Principal's Demographic Variables and Application of ICT in Secondary School Administration as an Empirical attempt to Mitigate Spread of Covid-19 Pandemic in School Environment in Akwa Ibom State

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ABSTRACT

The study sought to assess the principal's demographic variables and application of ICT in secondary school administration as an empirical attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. The research design used for this study was ex-post facto. The research area for this study was in Akwa Ibom State. The population of this study comprised 213 Principals and 629 Vice- Principals in Secondary Schools in Akwa Ibom State. Simple random sampling technique was used to select 535 respondents as the sample size. The main instrument used in this study was a Questionnaire titled "Principals' Application of ICT Based on Qualification and Teaching Experience in Secondary School Administration (PAICTBQTESSA)". Cronbach Alpha statistics used to determine the reliability of the instrument. The reliability coefficient obtained was 0.81 and this was high enough to justify the use of the instrument. The statistical technique used for the null hypotheses was One-way analysis of variance at 0.05 alpha levels. From the study, it was reveals and was concluded that there is significant difference in principals' application of ICT in Secondary School administration based on qualification in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. Also, that there is significant difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. Based on this, it was recommended that only qualified principals should be allowed to run the school administration and Government should see to the training of Qualified Teachers before been sent out to teach, and only qualified teachers should be employed into the schools.

KEYWORDS: Teaching Experience, Principals, Application, ICT, Administration.

Introduction

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The society expect that as the world changes, information and knowledge change rapidly, consequently, the school administration are expected to quickly adapt to the change and innovations in teaching and learning process as well as in the management of schools. According to Adeyemi and Olaleye (2010), the use of information Communication Technology (ICT) can improve education quality, expand learning opportunity and makes education accessible. Ibe-Bassey, (2000) and Inyang-Abia (2004), noted that media mediate in the continuum between stimulus response learning and cognitive learning to concretize ideas, concept and facilitate learning. This reveals that ICT is capable of facilitating the collection, preparation, presentation, storage, retrieval, conveyance and disseminating of information. Amebenomo (2000) maintained that information involves the implementation of policies procedures, rules and regulation as set up the management. The effectiveness of those functions can be facilitated through the use of ICT facilities such as telephone, computer networking, e-mail among others in processing, administering and disseminating timely and accurate information for intuition decision making and problem solving. Therefore, proper utilization of ICT facilities in the administration of secondary school will bring to bear, a well administered secondary school capable of enhancing effective communication among student and teachers, teaching and learning, creativity among others. Additionally, ICT data repositories, network and school curricula can be developed collaboratively; education materials can be procured more cost effectively, staff and students time can be schedule more efficiently as well as monitor individual student's performance more closely. Successful integration and use of ICT's in school will play a critical role in disseminating skills to a wider society, improve quality of curriculum, avoid duplication of effort and create positive impart in the economy. The ability to use computer effectively has become an essential part of everyone's education. Skills such as bookkeeping, clerical and administrative work, stocktaking, and so forth, now constitute a set of computerized practices that form the core IT skills package; Spreadsheet, word processors, and databases (Reffell and Whitworth, 2002). Apart from complexities in the school which the introduction of ICT technologies have the abilities to alleviate, Ibukun, Oyewole and Abe (2011) affirmed that principals' effectiveness is a function of situational variables, which he identified as experience on the job, position power, leader-member relations and knowledge. He added that for school effectiveness to be increased, the principal must increase situational control, meaning that the leader-member relation should be improved and the knowledge and experience on the job and position power should be expanded. Thus, principal variable such as area of specialization gender and teaching experience should not be seen as a barrier in adjusting their leadership behavior accordingly to accommodate effective application of ICT in their leadership roles.

