

Table 2: Model summary of simple regression on the correlate of management of flexible learning environment to teachers’ effectiveness in Unity schools in South-Eastern states of Nigeria.

Model	r	r ²	Adjusted r ²	Std. Error of the Estimate
1	.864 ^a	.746	.746	.408
a. Dependent Variable: Teachers’ Effectiveness				
b. Predictors: (Constant), Management of Flexible Learning Environment				

Research Question 3: To what extent does management of seamless technology integration (teachers’ soft skills development and flexible learning environment) jointly correlates to teachers’ effectiveness in Unity schools in South-Eastern states of Nigeria?

Table 3: Model summary of the joint correlates of management of seamless technology integration (teachers’ soft skills development and flexible learning environment) to teachers’ effectiveness in Unity schools in South-Eastern states of Nigeria.

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.893 ^a	.780	.780	.362
a. Dependent Variable: Teachers’ Effectiveness				
b. Predictors: (Constant), Management of Teachers’ Soft Skills Development, Management of Positive Classroom				

Results in Table 1 revealed that regression (r) and regression square (r²) coefficients are 0.92 and 0.85 respectively. The extent of correlation is obtained from coefficient of determinism. The coefficient of determinism is 85% (0.85 x 100). This showed that management of teachers’ soft skills development independently correlates to teachers’ effectiveness by 85 per cent in Unity schools in South-Eastern states of Nigeria.

Results in Table 2 revealed that regression (r) and regression square (r²) coefficients are 0.86 and 0.75 respectively. The extent of correlation is obtained from coefficient of determinism. The coefficient of determinism is 75% (0.75 x 100). This showed that management of flexible learning environment independently correlates to teachers’ effectiveness by 75 per cent in Unity schools in South-Eastern states of Nigeria.

Results in Table 3 revealed that regression (R) and regression square (R²) coefficients are 0.89 and 0.78 respectively. The extent of correlation is obtained from coefficient of determinism. The coefficient of determinism is 78% (0.78 x 100). This showed that the management of seamless technology integration of this study jointly correlate to teachers’ effectiveness by 82 per cent in Unity schools in South-Eastern states of Nigeria.

Test of Hypotheses

Hypothesis 1: Management of teachers' soft skills development does not significantly independently correlate to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Table 4: T-Test Associated with Simple Regression on Management of Teachers' Soft Skills Development and teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Decision
		B	Std. Error	Beta			
1	(Constant)	.033	.018		1.803	.072	Significant
	Management of Teachers' Soft Skills Development	1.063	.025	.922	41.795	.000	

Hypothesis 2: Management of flexible learning environment does not significantly independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Table 5: T-Test Associated with Simple Regression on management of flexible learning environment and teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Decision
		B	Std. Error	Beta			
1	(Constant)	.055	.024		2.311	.021	Significant
	Management of Flexible Learning Environment	1.033	.034	.864	30.209	.000	

Hypothesis 3: Management of seamless technology integration (teachers' soft skills development, flexible learning environment) does not significantly jointly correlate to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Table 6: ANOVA Associated with Multiple Regressions on the correlation of management of seamless technology integration to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	173.305	6	28.884	288.133	.000 ^b
Residual	30.575	305	.100		
Total	203.880	311			

a. Dependent Variable: Teachers' Effectiveness
b. Predictors: (Constant), Teachers' Soft Skills Development, Flexible Learning Environment

Result in Table 4 indicated that the beta value is given as 0.922. The T-test value of 41.795 is significant at 0.000 when subjected to alpha level of 0.05. Therefore, the null hypothesis is not retained. By implication, management of teachers' soft skills development significantly independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Results in Table 5 indicated that the beta value is given as 0.864. The T-test value of 30.209 is significant at 0.000 when subjected to alpha level of 0.05. Therefore, the null hypothesis is not retained. By implication, management of flexible learning environment significantly independently correlates to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Results in Table 6 indicated that the sums of squares are 173.305 and 30.575 while the mean squares are 28.884 and 0.100 respectively. With degrees of 6 and 305, the calculated F-value of 288.133 is significant at 0.00 when subjected to an alpha level of 0.05. Therefore, the null hypothesis 7 is not retained. By implication, management of seamless technology integration (teachers' soft skills development, flexible learning environment) significantly and jointly correlate to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Discussion of Findings

The findings of this study are discussed under the following subheadings:

