

HYBRID LEARNING MODEL IN TEACHER EDUCATION PROGRAMMES IN LAGOS STATE, NIGERIA: THE PERCEPTION OF PRE-SERVICE AND IN-SERVICE TEACHERS

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ABSTRACT

*Blending hybrid learning model into teacher education is the key to equipping and producing professional teachers, improving pedagogy and teacher's service delivery. This exploratory case study therefore investigated pre-service and in-service teachers' perceptions of blending hybrid learning model into Teacher Education Programme (TEP) at the Federal College of Education (Technical), Akoka and Public Schools at the Lagos Mainland Local Government Area, Lagos, Nigeria. It adopted the descriptive research design. A total of 400 participants **out of** were involved. One research question and two hypotheses, based on the specific purposes guided the study. A self-constructed validated and reliable instrument ($r=.83$) was used to collect data. Results revealed that current future teachers have misconceptions around the educational use of some ubiquitous virtual and in-person teaching and that there is not enough modeling of hybrid learning pedagogy, both in schools and in the TEP. Significant differences in the perceptions of pre-service and in-service teachers regarding the blending of hybrid learning model in teacher education programme to improve teachers' service delivery was also discovered ($t\text{-cal} = .316$; $df = 398$; $P < .05$). Pre-service and in-service teachers have to realise that hybrid learning model has come to stay in their programme with the disruption caused on traditional learning model during the COVID-19 pandemic. They need to develop more confidence in their individual ability in the usage of both virtual teaching method and in-person teaching method in order to remain relevant as a 21st century teacher.*

Keywords: Hybrid Learning Model, Teacher Training, Telecommunication Technologies, Professional Development, Remote Learning

Introduction

The issue of quality service delivery in teaching has been a recurring theme and in order to enhance efficiency and increase in the service delivery of teachers, school owners, administrators, minister of education and all the head in the educational sector have to look into those job related factors that can slow down or hinder effective service delivery of teachers if not well administered. The role of teachers in quality education is recognized (Tao, 2013) but as to why they no longer perform their duties effectively and efficiently as educators is still troubling. This troubling performance of teachers can be attributed to the type of education teachers are exposed to at the teacher training colleges.

Teacher education according to United Nations Educational Scientific and Cultural Organization (UNESCO) is defined as the formal training (pre-service or in-service) designed to equip teachers with the knowledge, attitude, behaviour and skills required for teaching at the relevant level. Okafor in Ifelunni (2013) further explained teacher education as the education that encompasses the training of administrators, supervisors and guidance counsellors within the frame of reference. In this context, it is defined as a pedagogical programme of education, research and training of persons to teach from pre-primary to higher education level. The statutory responsibility for teacher education in Nigeria today is vested in Universities of Education, Colleges of Education, Institutes of Education, Polytechnics, National Teachers Institute (by distance) and University Faculties of Education. The Polytechnics and Colleges of Education award the Nigeria Certificate in Education (NCE) which is a sub-degree but professionally demanding diploma obtainable after three years of fulltime study. Teacher education is tailored towards enabling the would-be teacher acquire knowledge in general education, subject-matter area, professional education or pedagogy area. This inter-disciplinary nature of teacher education programme is designed in order to produce a good teacher. George (2000) stated that technology plays a vital role in helping learners and teachers meet higher standard and perform at increased levels by promoting alternative and innovative approaches to teaching and learning. In the field of teacher education in recent times, information technology is offering pivotal and powerful teaching-learning tools that demands continuous development of skills and understanding by the teachers and learners, technology also provides new ways of engaging learners outside the traditional in-person learning mode at all levels of education. The

use of information technologies especially those involving multimedia technology, require both teachers and students to combine their varying intelligence, talents and abilities in order to achieve a set goal.

