APPRAISAL OF DIGITAL TECHNOLOGICAL SKILLS COMPLIANCE NEEDED BY PUBLIC PRIMARY SCHOOL TEACHERS INNSUKKA URBAN FOR EFFICIENT CLASSROOM MANAGEMENT

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Abstract

The study set to determine the appraisal of digital skills compliance by public primary schoolteachers in Nsukka Urban for efficient classroom management. The study employed survey design. Two research questions and one null hypothesis guided the study. The population of the study comprised all the 1058 teachers and IT staff in public primary schools. A sampling size of 75 management teaching and 30 IT staff were drawn using purposive sampling technique. The researchers developed instrument titled "Digital Technological Skills Compliance by Public Primary School Teachers Questionnaire (DTSCPPSTQ)", was used for the study. The instrument had face validity, with reliability established through a pilot test conducted using Cronbach Alpha statistics with a reliability coefficient of 0.85 for appraisal of digital technological skills compliance by public primary school teachers for efficient management; indicating an acceptable level of reliability indices. The data collected were analyzed using mean and standard deviation to answer research questions and an independent t-test to test the hypothesis. Some of the findings include that the ability to provide pupils with task management tools to organize their works, exploit computer games for pedagogical purposes, create screen capture tutorials. This suggests that digital technological skills compliance needed by their teachers may be effective in improving classroom management practices among primary school teachers. Based on these findings of the study, it was recommended that integrated digital technological skills compliance in the management of primary school teachers will improve management standard of primary schools.

Keywords: *Digital Skills, Primary School, Teachers, Management.*

Introduction

Education has remained at the top and veritable tool for all round development of man, not only tertiary and secondary but primary schools as well. In view of this, Onyebuenyi and Oluka (2022) defined education as a process by which man is made useful through the inculcation of moral and acceptable ethical standards for wide understanding and effective utilization of the resources within his environment and beyond. Thus, education takes place at different settings and places including primary schools and beyond. Primary education as referred to in this research is the education given in institutions for children aged 6 to 11 and above. It is education given to children in an educational institution prior to their entering into secondary school (NPE, 2014). Children at this stage of education are digital natives. Morrison (2012) states that children who were born into a digital world where the web, podcast and Google are basic vocabulary words are called digital natives. These children expect and require a high level of engagement, like read, write and think differently than other children did ten years ago. They think digitally. So, provision of digital technology in the primary school classroom is adequate to support teaching and learning. Teachers' role is essential for effective use of digital technology in primary

school classroom, like providing pupils with task management tools to organize their works, exploit computer games for pedagogical purposes and creating screen capture tutorials (Ogbonnaya,2018).

A teacher is one who is trained for the purpose of imparting knowledge to the pupil. He is an individual that has been professional training in any teacher education programme such as from the College of Education, Faculty of Education, Institute of Education, National Teachers' Institute, among others (NPE, 2014). Morrison (2012) sees primary school teachers as professionals who successfully teach all children, promote high professional standard and continually expand their skills and knowledge. According to McDiarmid and Clevenger-Bright (2018), a teacher is a person who helps others to acquire knowledge, competencies or values. In order to meet the demand of digital technology in primary schools, classroom teachers need to possess digital competence such as ability to exploit digital images for classroom use, compile a digital e-portfolio for their own development and ability to organize lesson materials in readiness for learning for effective use of digital technology in the classroom (McDiarmid and Clevenger-Bright, 2018). Hence, teachers' digital technological skills compliance need to be guaranteed for effective classroom management in primary schools.

Skill is capacity to perform a given task. This means that skill implies expertness, practiced capability in taking up tasks with ease and accuracy. It is the ability to perform expertly and facility in performance. Skill therefore is the end product of the training given to a student or an employee to make him/her perform more expertly and easily on a job by using effective knowledge for efficient performance (Isife & Ogakwu, 2023). Ogbuagu and Akubue (2019) in corroboration opined that a skill is an ability to perform a productive task at certain level of compliance. Digital technological skill is therefore defined in this context as ability to utilize trending technological devices in carrying out a specific task (Onyebuchi & Oluka, 2022). Asli (2022) define it as the digital skills needed to use digital devices, communication applications, and networks to access and manage information from basic online searching and emailing to specialist programming and development. The United Nations Educational Scientific and Cultural Organization (UNESCO, 2018) defined digital technological skills as a range of abilities to use digital devices, communication applications, and networks to access and manage information, They enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities at large. Fernando (2021) identified some digital skills to include: Programming, web, and app development; Digital business analysis; Digital marketing and content; Digital design and data visualization; Digital product management; Digital science; User experience design. Noticias (2012) listed ability to use social bookmarking to share resources with and between learners, use blogs and wikis to create online platforms for students, exploit digital images for classroom use and others like computer games for pedagogical purposes as part of the digital skills every 21st century teacher should possess with particular reference to all teaching staff of any level of learning. Digital technological skill can be apply here as an ability of a teacher to exploit digital images for classroom, compile a digital e-portfolio for their own development, organize line lesson materials in readiness for learning using digital technology, use info-graphics to visually stimulate pupils and create screen capture tutorials and exploit computer games for pedagogical purposes. This is the expectation from the public primary school teacher need for efficient classroom management in 21st century.

