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MANAGING CHILDREN CREATIVITY FOR NATIONAL DEVELOPMENT IN COVID 19 ERA THROUGH RE-ENGINEERING EDUCATION AT PRIMARY SCHOOL LEVEL IN ANAMBRA STATE

Umeozor, Uzonna Juliana (Ph.D.)
Department of Educational Management and Policy
Nnamdi Azikiwe University, Awka, Anambra State
Email: julzyiana@yahoo.com; Mobile Line: 08035085408

Professor Onuh, Uchenna Becky
Tansian University, Umunya, Anambra State

ABSTRACT

The role of primary education towards development of children creativity for national development cannot be overemphasized. Notwithstanding this important role, yet primary education in this COVID 19 era suffers a lot of dismay especially in the provision of quality education. This poor situation has warranted the present study to investigate the need for managing children creativity for national development in COVID 19 era through re-engineering education at the primary school level in Anambra State. Three purposes and research questions guided the study. A descriptive survey research design was employed in the study. Population of the study comprised 1,067 head teachers and 8,396 teachers from 1,067 public primary schools within the 6 education zones in Anambra State. Sample of the study consisted of 213 head teachers and 420 teachers from 213 primary schools selected at 20% and 5% from the entire head teachers and teachers population using the proportionate stratified random sampling technique. A 24-item questionnaire titled "Managing Children Creativity for National Development Questionnaire (MCCNDQ)" developed by the researchers and structured on a 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was used for data collection. Two experts from Educational Management and Policy Department, and one expert from Educational Foundations Department (Measurement & Evaluation expert), Faculty of

Education, Nnamdi Azikiwe University validated the questionnaire. Reliability of the questionnaire was established through a pilot test using a sample of 4 head teachers and 20 teachers selected from four public primary schools in Enugu State. The scores obtained after the pilot-test were computed using Cronbach Alpha statistics which gave internal consistency reliability value of 0.85, 0.82 and 0.87 for each of the three clusters respectively and summed up to yield an overall reliability value of 0.85, showing that the questionnaire was reliable for conducting the study. Data collated were analyzed using mean scores rated at 2.50 and standard deviation. From the findings of this study which revealed various ways of managing children creativity for national development in COVID 19 era through re-engineering of education at the primary school level, recommendations were proffered. Among these include that the State government should support the funding of primary education in Anambra State through adequate budgetary allocation and financial assistance from the private sector, in order to encourage the use of technological educational resources such as internet, computers, tablets, computer graphics, among others, which is essential and necessary for managing children creativity for national development in COVID 19 era and for re-engineering education at the primary school level in Anambra State.

Keywords: Children, Creativity, COVID 19 Era, Re-Engineering, Education, Primary School,

Introduction

Primary education is one of the important educational level in children schooling. Primary education according to the International Standard Classification of Education (ISCED, 2011) provides learning and educational activities typically designed to provide children with fundamental skills and creativity in reading, writing and mathematics (i.e. literacy and numeracy) and establish a solid foundation for learning and understanding core areas of knowledge and personal development, preparing for lower secondary education. Primary education is however, designed to prepare the child for other higher levels of education. Adepoju in Orimidu (2004), sees primary education as the education, which is exposed to children in primary institution, where the child acquires fundamental knowledge, skills, creativity, thought, feelings and actions, which are considered necessary for all citizens, regardless of social status, vocation or sex. Primary Education as referred by the Federal Republic of Nigeria (FRN, 2013) in the National Policy on Education (NPE), is the education given to children between the bracket ages of 6 and 11 plus. This level of education stands as a foundation upon which the rest of the education system is built upon. It is therefore, the key to the success or failure of the whole systems of education. The role of primary education towards development of children creativity for national development cannot be overemphasized. This level of education as further indicated by the FRN (2013) in its goals and objectives inculcates into children certain social skills and values that will