Teaching is increasingly a demanding profession that requires sophisticated knowledge of technology as this was confirmed recently as an alternative to teaching and learning during the COVID-19 pandemic. Carefully developed, structured and self-guided learning and teaching materials can be delivered through various but appropriate technologies (Swart, 2012). Digital learning model when blended with the traditional in-person learning model can yield positive impact on the way the teachers teach and the way the learners learn, thus, improving pedagogy (Hennessey, Harrison, & Wamakote, 2010). This therefore demands that pre-service and in-service teachers have to learn how to use these new technological solutions in their programme and in the classroom, thus their perceptions about the blending of Hybrid Learning Model need to be investigated as this will help in determining how, when and where Hybrid Learning Model should be integrated. Based on the afore-discussed, it becomes highly imperative that attempt be made at investigating the perceptions of pre-service and in-service teachers, about the blending of Hybrid Learning Model in teacher education programme. This is because teacher-factor has been regarded as an important issue for consideration when blending and implementing the model into teaching and learning process.

Literature Review

A brief literature review was carried out in this sub-section. This becomes necessary so as to have a better understanding of relevant concepts and variable in the study. It was also carried out in order to be familiar with some of the previous studies earlier done in this area.

The concept of Teachers' Service Delivery

Teachers' service delivery is defined as the outcome or contribution of employees to make the school attain its set goals. When the service of the school system is not well delivered, the quality of learning of the younger generation tends to be affected which will have a spill-over effect on the development of the nation. Service delivery is important because it is a measurement of employees' behaviours and the outcome of an individual role depending on varieties of factors from economy to job related factors and company culture. Nonis, Fenner and

Sager (2011) supported this view when they submitted that service delivery is one of the most important factors that most of organization should consider to focus on so that the aims and goals of the organization can be achieved. Therefore, organizations tend to focus efforts of individual workers on meeting specifically planned goals. Employee service delivery acts as the pressure point that powers the system of an organization such that if the service delivery is low, the organizational systems also tend to be low in terms of output and vice versa. It is therefore, advisable to invest in human capital since a pool of competencies is a superior strategy for increasing organizational output.

There are many factors that can influence the teachers' service delivery such as ability, attitude, subject mastery, teaching methodology, personal characteristics, the classroom environment, general mental ability, personality and relations with students. Teachers' service delivery also is evaluated by how they manage their students and duties they need to be done within the time given. Additionally, classroom has the vital roles to measure how efficiently and creatively the teachers manage and shape their students. Besides, in order to improve confident level, personality characteristics of teachers also important. That teachers can create fairness environment, maintain safe and conducive classroom setting and create a strong emotional climate for learning when they possessed a high rating performance.

In a school setting, the level of teachers' service delivery could be:

- a. In terms of test scores and examination results. Students' ability to apply what is learnt, and the rate at which students move up the learning ladder, and the achievements of the school in equipping skills for survival (Decenzo & Robbins, 2002).
- b. The results the school organization produces in terms of goal achievement.
- c. Teaching, continuous assessment of students, making schemes and lesson plans, participating in co-curricular activities (Redder, 2010)
- d. Timely scheming and lesson planning, timely setting, student testing, and marking of exams, punctuality, attending and contributing in staff meetings, timely assessment of learners and willingness to take on extra duties, and teaching with dedication and regularity (Nalweyiso, 2012). However, teachers' service delivery could also be viewed in the following context:

Timely scheming of work, Timely lesson planning, Involvement in co-curricular activities, Involvement in discipline management, Involvement in counselling and guidance, Participation in staff meetings, Lesson delivery/Actual teaching, Maintenance of records of work covered, Teachers' physical presence in school, Routine assessment of the learners, Management of learners' records, Time on task – time management.

Teachers' service delivery is critical to the survival of the quality of any educational system (Namuddu, 2010). Whether in educational or corporate settings, production processes are supported by a well streamlined system, with purpose-driven employees who are willing and determined to exert themselves to the maximum to surmount whatever challenges they encounter since the performance of an organizations is dependent on employee service delivery (Veeraselvam, 2014). In the general view, every organization should have interest in igniting employee service delivery through different strategies such as motivation through, remuneration, compensation, and incentives, training and retraining. Among these strategies are employee welfare, minimal workload and employee job security.

The Concept of Teacher Education Programme

Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviours and skills they require to perform their tasks effectively in the classrooms, schools and wider community. The teacher is the most important element in any educational program. It is the teacher who is mainly responsible for implementation of the educational process at any stage (NCTE, 1998). This implies that the preparation of teachers with adequate knowledge, skills and methods of what they need to know is very important and dictates the quality and extent of learner's transformation. Afe (as cited in Ilunor, 2010) maintained that with the best educational policy and design and colossal sum of money for education, the ultimate realization of the aims and objectives of education depends on the teachers.