Effective principals need to be actively involved with technology, including modeling the technology use and helping to implement ongoing curriculum-integrated technology for student and staff development. While discussing the role of the administrator in technology integration, Ritchie (2006) stated that principals must mobilize their teachers to create a technology culture. Indeed, Hope and Stakenas (1999) suggested three primary roles for the principals as technology leaders for better ICT integration among their teachers; role model, instructional leader, and visionary. In order for successful implementation of ICT application in administration, Macneil and Delafield (2008) commented that principals need to use the existing resources wisely and creativity. They ought to "think outside the box" and they must in a fluid environment, in addition, they need to establish a vision for the school, a context for technology in the school to empower teachers and help student become more technology literate (Brockmeier, Sermon and Hope, 2005).

Statement of the Problem

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Many school principals are ill equipped to effectively integrate ICT in school administration due to lack of or substandard training and acquisition of technological skills, unfit or nearly obsolete equipment for use are some critical indicators of technology leg and the process pace which is very slow and may likely lead to all benefits of ICT integration in schools inequitably realized or not being realized in the near future. In the state educational sector, factors such as age, qualification, gender and experience have been considered in appointing teachers to leadership positions of schools principals, with that belief that some individuals would be more effective than others. The researcher also have observed that the demographic characteristics of principals like age, gender, educational level, years of teaching experience, years of technology use, specialization and other factors would constitute problem in the application of ICT in school administration which has a strong influence on school variables The study therefore sought to assess the extent that principal and school variables influence the application of ICT in Secondary School administration in Akwa Ibom State.

Objectives of the Study

The study seeks to:

1. Examine the difference in principals' application of ICT in Secondary School administration based on qualifications in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.
2. Determine the difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.

Research Questions

To guide the study, the following research questions were formulated

1. What is the difference in principals' application of ICT in Secondary School administration based on qualification in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State?
2. What is the difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State?

Research Hypotheses

The following null hypotheses were formulated to guide the study:

1. There is no significant difference in principals' application of ICT in Secondary School administration based on qualifications in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.
2. There is no significant difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.

Literature Review

Expectancy – Value of Motivation Theory by Vroom (1964)

The Expectancy Theory of Motivation was propounded by victor H. Vroom in 1964. He is currently a professor at the Yale School of management at Yale University. The theory is best

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described as a process theory. Expectancy Theory provides as explanation of why individuals choose on behavioral option over others. Vroom suggested that prior belief of the relationship between people's work and their goal as a simple correlation is incorrect. Individual factors including skills, knowledge, experience, personality, and abilities can all have an impact on an employee's performance

Vroom's Expectancy Theory is based on these three components:

1. Expectancy: Expectancy can be described as the belief that higher of increased effort will yield better performance.

2. Instrumentality: Instrumentality can be described as the thought that if an individual performs well, then a valued outcome will come to that individual

3. Valence: Valence means "value" and refers to beliefs about outcome desirability

The implication of Vroom's theory is that individual irrespective of age, qualifications, teaching experience, gender, marital status, sex and specialization if motivated could apply ICT in the school administration.

Qualifications and principals' Application of ICT in Secondary School Administration

Badri, et al, (2013), defines well qualified teachers as one who is fully certified and held the equivalent of a major in the field being taught. Although the formal qualification of teachers is an important indicator for their knowledge and competence in teaching and administration, it has only limited utility in analyzing how well-prepared teachers are for what they have to teach in schools. More detailed knowledge of the courses they have taken during their training needs to be compared to the actual content and skills required to teach the high school's curriculum. Ruthland and Bremer (2002) refer to teacher qualification in two ways traditional and alternative qualification routes. Traditional certification is when an individual completes an undergraduate degree or post graduate degree or post graduate in education. Alternative routes of certification are based on coursework in pedagogy and subject area without a degree in education. Hardy and Smith (2006) cited short terms activities such as mentoring, peer evaluation and workshops as ways other formal qualifications for improving teaching. Most often graduate teachers with first degree in non-teaching areas go into teaching if they cannot bring another job right away. Although they often get somewhat lower salary than a fully qualified teacher; they choose not to enroll in the one year post-graduate training and therefore lack a basic foundation for teaching.