boost their creativity. These skills include literacy and speaking skills, numeracy skill, effective communication skill, scientific and technological skills, problem-solving skill, reflective thinking skill, imagination skill, moral skill, spirit of patriotism and enquiry, manipulative skill, arts skill, entrepreneurial skills, cooperation and team spirit, among others (FRN, 2013, p.10). In line with the above statements, Ofie (2005) observed that primary education inculcates in children certain skills that will improve their creativity for national development in several ways. Besides, Children creativity as described by Asodike and Ikpitibo(2012) is a mental, cognitive process including flexibility, originality and giving details. Creativity is a compound mental purposeful activity guiding a strong desire in searching for solutions or reaching original results that haven't been known before. It is considered an advanced mental phenomenon in which the individual deals with situations, experiences and problems in a creative way or by putting forward a collection of solutions to get one good solution (Al Ashmawi, 2009). Gilford's definition of creativity that is mentioned in Asodike and Ikpitibo(2012) is the readiness characteristics that include the freedom and flexibility of thinking, originality and sensitivity to problems, redefining the problem and clarifying it by details. Abu Jadu cited in Asodike and Ikpitibo(2012) considered children creativity as a form of leadership in which the creator practices a personal clear influence on others. The creative school environment is the atmosphere that includes the situations and condition, that simplify children's creativity. In essence, children creativity could be developed very early through the children's expressions, their games and then through their different activities inside and outside the school. The growth and development of such abilities extend from late childhood up to the beginning of adolescence and continue steadily (Hijazi, 2006).

National development on the other hand entails the all-round and balanced development of different aspects and facets of the nation viz. political, economic, social, cultural, scientific and material. It includes full-growth and expansion of a nation's industries, agriculture, education, social, religious and cultural institutions. It includes the ability of the nation to improve the standard of living of its residence which can be done by providing basic needs of livelihood to the people, and providing them employment etc(Bawa, 2021; Paliwal, 2018). SlideShare from Scribd (2021) referred to national development as the ability of a county or countries to improve the social welfare of the people by providing social amenities like quality education, potable water, transportation infrastructure, medical care, etc. The characteristics of national development includes improvement of quality life and well-being of citizens, inclusive growth, which is high growth that is sustained, generates mass employment and reduces poverty. Today, education is universally accepted as a form of investment in human beings, which yields economic benefits or returns and contributes to a nation's future wealth and development by increasing the productivity and consumptive capacity of its citizens. Viewed in this way, all expenditure on education can to a great extent be justified in terms of potential contribution of education to economic

growth and national development (Ofie, 2005). Therefore, developing the children's creativity for national development as further indicated by Asodike and Ikpitibo(2012) is possible because each child has a heaven creativity ability that could be enhanced and refined by the way of bringing up and education. pointed out that" the ability of creativity is not exclusive for the elite, but it is available for all individuals and parents could affect their children positively. Abu Alnaser cited in Asodike and Ikpitibo(2012) assured that it is necessary to encourage the creativity in childhood rather than in the late stages. Therefore, developing creativity could be achieved through practice and education. By encouraging creativity and imagination which is necessary for national development, primary education promotes children's ability to explore and comprehend their world and increase their opportunities to make new connections and reach new understandings. Good science knowledge will provide children at early stage with the knowledge of the environment and social behaviour that is needed to develop effective solutions to our global development (Bajah cited in Ofie, 2005). Therefore, introduction of science at the primary school is necessary because of the rapid changes that are taking place around the globe. The learning of science early in the life of an individual will facilitate the understanding of the natural world and will also develop scientific attitudes early in a child. Scientific and reflective thinking is the foundation of scientific invention. Bill Gates (the famous/richest American) has been engaged in reflective thinking right from his childhood. This has led to breakthroughs in his life (Ofie, 2005). Furthermore, the ability for one to communicate well in whatever vocation he finds himself leads to economic growth. Numeracy will help the recipient in areas like measurement (if he is a carpenter, tailor, mason) and calculations. Effective communication with clients will boost his trade. Citizenship education serves as a basis for effective participation in and contribution to the life of the individual and the society. The child learns about the rights and responsibilities of a good citizen. Molding the character and developing sound attitude and morals in the child is the aspect of education that cannot be over-looked in economic growth and self-reliance of a child. This training is necessary in a child so as to build in the child the morality and responsibility a man owes himself, his family and the society in general.