In some years back, the program of teacher preparation was called teacher training. It prepared teachers as mechanics or technicians. It had narrower goals with its focus being only on skill training. The perspective of teacher education was therefore very narrow and its scope was limited. National policy on education (2013) section 8, sub-section B paragraph 70 states: since

no education system may rise above the quality of its teachers, teachers education shall continue to be given major emphasis in all educational planning and development, in paragraph 72 it further states that all teachers in educational institutions shall be professionally trained, it is in this view that Ajayi in Ilunor, (2010) states that, teachers are not finished products even after completion of preparation programs which terminates with a Bachelors or Master degree.

Teacher education encompasses teaching skills, sound pedagogical theory and professional skills.it is a continuous process and its pre-service and in-service components are complimentary to each other. In pre-service training programs, teachers often need to attend compulsory courses according to rules established by the curricular for award of diploma, first degree or second degree. Such training is provided by formal education institutes, which prepare future professionals for jobs (Carroll, 2013) In service training programmes are necessary to re-orientate teachers to new goals and values, to train them in new teaching and learning methods, to prepare them to cope with curriculum change, and to provide them with the knowledge and skills to teach new learning areas Conco, 2004; Al-Zoubi, 2010) Teacher education is based on the theory that “Teachers are made, not born” in contrary to the assumption, “Teachers are born, not made”. Since teaching is considered an art and a science, the teacher has to acquire not only knowledge, but also skills that are called “tricks of the trade”.

Teacher education is broad and comprehensive. Besides pre-service and in-service programmes for teachers, it is meant to be involved in various community programmes and extension activities, as in other professional education programmes the teacher education curriculum has a knowledge base which is sensitive to the needs of field applications and comprises meaningful, conceptual blending of theoretical understanding available in several cognate disciplines. However, the knowledge base in teacher education does not comprise only an admixture of concepts and principles from other disciplines, but a distinct gestalt ‘emerging from the conceptual blending’, making it sufficiently specified.

Conceptualizing Hybrid Learning Model

The definition of Hybrid Learning (AECT, 2013) is the same as Blended learning, The simplest form of blended learning was considered as a mixture of physical classroom activities and learning activities supported by online technologies (Garrison and Kanuka, 2004) and was

further developed into the integration of learning activities, students, and instructors. This concept was in limited use in most education institution until the COVID-19 pandemic complexities, which brought about closures of schools among other sectors. The Hybrid Learning Model is based around straightforward concepts and uses simple language to allow practitioners to easily communicate and share teaching and learning practice in a generic and formalised structure.

The face-to-face model builds on the successes of the traditional teacher-led classroom lessons while also providing a bridge between slow and fast learners. The rotation model solves the problem posed by time and human resource limitations.

While the flex model makes it possible for students to fully own their learning experience. This model is most ideal for senior classes (especially students preparing for national and international terminal examinations). This model is very helpful when learners are way behind schedule and a make-up class is not possible. Beyond the advantages of the flex model mentioned earlier, it turns out that the model is one of the easiest ways to achieve inclusive education.

One model of hybrid that many people are familiar with is the ‘flipped’ classroom, where lessons were posted online, students watched and maybe did some work or reflection based on it, then came together in an in-person setting to solve problem, discuss, practice, or get one-on-one help (Brooke Blevins), Chair of the Department of Curriculum and Instruction at Baylor University’s School of Education. Another model is the setting where the teacher delivers the lesson simultaneously to both online students and in-person students. Remote students watch these lessons via video conferencing software, such as Zoom while in-person students continue to take notes and learn in the traditional way.

Development of Hybrid Learning Model in Nigeria

In general, hybrid learning is web-based learning with an open environment that can be accessed through the internet with the aim of facilitating learning and building learners’ knowledge through meaningful interactions. Research on online communities for teachers’ professional development did not yet take up the potential blended communities intensively (Shea and Bidjerano, 2010).