Management of Teachers' Soft Skills Development and Teachers' effectiveness

The findings showed that there is a positive significant and very high correlation of 0.92 between management of teachers' soft skills development and teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. The study has been able to reveal how management of teachers' soft skills development can, to a very high extent, influence teachers' commitment to their job to be effective when compared to the level of their productivity at this time in the Unity schools. Variables such as: schools' administrators active involvement in the grooming of teachers on the recognition and use of their innate ability in the teaching and learning process; schools' administrators determination to bridge the gap of intrinsic motivation among teachers; teachers' active role in the grooming of their students on resilience and sagacity; as well as, the utilization of emotional intelligence by the school administrators and teachers to gain students attention to instructional task performance. These findings is in line with the finding of Umeghalu and Obi (2020) that emotional intelligence and creative and critical thinking as well as creative and critical thinking and productivity have significant positive moderate and high relationships of 0.50 and 0.64 respectively in Public Senior Secondary Schools in Rivers state. Kpee and Umeghalu (2019) reiterated that teachers' soft skills development have a significant positive high relationship with productivity (effectiveness) in government-owned secondary schools in Rivers state. In the same vein, Cinches, et al. (2017) emphasized that teacher effectiveness is the best single predictor of student engagement.

Management of Flexible Learning Environment and Teachers' effectiveness

The findings showed that there is a positive significant and very high correlation of 0.86 between management of flexible learning environment and teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. The possible reason while management of flexible learning environment as a dimension of management of seamless technology integration is correlated with teachers' effectiveness in Unity schools in South-Eastern states of Nigeria lies in the fact that the management of flexible learning environment advances proper alignment of learning with the concept of student-centered pedagogy. This is why Demir-Yildiz and Tatik (2019) indicated that the physical environment influenced learning in terms of motivation and enthusiasm as the analysis of the data collected from the participants in the experimental group, regarding the advantages and disadvantages of a flexible classroom, suggested that nearly one-third of the participants emphasized that the flexible classroom environment is more motivating. Almost one-fifth of the participants stated that the flexible classroom environment is more suitable for activities.

Management of Seamless Technology Integration and Teachers' effectiveness

It was found that management of seamless technology integration have a positive significant and very high correlation of 0.89 with teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. The positive and high correlation depicted between management of seamless technology integration and teachers' effectiveness in the Unity schools is irrefutable owing to the fact that technology integration is no longer news in the success of Unity schools in saner climes and other renowned post-primary schools across the world. The findings of this study is in line with Sampaio (2013) who remarked that technology integration in school performed with a "beginning, middle and end" in tandem with specific objectives could bring enough benefits to education. However, this development seems to have either been neglected by school administrators as rightly observed by Aramide, *et al.* (2015) who observed that there is a low

level of access to science-based technological facilities and application, such as simulations and modeling, and graphical visualizing tools, among the science teachers in Unity schools in Nigeria.

Summary of Findings

The findings of this study are summarized as shown below:

1. The correlation of management of teachers' soft skills development to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria has a high and positive correlation of 0.92.
2. The correlation of management of flexible learning environment to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria has a high and positive correlation of 0.86.
3. The correlation of management of seamless technology integration (teachers' soft skills development, flexible learning environment) to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria has a high and positive correlation of 0.89.
4. The finding showed that there is a significant correlation (of 0.00 when subjected to an alpha level of 0.05) of management of teachers' soft skills development to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.
5. The finding showed that there is a significant correlation (of 0.000 when subjected to an alpha level of 0.05) of management of flexible learning environment to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.
6. It was found that management of seamless technology integration have a significant correlation (of 0.000 when subjected to an alpha level of 0.05) with teachers' effectiveness in Unity schools in South-Eastern states of Nigeria.

Conclusion

Based on the findings of this study, it can be concluded that management of seamless technology integration is positively and highly significant to teachers' effectiveness in Unity schools in South-Eastern states of Nigeria. Out of the two tested components (management of teachers' soft skills development, management of flexible learning environment), management of teachers' soft skills development have the highest prediction of the independent variable (management of seamless technology integration) to the dependent variable (teachers' effectiveness in Unity schools in South-Eastern states of Nigeria).

Recommendations

The following recommendations were made based on the findings of the study

1. School administrators in the fourteen Unity schools in South-Eastern states should immediately embark on self-development in the management of seamless technology integration
2. The Unity school administrators should onboard the teachers on the need and practice of soft skills in the use of technology in the classroom through teachers' soft skills development.
3. School administrators in the fourteen Unity schools in South-Eastern states of Nigeria should make use of the lean resources theory to embark on creating flexible learning environment

Contributions to Knowledge

The study has been able to make the following contributions to knowledge.