Traditional certification is when an individual completes an undergraduate degree or post graduate program in education. Alternative routes of certification are based on coursework in pedagogy and subject areas without a degree in education. They documented that teachers qualification accounted for approximately 40 to 60 percent of the variance in average of student achievement in assessment. They concluded that there was significant correlation between teacher qualification and pupil performance in Kenya. The good performance was attributed to excellent instruction given by qualified teachers in addition to other inputs. With regards to highest education attained, studies in small business management found that managers with masters' level education tend to experience less insecurity compared to the lower educational group. The overall Technology Readiness Index (TRI) score shows that managers with a degree-level education have a high technology readiness as compared to lower education achievers (Kosgei, et al., 2013).

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Owusu and Yiboe (2013) conducted a study on principals' qualifications, experience and perception as predictors of implementation of the senior High School ICT administration in Ghana. The focus and purpose of this study was therefore to ascertain the extent to which three teacher-related factors predicted the ICT application in the Senior High School. The design of this study was expo facto research design. Twenty-one (21) principals representing 45% of entire population in the western region of Ghana were purposively selected and surveyed. The findings revealed that majority of principals were experienced with at least first degrees even though the study also found that teachers had negative belief and perception about the ICT application due to their perceived non-involvement in national curriculum programmes. Principals were found to be predictor of ICT application in administration. It was concluded that principals' variables affected ICT application in administration and so government should imbibe the concerns of teachers in the design of curriculum, so as to ensure successful ICT application in administrational of national curricula.

Owolabi and Adedayo (2012) examined the effect of principal qualification on the ICT application in administration of Senior Secondary School. The effect was to determine whether the status of the principals had any impact on the ICT application in administration. The survey type of descriptive research design was adopted. The sample for the study consisted of 100 Secondary Schools in Ekiti State and the principals that prepared and presented the ICT facility checklists in each school for the 2009/2010. Four hypotheses were postulated and tested at 0.05 significance level. The data collated were analyzed using inferential statistics. The results revealed that principals with higher qualifications performed better than those with lower qualifications. It was also showed that principals performed better when use ICT in administration. The result showed that principals' gender had no effect on their ability to ICT application in administration, much as he/she was a skilled principal in that field of the study. Based on the findings, it was recommended that experienced principals with higher-level professional qualifications should head the school.

Teaching Experience and Principals' Application of ICT in Secondary School Administration

There is a wide range of findings on the relationship between years of teaching experience and school outcome. Teachers' experience has a significant effect on head teacher administration in both primary and secondary school levels. Experience teachers have richer background of experience to draw from and can contribute insight and ideas to the course of teaching and learning, are open to correction and less dictatorship in administration. The relationship between principals' experience and administrative role is that leadership provided by more experienced principals achieve at a higher levels, because their principal over the years have mastered the content and acquired classroom management skills, verbal ability (explaining, questioning and providing directions) to deal with different types of classroom problems; gathered administrative experiences from other leaders which would make him/her more efficient and proficient in administration.

Furthermore, more experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds as well as in administration. Kosgei, et al, (2013), research on primary school head teachers who had generally spent more years on the job (experience), attended more seminars and participated in relevant professional discussions that exposed them to new techniques of administration, perform better than new ones.

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Though some research reported that teachers' experience in teaching and administration did not influence their use of computer technology in teaching (Niederhauser and Stoddart, 2001), most research showed that teaching experiences influence the successful use of ICT in classrooms (Wong and Li, 2008). Gorder (2008) reported that teacher experience is significantly correlated with the actual use of technology. Gorder (2008) revealed that effective use of computer was related to technological comfort levels and the liberty to shape instruction to teachers-perceived student needs. Also, Baek, Jong and Kim (2008) claimed that experienced teachers are less ready to integrate ICT into their teaching. Similarly, in United States, the (U.S National Center for Education Statistics, 2000) reported that teachers with less experience in teaching were more likely to integrate computers in their teaching than teachers with more experience in teaching. The reason to this disparity may be that fresh teachers are more experienced in using the technology. Several studies have been conducted that addressed the relationships between selected demographic variables such as teaching experience and subjects taught and usage of computer. One such study was conducted by Zidonand Miller (2002) who found weak relationship existed between years of teaching with computer usage. Meanwhile, a meta-analysis and review of 81 research studies by Rosen and Maguire (2009) concluded that teachers teaching experiences does not eliminate computer phobias and many experienced teachers display some wariness, discomfort and /or mild anxiety in relation to computers.