Moral education will mold the recipient of primary education to be a goal-getter (strong-willed person). Strong-will makes one to pursue certain goals (Ofie, 2005). Additionally, moral education broadens children understanding, so that they can make the best use of their innate potentials for advancement economically or otherwise. Moral and character molding education for economic and self-reliance, does not only cover formal education, but also includes practical skills and unbiased awareness of one's social and physical environments (Ofie, 2005). Primary education gives the child opportunities for developing manipulative skills that will enable him to function effectively in the society within the limits of his capacity. This will. develop the child's mental and technical know-how to prepare him for the challenges in the society.-The emergence of highly skilled manpower

would surely stimulate economic growth and employment. This will help the individual to begin new forms of enterprise, trade or industry. The. new person here would assume a new role of responsibility and have determination to achieve change for the economic growth of the nation (Ofie, 2005). From all the above statements, it can be said that primary education enhances children creativity by developing in the child the ability to adapt to his changing environmental needs and provides the child with basic tools for further educational advancement, including preparation for trades and crafts of the locality. Such a child is taught to become the professional man who will in future help to harness the nation's wealth for economic development which is equally an aspect of national development. He is also taught to become self-reliant. Therefore, relevant modalities, strategies and equipment for managing children creativity for national development through re-engineering the primary education is required for the training of the child at this level of education. Notwithstanding the important role of primary education in this COVID 19 era suffers a lot of dismay especially in the provision of quality education. Scholars like Abamba and Okokoyo (2012), Asodike and Ikpitibo (2012), Ofie (2005), Orimidu (2004), among other scholars, observed that the problems faced by primary education in this recent times which requires re-engineering the entire education system using a wholistic and dysfunctional approach include funding issues, huge disparity between expected school enrolment and actual enrolment, structural challenges, problem of quality control, curriculum issues which focuses more on abstract (theory) with less emphasis on practicals, teaching personnel issues, problem of gathering accurate data and statistics, poor quality assurance delivery and supervision in the system, among others. Ofie (2005) asserted that primary school education has a lot of obstacles that hinder it from achieving peak success. These problems include the transfer of primary education from the federal government to the state and local governments which has a lot of implications on the smooth running of primary schools. This transfer led to problem of poor-quality control. There is no longer uniformity in some services rendered by the primary institutions. The quality of teaching staff in both state and federal schools also differs. Federal schools have more qualified teachers.

Besides the problem of quality control, there is also the problem of financing. Primary school teachers were not only paid good salaries while under the federal government, but they were also paid on time. Unlike today, the salaries are not paid on time and there is no uniformity in salaries of the state and federal government teaching staff. Due to poor funding by the state/local governments, teachers recruited to teach in the primary schools may not be as highly qualified as those recruited by the federal schools. In addition, the infrastructure/materials and teaching resources used when schools were under the federal government were better than what we have today. Today, we have dilapidated buildings and worn-out materials (Ofie, 2005). Abamba and Okokoyo (2012) indicated that there is a general outcry that standards of primary schools are falling. This was re-echoed by