For technology to aid pedagogy, it must be accompanied by fundamental process re-design. Schools are required to create a blended learning experience by designing how exactly technology should be used by the student and this is of utmost importance in Nigeria education so as to combat lots of lapses and drawbacks observed during school closure in the course of COVID-19 pandemic and future unforeseen occurrences, lots of students were left out of learning activities due to knowledge gaps in the usage of virtual platforms for teaching. A major indication that hybrid learning model was not fully or partially incorporated into teacher training education at all levels in the country. For instance, introducing research projects or recommending curriculum-based revision videos to students enables them to explore learning beyond the classroom knowledge which is the flexibility and personalization hybrid learning affords.

Some studies show that the use of the right learning media can accelerate and enhance the interaction among teachers, learners, and instructors; so that the development of learning media becomes a necessity in learning. The choice of a hybrid-learning model is to overcome the above problems because based on a survey of Internet users. Indonesia occupies the fourth position concerning users who spend a lot of time on the internet. Integration of online and offline activities is considered beneficial to teachers' communities. A mixture of virtual and 'real-life' interaction between some members is enough to provide more benefits to teachers in the whole community, making a complete integration unnecessary (Matzat, 2013).

Challenges of Hybrid Learning in Teacher Education

With the move to hybrid or "blended" course delivery that is taking place in many institutions, there is a challenge for teachers to think through the pedagogical implications of both methods and develop new designs for instruction and course delivery that maximizes both environments. It was argued that professional development would generally benefit from the extensive literature on teacher expertise that focused on how well teachers understood the content they taught and how well they understood how students learnt that content, but blended learning was not proved useful in teachers' professional development (Bausmith and Barry, 2011).

Many teachers have a fear of technology and often see a move to hybrid or online learning as a move to replace them as teachers and as a way to diminish the learning experience for students.

Some institutions were not ready to accept blended learning (Vaughan, 2007). It was even seemed as a dangerous conception (Seife, 2000) in that it threatened the integrity of the traditional pedagogy.

Additionally, teachers can feel overwhelmed in having too many student responses to read through and not really sure what to do with those response or how to integrate them into the learning experience. According to (Carbonell, 2013), the hybrid-learning model could be very challenging, as it required teachers to step away from their usual and normal pedagogies coupled with creativity and innovation that was never easy to accomplish.

As such, the technology-supported tasks or activities tend to "sit outside" the actual course, and the course then has the usual classroom time, usual assignments and evaluation activities, plus additional and tedious online activities.

The main problem here is that the instructional design has not changed because the actual online methodology has not been understood. In professional development for teachers, more time should be spent on methodology training than on technology training. Usually, the reverse is true, and teachers can know how the technology works but remain confused about what the benefits are to instruction or why the change is necessary in the first place.

Skills and Competences Required of Pre-Service and In-Service Teachers

The term teaching competency refers to a set of knowledge, skills values, attitudes, capacities and beliefs people need for success in a profession. Teachers' professional competencies include various competencies in different areas such as pedagogical, cultural, communicational, personal, intellectual etc, which are needed for effective teaching. (Monicka M. & Jayachithra J., 2018). Teachers in hybrid learning environments have to assume the challenging role of a mediator and a knowledge broker: to provide strategic support to help students to become self-directed learners. This changing role of teachers has serious implication for their professional learning – from pre-service to induction and through to in-service teacher education (Chai & Lim, 2011; Kirschner & Selinger, 2003; UNESCO, 2008). The challenge for teacher education then is to prepare teachers who can constantly learn, unlearn and relearn; and construct new practices with technologies. Regular evaluation of the these pre-service competences especially around technology related courses are essential to build up teachers skills for hybrid learning;

evaluation of teaching methods, classroom observations, teaching staff performance appraisal, and engagements of external reviewers and examiners. (Lim C.P., Chai C.S. & Churchill D. 2011)

Factors that possibly influence the effects of blended learning should never be neglected. Examples are computer use, efficiency of online tools, familiarity with technologies and student satisfaction with blended mode, among which student satisfaction is playing a growingly important role. Computer self-efficacy, system functionality, content feature and interaction significantly influenced performance expectations. Interaction had a significant effect on learning climate. These factors were likely significant antecedents for planning and implementing a blended learning system to enhance student-learning satisfaction (Wu et al., 2010). According to Charles R.G et al (2019) there are four core skills needed for effective blended teaching. These competencies stand on a foundation of basic technology skills and dispositions namely:

- Online Integration – the ability to effectively combine online instruction with in-person instruction.
- Data Practices – the ability to use digital tools to monitor student activity and performance in order to guide student growth.
- Personalization – the ability to implement a learning environment that allows for student customization of goals, pace, and/or learning path.
- Online Interaction – the ability to facilitate online interactions with and between students.