Afshari, et al (2009), stated that the success of educational innovations depends largely on the skills and knowledge of teachers. Also, they found that teachers' lack of knowledge and skills was the second most inhibiting obstacle to the use of computers in schools. Similarly, in the United States, high levels of (attitude), skill and knowledge (proficiency) and tools (level of access) would produce higher level of technology integration that will reflect on student achievements positively. Their model postulates that educators with higher levels of skills, knowledge and tools would exhibit higher levels of technology integration in the classroom.

In fact, the teachers' needs under changing conditions have to be continuously assessed and activities to satisfy these have to be developed. So, professional development is necessary for teachers to enable them effectively use technology to improve students' learning: staff development must prepare teachers to use technology effectively in their teaching. Teachers who have a strong engagement towards their own professional development are more motivated to undertake activities which lead to be a better understanding of the goals of an innovation. Similarly, teachers who are actively involved in their own professional development are more able to implement changes in their teaching, hence, having a recognition system for innovation, similarly, teachers who are actively involved in their teaching. For example, formal certification of in-service professional development that leads ton diplomas or degrees could provide an incentive for teachers to upgrade and update their skills in and knowledge of ICT integration (Afshari, et al, 2009).

In line with this idea Afshari et al, (2009), suggested that training should not be one-shot workshops, but rather ongoing experiences so that learners can be kept up-to-date with ever-changing technologies teachers need follow-up training sessions to ensure that they keep abreast with current technologies. Hence, teacher training is crucial and these programmes must adequately prepare teachers with skills necessary to integrate technology in their classes. Having vision requires strategic planning, risk-taking and decision-making, imagination and commitment. In addition, teachers need to have a clear understanding of what to change as well as how to change. Therefore, they need to become lifelong learners to develop their skills and abilities to overcome their fear of being the captain and focus on leading the skip. In other words, the teachers must work to become transformational leaders.

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Teachers' attendance of in-service training is one of the indicators of experience. Teachers' motives to attend in-service training can be manifold e.g. increase in salary, career planning, keeping up with development s, filling in lacunae, removing insecurity and meeting colleagues. Therefore, the more the teachers know about the students, the better the teachers can connect with them and more the likely will be able to benefit from the teachers' experience in reconstructing their world. The knowledge that teachers need about students in order to connect with them in gained through interaction. For many reasons, measuring real impact of experience on teacher's effectiveness is complex, more so than measuring any other teacher attributes students whose teacher had five to nine years' experience. Teachers' effectiveness has been said to increase dramatically each year during the first ten years of teaching. In the extreme case, evidence a bound of growing teacher, effectiveness up to 20 or more years, although more than half of the gains in teacher effectiveness occurred during the first few years of teaching (Kosgei, et al, 2013).

If training is inadequate or inappropriate, then principals will not be sufficiently prepared and perhaps not sufficiently confident to make full use of technology. Hence, lack of principals' competence and lack of quality training for principals can be barriers to principals' se of ICT. According to Afshari, et al (2009), the success of educational innovations depends largely on the skills and knowledge of teachers. Also they found that teachers' lack of knowledge and skills was the second most inhibiting obstacle to the use of computers in schools. Similarly, in the United States, it was hypothesized that high levels of (attitude), skills and knowledge (proficiency) and tools (level of access) of teachers would produce higher levels of technology integration that will reflect on students' achievement positively; and tools would exhibit higher levels of technology integration in the classroom.