Digital skill compliance on the other hand can be defined as the ability to know and choose particular set of digital technological working instrument for a specified task. Digital skill compliance in this context refers to the ability of an individual to know and select a particular digital tool for the utilization of mobile learning applications for effective learning. According to Andre (2019) digital technological tools for online content creation are utilized in the creation of school marketing videos that can promote your school, boost enrollment, and enrich students' classroom experience. It involves all the tools required for the creation of online educational contents. Ashutosh (2018) identified some of these tools to include Edmodo, Socrative, Thinglink, Pojecq1, ClassDojo, cK-12, eduClipper, Storybird, Animoto, Kahoot and TED-Ed. However, digital tools and its application depend on the purpose for which it intends to fulfil. These competencies are highly needed for effective utilization of mobile learning applications in public primary schools in Nsukka.

In the world at large, it is acknowledged that digitalization is growing at a rapid pace with emerging technologies continuing to develop. There is more knowledge explosion and institutions are required to develop greater Information Communication Technology (ICT) capability. For this ICT is relevant in the administration of primary schools. It is relevant in admission processes in primary school. The quality of students admitted

into primary schools in Nsukka Urban is a crucial factor in ensuring high quality graduates. Clearly the quality of pupils admitted could positively correlate with the quality of graduates irrespective of the provisions of other aspect of the programme. In this regard the use of computers, computer software, the internet and other tools by both primary, post primary, JAMB and Universities enhances the admission processes (Ogbonnaya, 2018).
ICT facilities are used to enhance the nature and mode of assessment and its administration. The scoring, processing and collation of results are also improved through the use of computers and computer softrware. The use of computer and other electronic devices can create better learning. E-learning facilities are capable of enabling individualized learning, and make learning more attractive and motivating. This is because new knowledge and better ways of doing things interest learners and generate curiosity.

Hence, becoming ICT compliant and optimizing the potentials of ICT are among the major challenges facing the management of primary education (Onyekaba & Bello, 2018). Valcke (2010) noted that ICT is particularly useful in schools or organizations to facilitate organizational information about courses, registration and follow-up of students learning activities, information about staff, subscriptions for examinations, communication about the instructional process, collaborative learning, self-assessment and collaborative research activities. Ogbonnaya (2018) believe that digitalization could be used to revolutionize planning, develop human capacities, improve course content, staff and pupils' personnel records, security provision and primary or post primary for vital information or clarifications with outside world, so that ICT -compliant institutions could compete favorably in a knowledge driven world.

Consequently, irrespective of the said benefits of the utilization of modern technologies in education as evident in mobile learning and its application, it is disheartening that most teachers of public primary schools in Nsukka urban of Enugu state are ignorant of the use of this technology in teaching and learning activities nor any availability of digital technological skill install in these primary schools for efficient classroom management. This could be traced down to lack of awareness or knowledge of the use of these innovations whereas Igwe, Amarachi, Ogundana, Egere and Anigbo (2018) attributed it to a problem of skills mismatch in the Nigeria primary education system, funding system, manpower, administrative, absence of a comprehensive policy, lack of awareness. The use of ICT demands that students and personnel be familiar with online environment. Lack of awareness also leads to lack of ownership, trained cadre of professionals to support the integration and if this happens at the government levels where there is no awareness and ownership, no trained cadre and funding, there will be implantation failure, not necessarily due to lack of resources (Ogbonnaya, 2018). Pelrum (2011) affirmed that teachers' lack of technological competence is a main barrier to their acceptance and adoption of ICT into teaching and learning. Thus, this knowledge-gap in the use of mobile learning has hampered the development of public primary schools' education in Nsukka urban and undoubtedly given rise to the high level of irresponsibility and social misconducts actively displayed by graduates of public primary schools in Nsukka urban. On this note, the study sought to determine, through the opinions of public primary school teachers and IT Professional found all over Nsukka urban, the digital technological skills competencies needed by teachers for utilizing mobile learning applications for efficient instructional delivery and classroom management in public primary schools in Nsukka.