1. The study has documented that the practice of management of teachers' soft skills development correlated to teachers' effectiveness in Unity schools by 92%

References

1. Abdullahi, N. J. K. (2019). Education quality management and teacher effectiveness in Nigeria. *Malaysian Online Journal of Education*, 3(1), 59-68.
2. Abuli, W., & Odera, F. (2013). The impact of chemistry school radio broadcast in secondary schools in Vihiga county, western Kenya. *International Journal of Information and Communication Technology*, 3(1), 1-10.

3. Akinbobola, A. O., & Asagha, E. N. (2015). Promotion of blended learning usage in science teaching in Nigeria: some inhibiting factors. *E-learning*, 79(52.16), 7-24.
4. Alexander, R., Rukshan, P., & Mahesan, S. (2013). Natural language web interface for database (NLWIDB). *arXiv preprint arXiv:1308.3830*.
5. Aramide, K. A., Ladipo, S. O., & Adebayo, I. (2015). Demographic variables and ICT access as predictors of information communication technologies' usage among science teachers in federal unity schools in Nigeria. *Library Philosophy and Practice*, 1
6. Armstrong, M., & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.
7. Arop, F. O., Ekpang, M. A., & Owan, V. J. (2018). Management of school related variables and teachers' job effectiveness in secondary schools in Calabar south local government area of Cross River state, Nigeria. *International Journal of Social Sciences and Management Research*, 4(8), 90-100.
8. Atueyi, N. C. (2016). ICT and entrepreneurship. In *Association of Business Educators of Nigeria Conference Proceedings*, 3(1), 135-138.
9. Benade, L. (2017). Is the classroom obsolete in the twenty-first century? *Educational Philosophy and Theory*, 49(8), 796-807.
10. Byers, T., Imms, W., & Hartnell-Young, E. (2014). Making the case for space: the effect of learning spaces on teaching and learning. *Curriculum and Teaching*, 29(1), 5-19.
11. Chalekian, P. (2013, October). POSDCORB: core patterns of administration. In *Proceedings of the 20th Conference on Pattern Languages of Programs* (p. 17). The Hillside Group.
12. Conway, J. M., & Andrews, D. (2016). A school wide approach to leading pedagogical enhancement: an Australian perspective. *Journal of Educational Change*, 17(1), 115-139.
13. Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97-140.
14. Deakin University (2013). Introducing flexible learning. [sitios.itesm.mx/va/congreso_academico/documentos/Introducing%20flexible%20learning_Deakin%20Unv.pdf](https://www.deakin.edu.au/learning/academic/congresso_academico/documentos/Introducing%20flexible%20learning_Deakin%20Unv.pdf)
15. Deed, C., Blake, D., Henriksen, J., Mooney, A., Prain, V., Tytler, R., & Swabey, K. (2019). Teacher adaptation to flexible learning environments. *Learning Environments Research*, 1-13.
16. Demir-Yildiz, C., & Tatik, R. S. (2019). Impact of flexible and non-flexible classroom environments on learning of undergraduate students. *European Journal of Educational Research*, 8(4), 1159-1173.
17. Glatter, H., Deruy, E., & Wong, A. (2016). Reimagining the modern classroom: the seats, space, and stuff that idyllic learning environments are made of. *The Atlantic*, www.theatlantic.com/education/archive/2016/09/reimagining-the-modern-classroom/498224/
18. Guzey, S. S., & Roehrig, G. H. (2012). Integrating educational technology into the secondary science teaching. *Contemporary Issues in Technology and Teacher Education*, 12(2), 162-183.
19. Hassan, I. (2017). Theoretical perspectives of management and their application in Abubakar Rimi television, Kano state, Nigeria. *IOSR Journal of Humanities and Social Science*, 22, 18-28.
20. Horzum, M. B. (2013). Re: how can we integrate technology in teaching? https://www.researchgate.net/post/How_can_we_integrate_technology_in_teaching/51586cf6d11b8b571b000030/citation/download
21. Ijioma, B. (2013). Strategies for effective management of classrooms and schools in Imo State. A paper presented at the Teacher's Registration Council of Nigeria's workshop on international best practices in classrooms and school management held in Owerri, on March 19th, 2013.