Statement of the Problem

Hybrid learning is a necessary model for lecturers in disseminating and transmitting knowledge and training teachers in the best possible way for their students to assimilate and understand concept taught, the approach and method is an important ingredient which drive all they do in teaching and ensuring that learning is enhanced. However, Hybrid learning was in limited use in most education institutions in Nigeria until the COVID-19 pandemic complexities, which brought about closures of schools among other sectors.

Teachers' service delivery which is the end point of their overall disposition cannot be left out in the teaching and learning process. The service delivery of teachers in the school system has serious implications for academic performance of learners and achievement of school goals and objectives. Teachers' service delivery is a problem around the world and it is noticeable at all levels of the education system. Obviously, non-performance of teachers affects the teachers, students' performance, efficient utilization of resources, and attainment of school goals and objectives. It is pertinent to determine the extent to which hybrid learning model in teacher education programmes relates to teacher's service delivery in Lagos State.

Purpose of the Study

The general purpose of this study was to determine the perception of pre-service and in-service teachers regarding the blending of hybrid learning model and teacher's service delivery in Nigeria. Specifically the sought to:

1. to investigate the perception of teachers regarding hybrid learning model in teacher training programme in terms of content development, delivery process, benefits, challenges and outcome.
2. to ascertain the relationship between the perception of teachers about hybrid learning model and teacher's service delivery.
3. to ascertain the age difference in the perception of pre-service and in-service teachers about the blending of hybrid learning model in teacher training programme.

Research Question

The study was guided by the following research question:

1. What are the perceptions of pre-service and in-service teachers regarding the blending of hybrid learning model in teacher training program in terms of content development, delivery process, benefits, challenges and outcome?

Research Hypotheses

The following hypotheses were formulated and tested at .05 level of significance with a view to addressing the last two specific objectives:

1. There is no significant relationship between the perception of pre-service teachers and in-service teachers about the blending of hybrid learning model and teacher's service delivery.
2. The perception of pre-service and in-service teachers about the blending of hybrid learning model in teacher training programme does not significantly relate based on their period of birth.

Methodology

The descriptive survey research design was used for this study in order to assess the opinions of the selected participants. A descriptive survey research generally collects information from a defined population in order to describe the present condition of the population using the variables under study. The population consisted of all 16,566 pre-service teachers in Federal College of Education, Akoka and all 818 in-service teachers in Lagos Mainland Local Government Area, Lagos State as at the time of conducting this study (Lagos State School Census Report, 2019). While the sample was while the sample 400 through multi stage sampling approach. At the first stage, Lagos State was stratified into the existing six Educational Districts in the State. Multi stage sampling technique was then used to select one local government in one zone from the six stratum (Education District IV, Lagos Mainland Local Government). Federal College of Education (Technical), Akoka, the only teacher training college in the selected local government and all the public schools in the selected local government participated in the study. Bowley's proportional allocation formula was therefore used to select the number of pre-service and in-service teachers that participated in each school.

A self-constructed questionnaire titled "Pre-service and In-service Teachers' Perceptions of Hybrid Learning Model Scale (PITPHLMS)". It was constructed with two sections. 'A' and 'B'. Section 'A' contained the bio-data of the participants such as age, gender, marital status, type of programme for pre-service teachers and years of experience for in-service teachers while section 'B' contained the statements that measure the challenges of hybrid learning model to teacher education programme. Each statement in section B had 4 options task under likert-scale type of Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD). The participants responded to the items by ticking the option that suites them most. Positive

statements were score in ascending order while negatives ones were scored in descending order for effective data analysis.

The instrument was validated by two lecturers in the Department of Educational Management to assess its face and content validity while it was pilot tested on 100 pre-service and in-service teachers in Ikeja Local Government once and the data obtained was subjected to Cronbach Alpha reliability testing. A correlation coefficient of 0.83 was obtained; this showed the instrument is good enough and can be relied on. The researcher administered 400 copies of the instrument and it was completely filled and submitted. For the purpose of analysis, the response options on the instrument were coded as 4, 3, 2 and 1 respectively for positive items, while these scores were reversed for negative items. The data obtained were used to test the stated hypotheses using Pearson Product Moment Correlation (PPMC) statistics at .05 level of significance.