Statement of the problem:

Global trends in digital technological skills compliance has been a veritable means for the transformation of school organization, with particular reference to primary school for efficiency classroom management. By this view, digital technology kills helps in bridging the relationship gap between teachers, pupils, reinvents approaches to learning and collaboration, information access, decision making, data management and knowledge management, shrining long standing equity and adapt different learning experiences to meet the needs of contemporary learners in institutions. Digital skills compliance causes fundamental changes in the nature and application of technology in management. It has created a wide array of new methods of teaching and learning, many of which did not exist ten years ago. It is obviously noted that new technologies challenge traditional conception of both teaching and learning and by reconfiguring how teachers and learners gain access to knowledge and have the potential to transform teaching and learning processes.

Based on the researchers' interaction with some of the management staff from the primary education studied, it was observed that the incorporation of specific policies for digital use, as well as the application of

infrastructure facilities used in planning of academic activities by the management of the primary schools, has not made any much impact due to unavailability of the relevant digital technological skills and facilities for efficient management functions. The researcher is worried about this perceived development. It is with this consideration in mind that this study was poised to assess the digital technological skills compliance by the teaching staff and for the primary school management in Nsukka urban.

Purpose of the study

The purpose of the study is to appraise digital technological skills compliance by public primary school teacher for efficient classroom management in Nsukka urban of Enugu state. Specifically, the study sought to

1. Appraise the digital technological skills compliance needed by the public primary school teachers in Nsukka urban.
2. Determine digital technological tools integrated into public primary school management for efficient classroom achievement in Nsukka urban primary schools.

Research questions

The following research questions were formulated to guide the study:

1. What is digital technological skills compliance need by the public primary school teachers for efficient classroom management in Nsukka urban primary school?
2. what is the digital technological tools integrated intopublic primary school management for efficient classroom achievement in Nsukka urban primary schools?

Hypothesis.

There is no significant difference between the mean scores of primary school board members and the teaching staff of public primary schools for digital technological skills compliance needed by the public primary school teachers for efficient classroom management in Nsukka urban

Theoretical literature

Skill development theory, 2009.

The theory for aiding the development of skills as proposed by Romiszowski 2009. It states that skill is the capacity to perform a given type of task or activity with a given degree of effectiveness, efficiency, speed or other means of quantity or quality. It distinguishes between intellectual skills which involve the mind, motor, sensor motor, or psychomotor skills which involve the body, personal skills which involves emotions and interpersonal skills, that which involves interacting with others. It indicates that skill is distinct from knowledge, in that it develops with experience and practice, but that knowledge is something you either have or do not have. The theory says that skills exist as a continuum of complexity fromreproductive to productive and stating that reproductive skills are those which are focused on applying standard procedures or automate processes, such as multiplying numbers or typing. However, those reproductive skills involve applying principles and strategies, for instance, creative writing or playing chess. Romiszowski shows that whether a skill is reproductive or productive, that it has greater influence on the selection and design of instructional strategy than if a skill is intellectual, motor, personal or interpersonal. The theory states that there are both closed and open responses in the skill cycle. Closed responses involve a static environment, one that does not change with the activity of skilled practice within the space while open responses involve dynamic environment where the performer must constantly adjust his or her performance based on variables within the environment. In the skills cycle, open responses are more in that environmental stimuli affect the decision-making and behavior of the learner/performer. The learner perceives the stimulus, recalls prerequisites based on his or her perceptions, plans for behavior which affects the environment. The theory states that there are instructional tactics for specific situations. These situations will necessitate variations in the best instructional tactics to be used. These are in four categories; information provided including explanation, demonstration and guidance, practice including the frequency and spacing, feedback including frequency, form, quality, as well as transfer and generalization. This theory is related to this study becausegetting skills on digital technology help the capacity of teachers in Nsukka urban primary schools to perform efficiently in their classroom management.

Method.