Professional development of teachers sits at the heart of any successful technology and education program. In their study that locked at the quantitative factors facilitating teacher skills, teacher morale and perceived students learning in technology using classrooms, Afshari, et al (2009) found that professional development has significant influence on how well ICT is embraced in the classroom. Also, they added that teachers' training programmes often focus more on basic literacy skills and less on the integrated use of ICT in teaching. When technology is introduced into teacher education programs, the emphasis is often on teaching about technology instead of teaching with technology. Hence, inadequate preparation to use technology is one of the reasons that teachers do not systematically use of ICT provides them time to practice with the technology and to learn, share and collaborate with colleagues.

In a qualitative multiple case-study research on primary school, teacher competence and confidence level regarding the use of ICT in teaching practice conducted in five European countries; Buabeng-Andoh (2012) reported that technical competence influenced Italian teachers' use of ICT in teaching. However, the teachers cited pedagogical and didactic competences as significant factors if effective and efficient educational interventions are likely to be implemented. In Portugal, teachers reported different views regarding the most important competences for teaching with ICT. The experienced and new teachers stressed the need for technical skills and attitude, the innovative teachers' emphasized curricula and didactic competences and the student-teachers cited technical competence and pedagogical efficiency as significant to integrate ICT in teaching and learning processes. Teachers with more experience with computers have greater confidence in their ability to use them effectively. Teachers competence relate directly to confidence. Teachers' confidence also relates to their perceptions of their ability to use computers in the classroom, particularly in relation to their children's perceived competence.

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Computer aided teaching is the most appropriate skill required of a teacher, unfortunately, it is the least possessed by many. This may be because it has barely been part of their training course. Training should be directed to using "ICT to teach", rather than "learning to use ICT". Mingaine (2013) outline some of ICT packages required of a secondary school teacher as data processing, word processing, use of internet, use of spreadsheet, use of presentation software like PowerPoint and e-mail. These ICT packages are important to teachers because the assist in preparing lesson plans, analyzing and setting students' test, acquiring new knowledge and presenting lesson in a clear way among others. To acquire these skills, teacher educators should prepare teachers properly. It has been noted that teachers who use ICT tools in the classroom might have experimented or observed their own teachers use ICT tools during formative days in initial teachers training institutions.

Roles of ICT in Mitigating Spread of Covid-19 Pandemic in School Environment

The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents. Closures of schools and other learning spaces have impacted 94 per cent of the world's student population, up to 99 per cent in low and lower-middle income countries (UN, 2020). On the other hand, this crisis has stimulated innovation within the education sector. We have seen innovative approaches in support of education and training continuity: from radio and television to take-home packages. Distance learning solutions (such as online educational platforms, e-learning) were developed thanks to quick responses by governments and partners all over the world supporting education continuity, including the Global Education Coalition convened by UNESCO.

Since the whole world is fighting against the pandemic spread of COVID-19, the role of Information and Communications Technology (ICT) to enhance public awareness and prevention, surveillance, diagnosis, treatment and coordinate response for COVID-19 has become more significant. Thus, the ICT interventions can be treated as one of the most effective, widely used and popular modes around the world to fight against the pandemic spread of COVID-19. ICT in Education can be understood as the application of digital gadgets to all aspects of teaching and learning. Within the concept of education, ICT is described as the combination of technologies for collecting, storing, processing, communicating and delivering of information related to be teaching and learning process.

One strategy adopted by the government to fill the space is the introduction of on-line platform into the educational system. In a study conducted by Basilaia and Kvavadze (2020) on Transition to Online Education in Schools during COVID-19 Pandemic in Georgia, they discovered that online education, help in the development and acquisition of knowledge from the different remote locations. Different countries worldwide have introduced various solutions during the pandemic to continue the education process. According to UNESCO (2020) on National Learning Platforms and tools, online libraries, TV broadcasts, guidelines, resources, video lectures, online channels are introduced in at least 96 countries. To increase the coverage of the school lessons to the population, the live transmission of lessons is broadcasted through the TV channel in different subjects nationwide.