RESULTS AND DISCUSSIONS

Results obtained from the analysed data are as presented below. This was followed by its discussions.

Research Question

1. What are the perceptions of pre-service and in-service teachers regarding the blending of hybrid learning model in teacher education programme in terms of content development, delivery process, benefits, challenges and outcome?

Table 1: Perceptions of Pre-Service and In-Service Teachers Regarding the Blending of Hybrid Learning Model in Teacher Education Programme

S/No	Categories/Items	X	SD
	Content Development		
1.	I see blending of hybrid learning model in teacher education programme as an avenue to develop more content that aids learning.	3.88	.53
2.	I believe that the blending of hybrid learning model will help me deliver my duties within and outside the four walls of the classroom.	3.70	.59
3.	I think it is difficult to integrate hybrid learning model in teacher education in Nigeria.	3.76	.91
	Delivery Process		
4.	I think blending hybrid learning model in teacher education will	3.68	.77

	broaden my scope of the delivery of lessons		
5.	Hybrid learning model will enable me to acquire 21 st century teaching skills to deliver effectively in-person and virtually.	3.72	.73
6.	Our curriculum has not been designed to delivery classes remotely	3.66	.73
	Benefits		
7.	I think hybrid learning model will be beneficial to me in professionally developing myself to deliver the best	4.01	.79
8.	Hybrid learning model will be beneficial to me as a teacher to deliver lessons anywhere without having to be in the classroom	4.04	.74
9.	My servicer delivery will be enhanced with hybrid learning model as I will be able to deliver from anywhere	3.76	.82
	Challenges		
10.	Resistance to change form the traditional pedagogical methods to more innovative technology based method of teaching and learning will hamper hybrid learning model integration in teacher education	3.36	.76
11.	Technical incompetence on the part of lecturers will be a challenge to blending hybrid learning model in teacher education	3.37	.79
12.	Inadequate facilities will affect integration of hybrid learning model in teacher education	3.44	.68
	Outcome		
13.	Integrating blended learning model will enhance my service delivery as a teacher.	4.35	.56
14.	Blending hybrid learning model in teacher education will help me perform will in transmitting knowledge to the students.	3.63	.63
15.	Blending hybrid learning model will help be to be more technological savvy during and after the teacher education programme	3.61	.64
	GRAND MEAN	3.48	10.67

Table 1 showed the results of the perceptions of pre-service and in-service teachers as regards the blending of hybrid learning model in teacher education programme in terms of content development, delivery process, benefits, challenges and outcomes. With respect to

content delivery, majority of the pre-service and in-service teachers that participated in the study agreed to the content delivery of hybrid learning model integration as indicated by the first item (M=3.88; SD=.53) and the second item (M=3.70; SD=.59), but disagreed to the third item (M=3.76; SD=.91).

The perceptions of the pre-service and in-service teachers about the delivery process of hybrid learning model integration as shown in the Table indicated that majority of them agreed to the

three items (M=3.68; SD=.77), (M=3.72; SD=.73), and (M=3.66; SD=.73) respectively. In terms of benefits, the Table showed that majority of them agreed to the three items (M=4.01; SD=.79), (M=4.04; SD=.74), and (M=3.76; SD=.82) respectively.

In terms of challenges, the Table showed that the greatest challenge facing the pre-service and in-service teachers in blending hybrid learning model into Teacher education was item number one (M=3.36; SD=.76), followed chronologically by items two and three respectively. It was also shown in the Table that as regards pre-service and in-service teachers expectations in terms of outcomes, majority of the participants believed that integrating hybrid learning model in teaching methods will enhance their service delivery (M=4.35; SD=.56), closely followed by the third item (M=3.63; SD=.63) and the second item (M=3.61; SD=.64) respectively. On a final note, the Table showed that generally, the participants were favourably disposed to the blending of hybrid learning model into teacher education as indicated by the grand mean and standard deviation (M=3.48; SD=10.67).