The study adopted survey research design. This type of study, according to Nworgu (2015), a survey research design is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire group. This design was considered appropriate for this study as the researcher sought to establish the digital technological skills compliance needed by primary school teachers for efficient classroom management, which made the design more appropriate. The study was carried out in Nsukka Urban of Enugu State. The study comprised 75 teachers and IT staff of public primary schools in Nsukka urban.Simply sampling method was used to select 75 teachers and 30 IT staff for the study. Digital Technology Skills Compliance by Teachers for Efficient Classroom Management Questionnaire (DTSCTECMQ), developed by the researchers, were used for data collection. It was validated by three experts from the faculty of Education, two from educational foundations and one from measurement and evaluation, the items in the questionnaire were thirty items in two clusters. The instrument was trial tested in Enugu zone of Enugu state and the reliability of the instrument yielded coefficient of 0.77 and 0.79 were obtained for the two clusters. The four – point rating scale of strongly Agree (4), Agree (3), Disagree (2) and Strongly Disagree (1) were used to answer the questionnaire. Mean and standard deviation were used to answer the two research questions while t-test statistics was used for testing the null hypothesis. In decision making, items with mean scores of 2.50 and above were regarded as Agree while those with mean score below 2.50 are regarded as Disagree. For the hypothesis, when the significant value is more than the level of significance, the hypothesis was rejected, while the null hypothesis was not rejected when the significant value is less than the level of significance.

Result:

This session of the work shows that the analysis of the data as collected. It is done in tables 1 and 11. Each table shows the analysis of different sections of the instrument according to different research question.

Research Question: 1: What is the digital technological skills compliance needed by the public primary school teachers for efficient classroom management in Nsukka urban of Enugu State?

Table 1: Mean responses of teachers and IT computers on the digital technological skills compliance needs by the public primary school teachers for efficiency classroom management in Nsukka urban.

S/N	Items	Mean	SD	Remark	Mean	SD	Remark
1	Exploit digital images for classroom use	3.43	0.54	A	3.25	0.81	A
2	Compile a digital e-portfolio for their own development	3.22	041	A	2.98	0.91	A
3	Ability to organize lesson materials in readiness for teaching using digital technology	2.79	0.88	A	3.32	0.56	A
4	Use info-graphics to visually stimulate pupils	3.39	0.74	A	3.14	0.84	A
5	Create screen capture tutorials	3.34	0.89	A	3.39	0.95	A
6	Exploit computer games for pedagogical purposes	3.10	0.72	A	3.04	0.78	A
7	Digital technology tools for online content creation to boost enrollment	3.01	0.70	A	3.21	0.77	A
8	Digital technology tools for online content creation to enrich students' classroom experience	3.21	0.70	A	3.19	0.81	A
	Cluster Mean	3.19	0.70	A	3.19	0.80	A

Table 1, shows that mean ratings and standard deviation of primary school teachers and IT computers on the digital technological skills compliance needs by the public primary school teachers for efficient classroom management in Nsukka urban. The cluster means of 3.19 and 3.19 respectively revealed that the respondents strongly agreed that all the digital technological skills compliance were needed by primary school teachers for efficiency classroom management in Nsukka urban primary schools. The table equally revealed that the items had their standard deviation ranged from 0.70 to 0.80 which indicated that the respondents were close to the mean and one another in their responses. The cluster standard deviation of 0.70 and 0.80 shows that the degree of variance from the mean is not much.

Research Question 2: what are the digital technological tools integrated for public primary school management in Nsukka urban for efficient academic achievement?

Table 2: The digital technological tools needed to integrate into primary school for efficiency class room management in Nsukka urban.

S/N	Item	Mean	SD	Remark	Mean	SD	Remark
1	Multimedia projector to deliver lessons in the school	3.32	0.94	A	3.01	0.57	A
2	Computer assisted Instructions to deliver lessons in the classroom	3.33	0.38	A	2.99	0.66	A
3	functional internet for post information to the students	3.40	0.37	A	3.04	0.44	A
4	Video conferencing to deliver lessons	3.51	0.99	A	3.22	0.66	A
5	digital technology lecture rooms housing multimedia projector.	3.16	0.77	A	3.34	0.72	A
6	internet and other facilities for academic staff	3.32	0.63	A	3.01	0.52	A
7	Management use the computer to update pupils, staff and school data	3.32	0.93	A	3.24	0.33	A
	Cluster Mean	3.34	0.71	A	3.12	0.55	A

Table 2, shows that mean ratings and standard deviation of primary school teachers and IT computers on the digital technological tools needed by the public primary school management for efficient classroom achievement in Nsukka urban. The cluster means of 3.34 and 3.12 respectively revealed that the respondents strongly agreed that all the digital technological tools were needed by primary school management for efficiency classroom achievement in Nsukka urban primary schools. The table equally revealed that the items had their standard deviation ranged from 0.71 to 0.55 which indicated that the respondents were close to the mean and one another in their responses. The cluster standard deviation of 0.71 and 0.55 shows that the degree of variance from the mean is not much.

Hypothesis. 1.

There is no significant difference in the mean scores of the responses of primary schoolteachers and IT staff on the extent to which digital technological skills compliance are needed by the public primary school teachers for efficient classroom management in Nsukka urban in Enugu.