In this hard period, the educational system has gotten support from large companies such as Microsoft, Google, Zoom, and Slack, who are offering many of the features of their products for free: Microsoft is offering anyone its premium version of Teams for free for six months and lifted existing user limits. Google has announced that it is offering its enterprise video conferencing features such as larger meetings up to 250 people and recording functionality

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for free to G Suite and G Suite for Education customers. Zoom has lifted the time limit of video calls in China, Japan, Italy and the US by request. (Rani Molla, and VOX. 2020). Also, the study of Muirhead, (2020) on online education in schools, admits that online education, although new in the school system, can be considered for enhancing traditional schools and home-schooling.

Technology-based e-learning is also another technology adopted for distance learning. It encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization (Fry, 2001). E-learning is critical to education as it is the use of information and communication technologies in various processes of education to support and enhance learning (Pande, Wadhai & Thakare, 2016). Therefore, to mitigate the impact of COVID-19 on education in higher education requires the adoption of e-learning during the period of lockdown. However, due to the rule of social distancing, any e-learning that requires physical contact during teaching and learning may not be effective. Given this, any of the blended learning may not be the best for education at this period except for the full online mode. Therefore, study shows that the best e-learning suitable for teaching and learning at this period could be the Google Classroom. Google Classroom is a Google Apps for Education that helps the teachers to create and organize assignments quickly, provide feedback efficiently, and communicate with their learners easily (Shaharanee, Jamil & Rodzi, 2016).

Given the above, it is apparent that one way to mitigate the impacts of COVID-19 on science education may be to adopt e-learning mode to teach science in Nigeria higher institutions. Therefore, the online e-learning, which does not depend on traditional paradigms like the Google Classroom would be the best for instruction in science education. The Google Classroom framework would provide the same instruction to every student irrespective of their parents' background. It will offer the students the same classroom context as against the present situation where some students attend school well equipped with learning resources while some do not. Research shows that many countries are using Google Classroom in their schools because of its effectiveness (Henukh & Rosdianto, Oikawa, 2020). According to Hussaini, Ibrahim, Wali, Libata, and Musa (2020), it allowed teachers to post notes, assignments, create different groups in one class, invite another teacher to the class and it is flexible.

According to Gredgett (2020), as the central coordination unit for educational system in Nigeria, the school administration has opted to the wide scope of services provided through the use of e-learning platform facilities to enhance educational activities, such as: E-registration and admissions, E-examination, E-counseling, E-timetable and class register, E-Payments, E-conferencing. The need to maintain, as far as possible, a certain administrative normality during the COVID-19 pandemic, to avoid greater evils or avoid suspending acts that are very significant in secondary school life is never underestimated.

Method

Research Design

An Expost-Facto design was used for this study.

Area of the Study

The research area for this study was conducted in Akwa Ibom State.

Population of the Study

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The population of this study comprised of 213 Principals and 629 Vice- Principals in Public Secondary Schools in Akwa Ibom State during 2017/2018 academic session.

Sample and Sampling Techniques

A stratified random sampling technique was used to draw the sample of 535 secondary school administrators comprising 123 principals and 412 vice principals for the 2017/2018 school session was chosen to participate in the study.

Instrumentation

The Main Instrument used in this study was questionnaire titled "Principals' Application of ICT Based on Qualification and Teaching Experience in Secondary School Administration (PAICTBQTESSA)".

Validation of the Instrument

The face validation of the instrument was carried out using expert in test and measurement.

Reliability of the Instrument

In order to establish the reliability of the instrument, internal consistency reliability coefficient was used. Cronbach Alpha technique was used to determine the level of reliability of the instrument used in the study with a reliability coefficient of 0.81.

Method of Data Analysis

Research hypothesis formulated for the study was answered using One-ways Analysis of variance at .05 level of significance.