1. **HO1:** There is no significant relationship between the perception of pre-service teachers and in-service teachers about the blending of hybrid learning model and teacher’s service delivery.

Table 2: Significant Difference in the Perceptions of Pre-Service Teachers and In-Service Teachers about the Blending of Hybrid Learning Model and Teacher’s Service Delivery.

Var	N	X	SD	df	t-Cal	P	Rmk	Dec
Perceptions of Pre-service and In-service Teachers	400	67.5755	6.7569	398	.316	.753	sig	Reject
Teachers Service Delivery		67.8829	7.5447					

Difference is significant at the 0.05 level.

From Table 2, it is shown that there was significant difference in the perceptions of pre-service and in-service teachers about the blending of hybrid learning model in teacher education programme and teachers’ service delivery (t-cal =.316; df =398; P<.05). There is no significant difference in the perception of pre-service and in-service teachers about the blending of hybrid learning model in teacher education programme and teacher’s service delivery. Thus, the researchers failed to accept the null hypothesis.

2. **HO1:** The perception of pre-service and in-service teachers about the blending of hybrid learning model in teacher training programme does not significantly relate based on their period of birth.

Table 3: Significant Difference in the Perceptions of Pre-Service Teachers and In-Service Teachers about the Blending of Hybrid Learning Model based on their period of birth.

Var	Period of Birth	N	X	SD	df	t-Cal	P	Rmk	Dec
Perception	Born Before Technology		63.2105	3.5569					
		400			398	-1.79	.007	sig	Reject
	Born After Technology		57.1768	4.9078					

Difference is significant at the 0.05 level.

From Table 3, it is revealed that period of birth makes no significant difference in the perceptions of pre-service and in-service teachers about the blending hybrid learning model in teacher education programme (t-cal =-1.79; df =398; P>.05). All teachers, regardless of period of birth, have positive perceptions about the blending hybrid learning model in teacher education programme. Thus, the authors therefore, failed to reject the null hypothesis.

Discussion of Findings

Finding from the research question shows that there was favourable disposition of pre-service and in-service teachers about the blending of hybrid learning model into teacher education as indicated by the grand mean and standard deviation (M=3.48; SD=10.67). This finding corroborates some previous studies done in formal higher education settings that documented positive teacher attitudes toward the use of hybrid learning model as teaching tools Charles (2019), but contradicts the finding of Ifelunni (2013) who stressed that most teachers do not utilize the potential of ICT to maximize the quality of learning environments, which is due to their poor perceptions about ICU utilisation.

As regards the first hypothesis, it was shown that there was significant relationship between the in the perceptions of pre-service teachers and in-service teachers about the blending hybrid learning model in teacher education programme and teacher's service delivery (t-cal =.316; df =398; P<.05). This finding shows that integrating hybrid learning model will enhance teacher's service delivery in schools in Nigeria.

Finally, finding from the second hypothesis revealed that period of birth makes no significant difference in the perceptions of pre-service and in-service teachers about the blending of hybrid learning model in teacher education programme ($t\text{-cal} = -1.79$; $df = 398$; $P > .05$). This contradicts the finding of Dailey-Hebert (2013), who reported that gender, age and subject teaching are significant in the blending of hybrid learning model in teacher education programme.

Conclusion

The integration of virtual and in-person learning model can play a number of vital roles in education by changing the teaching and learning process. However, hybrid learning model is not easy task. There are significant challenges in blending hybrid learning model use in education rising from environmental, cultural and educational faced by policy makers, educators, educational administrators and students in higher education. Hybrid learning model can will also improve teacher's service delivery, teacher's job performance, teacher's effective delivery among others.

Implications for Educational Policy Makers and Planners

It is very important for educational policymakers and planners before any hybrid learning model implementation in education to carefully consider the following:

- Policymakers should also look at the ubiquity of different types of telecommunication and technological ways of teaching in the country in general and in the educational system in particular.
- Students should be encouraged to embrace technology which will go a long way at making teaching-learning more effective and meaningful.
- Teachers should always be exposed to regular updates as regards virtual learning integration through several on-the-job-training opportunities.
- Hybrid or blended form of learning should be practiced as this will ensure regular exposure to technology utilisation.
- Institutional administrators as well as government should find ways of tackling the challenges facing effective hybrid learning model, especially the irregular power supply.

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