Table 2: Summarized t-test analysis on mean ratings of the responses of and IT staff regarding the extent to which digital technological skills compliance are needed my teachers of public primary schools for efficient classroom management in Enugu state.

RESPONDENTS.	N.	X.	SD.	DF.	t-cal	t-crit	Decision
Teachers	75.	3.21.	.70.	785.	.87.	0.91.	Accepted
IT.	30.	3.19.	.80				

Table 2 shows that the calculated value of t, at 0.05 level of significance and 785 degree of freedom, is 0.91, as against the critical to-value of 1.96. Since the calculated to-value is less then the critical to-value, the null hypothesis is therefore, not rejected. This decision means that there is actually no significance difference in the mean rating of teachers and those of IT computers regarding the extent to which digital technological skills compliance are needed my teachers for the efficient classroom management in public primary schools in Nsukka Urban in Enugu state.

Discussion of Findings

The result of this study with respect to the 8 identified items in research question one indicates that the respondents agreed that digital technological skills compliance needed by public primary school teachers in Nsukka urban for efficient classroom management includes: exploit digital images for classroom use, compile a digital e-portfolio for their own development, ability to organize lesson materials for teaching using digital technology, use info-graphics to visually stimulate pupils and create screen capture tutorials. Others are to exploit computer games for pedagogical purposes, digital technology tools for online content creation boost enrollment and digital technology tools for online content creation to enrich students' classroom experience.
This result concurs with the findings of Asli (2022), who agrees that digital technological skill compliance need by teachers of primary schools for efficient classroom management were networks to access and manage information from basic online searching and emailing to specialist programming and development, exploit digital images for classroom use, compile a digital e-portfolio for their own development, ability to organize lesson materials for teaching using digital technology, use info-graphics to visually stimulate pupils and create screen capture tutorials. The findings also agree with Pappas (2017), who states that online teaching is a network and web based learning which exposes learners to new knowledge and sustains students' interests to learn online. Research question two on the digital technological skill tools needed to integrate into primary school for efficiency classroom management in Nsukka urban identified the following needs: multimedia projector to deliver lessons in the school, computer assisted instruction to deliver lessons in the classroom, functional internet and video conferencing to deliver lessons. Other are digital technology lecture to deliver lessons and digital technology lecture rooms housing multimedia projector, internet and other facilities for academic staff and computer to update pupils, staff and school data. This finding agrees with to Andre (2019) that digital technological tools for online content creation are utilized in the creation of school marketing videos that can promote your school, boost enrollment, and enrich students' classroom experience. This finding also agrees with Obiweluozo et al (2017) that digital technology encourages active learning, knowledge construction inquiry an exploration among learners. The devices make it easier for remote communication as well as data sharing to take place between teachers and, or learners in different physical classroom locations. Graziant in Morrison (2012) states that technology resources in the classroom provide the teachers with tools to differentiate, engage the children, and track data to better design instruction. Therefore, teachers' role is essential for effective use of digital technology in primary schools in Nsukka urban of Enugu State. Greany (2002) affirms that general use of technology in classrooms enhance increased motivation, improvement in self-concept and mastery of basic skill.

Conclusion

The use of information communication technologies (ICT), in this digital era is unavoidably needed mostly in education sector in Nigeria. Twenty first century era has driven away any form of educational learning than digitalization. For this one need not to be the needs for online teaching and learning in schools to achieve the set educational objectives as and when required. For education programs not be distorted, online teaching and learning, multimedia projector to deliver lessons in the school, computer assisted instruction to deliver lessons in the classroom, functional internet and video conferencing to deliver lessons. Others are digital technology lecture rooms housing multimedia projector, internet and other facilities for academic staff and computer to update pupils, staff and school data. For education programs not be distorted, digital technological skills compliance needs by public primary school teachers in Nsukka urban for efficient classroom management need to be included into the primary school curriculum. When this is done the teachers need to practice the use of the new technologies to teach and pupils on the other hand, need to individualize their learning online. However, the essence of advocating digital technological skills compliance need by public primary school

teachers at primary school level is to ensure continuity in teaching and learning towards the achieving the educational goals at the appropriate time.

Recommendations

(1) The government and educational agencies should procure digital technology devices and facilities at primary school level to enhance digital technological skills compliance need by teachers for efficient classroom management.

(2) The teachers should be trained and re-trained on the digital technological skills for efficient classroom management.

(3) Online teaching and learning should be made compulsory in the curriculum of public primary schools in Nigeria.

(4) There should he power supply to make this idea feasible.

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