Result and Discussion

Hypothesis One

The null hypothesis states that there is no significant difference in principals' application of ICT in Secondary School administration based on qualifications in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. In order to test this hypothesis, One-ways Analysis of variance was used on the data. (see TABLE 1)

TABLE 1: **One-way analysis of variance of the difference in principals' application of ICT in Secondary School administration based on qualifications in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State**

QUALIFICATIONS	N	X	SD
Low (First Degree)	213	12.00	0.87
Average (PGD/Master Degree)	214	15.12	1.17
High (Ph.D)	108	17.00	0.71
Total	**535**	**14.26**	**2.19**

Source of variance	SS	DF	MS	F

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Between groups	2055.84	2	1027.92	
				1084.86*
Within groups	504.08	532	0.95	
TOTAL	2559.92	534		

*Significant at 0.05 level; df = 2 & 532; N= 535; critical f-value 2.99

The above Table 1 shows a calculated f-value (1084.86). After tested for significance at 0.05 alpha level with (2 & 532) degrees of freedom, the calculated F-value (1084.86) was greater than the critical F value of (2.99), hence the result was significant. The result therefore means that there is difference in principals' application of ICT in Secondary School administration based on qualification in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.

Hypothesis Two

The null hypothesis states that there is no significant difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. In order to test this hypothesis, One-ways Analysis of variance was used on the data. (see Table 2)

TABLE 2: One-way analysis of variance of the difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State

QUALIFICATIONS	N	X	SD
Short (Less than 10yrs)	215	12.63	1.66
Middle (10 – 25yrs)	212	14.38	1.40
Long (26 and Above)	108	17.25	0.44
Total	**535**	**14.26**	**2.19**

Source of variance	SS	DF	MS	F
Between groups	1537.88	2	768.94	
				400.26*
Within groups	1022.03	532	1.921	
TOTAL	2559.92	534		

*Significant at 0.05 level; df = 2 & 532; N= 535; critical f-value 2.99

The above table 2 shows a calculated f-value (400.26). After tested for significance at 0.05 alpha level with (2 & 532) degrees of freedom, the calculated F-value (400.26) was greater than the critical F value of (2.99), hence the result was significant. The result therefore means that there is difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.

Discussion of the Findings

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From the data analysis in table 1, the result was found to be significant due to the fact that the obtain f-value (1084.86) was greater than the critical f-value (2.99) at 0.05 level with 2 and 532 degree of freedom. The result implies that there is significant difference in principals' application of ICT in Secondary School administration based on qualification in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. This is in support with the opinion of Badri, et al, (2013), who asserted that well qualified teachers as one who is fully certified and held the equivalent of a major in the field being taught. Although the formal qualification of teachers is an important indicator for their knowledge and competence in teaching, it has only limited utility in analyzing how well prepared teachers are for what they have to teach in schools. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

From the data analysis in table 2, the result was found to be significant due to the fact that the obtain f-value (400.26) was greater than the critical f-value (2.99) at 0.05 level with 2 and 532 degree of freedom. The result implies that there is significant difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. This is in agreement with the opinion of Kosgei, et al, (2013), who avowed that more experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds as well as in administration. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusion

From the result of the findings, it was concluded that Proper utilization of ICT facilities in the administration of secondary school will enhance effective communication among student and teachers, teaching and learning, creativity among others. Effective principals need to be actively involved with technology, including modeling the technology use and helping to implement ongoing curriculum-integrated technology for student and staff development. Teachers' experience has a significant effect on head teacher administration in both primary and secondary school levels. Experience teachers have richer background of experience to draw from and can contribute insight and ideas to the course of teaching and learning, experienced teachers are considered to be more able to concentrate on the most appropriate way to teach particular topics to students who differ in their abilities, prior knowledge and backgrounds as well as in administration. Teachers' experience in teaching and administration influence their use of ICT in teaching in classrooms. Teachers qualifications is an important indicator for their knowledge and competence in teaching and administration. Therefore, the study states that there is significant difference in principals' application of ICT in Secondary School administration based on qualification in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State. Also that there is significant difference in principals' application of ICT in Secondary School administration based on teaching experience in attempt to mitigate spread of covid-19 pandemic in school environment in Akwa Ibom State.

Recommendation

1. The study recommended that, only qualified principals should be allowed to run the school administration.
2. Experienced principals with higher-level professional qualifications should head the school.

3. Government should see to the training of Qualified Teachers before been sent out to teach, and only qualified teachers should be employed into the teaching sector.

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