22. Joan, R. D. R. (2013). Flexible learning as new learning design in classroom process to promote quality education. *Journal on School Educational Technology*, 9(1), 37-42.
23. Kariippanon, K. E., Cliff, D. P., Lancaster, S. J., Okely, A. D., & Parrish, A. M. (2019). Flexible learning spaces facilitate interaction, collaboration and behavioral engagement in secondary school. *PloS One*, 14(10), e0223607.
24. Koontz, H., Weihrich, H., & Cannice, M. V. (2020). *Essentials of management-an international, innovation and leadership perspective*. McGraw-Hill Education
25. Kpee, G. G., & Umeghalu, E. O. (2019). New teachers' soft skills and productivity in secondary schools in Rivers state. *American Journal of Humanities and Social Sciences Research*, 3(3), 224-235.
26. LeMahieu, P. G., Nordstrum, L. E. & Greco, P. (2017), "Lean for education". *Quality Assurance in Education*, 25(1), 74-90.
27. Looi, C. K. & Wong, L. H., (2019). The conceptual niche of seamless learning: An invitation to dialogue. In *Seamless learning* (pp. 3-27). Springer.
28. Masaviru, M. (2020). From physical classrooms to e-learning and online teaching: a case study of light international school, Mombasa. *Learning*, 11(13).
29. Mashhadi, V. Z., & Kargozari, M. R. (2011). Influences of digital classrooms on education. *Procedia Computer Science*, 3, 1178-1183.
30. Mbah, N. H. (2019). *Professionalism and classroom instructional performance of teachers in public secondary schools in Rivers state*. (Master dissertation, University of Port Harcourt).
31. Mehrbach, L. & Beingessner, C. (2018). Why flexible learning environments? www.gettingsmart.com/2018/08/why-flexible-learning-environments/
32. Muijs, D., & Reynolds, D. (2017). *Effective teaching: evidence and practice*. Sage.
33. Nelson, R. (2020). *Examining preservice teacher technology development during the COVID-19 pandemic* (Doctoral dissertation, The University of Texas).
34. Nwangwu, E. C., Obi, C. A., & Ogwu, E. N. (2014). Integration of information communication technology (ICT) in the curriculum of federal unity schools (FUS) in Nigeria: implications for learning. *Greener Journal of Educational Research*, <http://gjournals.org/GJER/Publication/2014/July/HTML/021714113%20Nwangwu%20et%20al.htm>
35. Nworgu, C., & Oluwuo, S. O. (2019). Time resource management and teachers' task performance in public senior secondary schools in Rivers state. *International Journal of Education and Evaluation*, 5(6), 36-48
36. Odumody, N. (2018). Rethinking education in southeast Nigeria. *Tekedia*, www.tekedia.com/rethinking-education-in-southeast-nigeria/
37. Okunfolami, A. (2017). Where is the unity in unity schools? www.sunnewsonline.com/where-is-the-unity-in-unity-schools/
38. Oluwuo, S. O., & Asodike, J. D. (Eds.). (2016). *Managing schools for productivity: emerging perspectives*. Pearl Publishers International Limited
39. Oluwuo, S. O., & Enefaa, B. B. A. (2016). Application of education information management support tools in the promotion of teaching/learning and management of students' performance in federal universities in the south-south zone of Nigeria. *Journal of Education and Practice*, 7(11), 120-126.
40. Oluwuo, S. O., & Nwabueze, A. I. (2016). Development of management theories. *Managing schools for productivity: Emerging Perspectives*, 01-40.
41. Onaleye, T. (2020). How secondary schools in Lagos are leveraging distance learning technology to continue education in the midst of a lockdown. *Technexttechnext.ng/2020/04/18/how-halifield-*

schools-in-lagos-is-leveraging-distance-learning-technology-to-continue-education-in-the-midst-of-a-lockdown/

42. Ratnapala, S. H. I. P. (2014). Adopting e-learning for university education in Sri Lanka–Peradeniya Perspective. *Proceedings of the Peradeniya University*, 105.
43. Sampaio, A. Z. (2013, June). Virtual Reality used as a learning technology: visual simulation of the construction of a bridge deck. In *2013 8th Iberian Conference on Information Systems and Technologies* (pp. 1-5). IEEE.
44. Subramaniam, I. (2013). Teachers’ perception on their readiness in integrating soft skills in the teaching and learning. *Journal of Research & Method in Education*, 2(5), 19-29.
45. Sumaryanto, T., (2018). Implementation of integrated quality management in improving the quality of education at Madrasah Aliyah RaudlatulUlum. *Educational Management*, 7(1), 1-10.
46. Umeghalu, E. O. (2019). *New teachers’ soft skills and productivity in secondary schools in Rivers state*. (Master dissertation, University of Port Harcourt)
47. Umeghalu, E. O. (2021). *Management of seamless technology integration and teachers’ effectiveness in Unity schools in south-eastern states of Nigeria*. (Doctoral thesis, University of PortHarcourt).
48. Umeghalu, E. O. & Obi, C. E. (2020). New teachers’ soft skills and productivity in secondary schools in Rivers state, Nigeria. *European Journal of Education Studies*, 7(1), 136-156.
49. Worika, L. B. (2019). *Financial management practices of principals and teachers’ job performance in government-owned secondary schools in Rivers state*. (Master dissertation, University of Port Harcourt).