Udebhulu and Okinowo (2008) when they opined that "…stakeholders over the years have decried the fallen standard of education in the country". With such observations, there is something definitely wrong with the system of education in Nigeria particularly at the foundation level – primary education. Underlying the deficiencies of primary education in Nigeria are underfunding, declining teacher quality, faulty structure, duration and curriculum, outdated examination practices and examination-led school system as well as absence of a strong philosophical and social cultural foundation. At this period of Covid-19 where schools are supposed to utilize enough technological resources to support teaching and learning, many of these resources are founding lacking in their large numbers in many primary schools. All these problems has made the development of children creativity at the primary schools very difficult. Hitherto, without availability of funds, quality teaching personnel, effective quality control system, adequate resources and infrastructure, control of pupils enrolment and proper management to carry out any work at the primary level, any plans of transformation or re-engineering of primary education are bound to fail. Adequate funding of primary education coupled with maintain effective quality control system for instance, plays a crucial role in determining the level of success, development and change in primary schools. This is however, the more reason why re-engineering education at the primary school level in Anambra State is important. Re-engineering primary education however can be referred to as the examination and alteration of a system to reconstitute it in a new form (Abamba&Okokoyo, 2012). According to the same source Abamba and Okokoyo, re-engineering implies changes of various types and depth to a system, from a slight renovation to a total overhaul. If this concept is to be used in the education sector, it means drastically altering the primary education system because it has failed to meet the objectives for which it was originally intended. In other words, it has become a dysfunctional education. In this case, the country's primary education level has failed woefully to meet the objectives for which it was designed for. This includes failure to lay a good foundation for other levels of learning and institutions as well as producing far below standard primary school graduates for the next level of education, as well as not equipping them with skills and creativity needed to live a functional life in a rapidly changing and growing society. Therefore, if the primary education level is to eliminate these complete failures as well as equip the graduates to live economically productive lives for national development, it is therefore requested in the present study, that, the primary school system should be reengineered. To re-engineer implies that engineering had already occurred but as a result of the undesirable outcomes of that engineering, there is need to alter what has been initially engineered so that there will be positive outcome towards achieving the goals and objectives of primary education in the country and Anambra State inclusive (Abamba&Okokoyo, 2012).

Re-engineering of primary education therefore requires that a lot of considerations and efforts be focused on not only the aspect of funding but other areas which is the main thrust

of this study and concerns teaching and learning situations such as the use of technological educational resources, putting in place effective quality control measures and paying adequate attention to the teaching force establishing adequate motivation. The use of technological resources such as computers coupled with other audio-visual and electronic materials will enhance the re-engineering of primary education likewise increase children creativity. Several empirical studies have indicated that the use of information and communication technologies (ICTs) stands to promote students skills and creativity in this recent technological era. Given the digital world in which education is increasingly situated, there has been much consideration of what teachers need to know to use technology effectively in the classroom, and the competencies needed to develop digitally-fluent, creative students (Mishra & Mehta 2017). Studies of Henriksen, Henderson, Creely, Ceretkova, Černochová, Sendova, Sointu and Tienken (2018) reported that technology increases creativity which is closely connected not only with the artistic world and the creation of products, but also with science, engineering, innovative and creative thinking and problem-solving.Similar to the positioning of creativity, the ability to use digital technologies is also commonly seen as a core skill in twenty-first century. Indeed, it is often argued that the connection between technology and creativity is a key issue for twenty-first century education (Henriksen et al, 2018).The results of Fitriah (2018) study showed that teachers utilized a wide range of technological tools in their creative practices, such as a computer, mobile phone, Internet, LCD projector, and videos, among others. Other empirical studies of Chao (2009), Charlile and Jordan (2012), Fautley and Savage (2007), Loveless (2002), Richards and Cotterall (2016), Saljo (2010) found out that technology plays an important role in increasing children creativity for national development as well. Appropriate quality control measures through the control of pupils enrolment, effective monitoring and supervision, effective pupils assessment and evaluation procedures, promoting participatory decision-making process by involving children, promoting a stimulating learning environment through consistence in the use of practicals in teaching and learning, promoting constructive learning, among others, will enhance re-engineering of primary education. Falconer, Cropley and Dollard (2018), Riga and Chronopoulou (2014) observed that a successful creativity intervention should touch on the 4Ps framework, as well as provide options to students, create a supportive environment, allow children to demonstrate initiative, and involve them in the decision-making process. In order to promote greater creativity in education, it is important that teaching incorporates all aspects of the holistic 4Ps framework, and has a balance between structure and freedom. The 4Ps frames involves the Person aspect of creativity enhancing creativity in the Individual and incorporates personality, intellect, temperament, traits, habits, attitudes, self-concept, value systems, defense mechanisms, and behaviour. The Press which involves the environment enhancing creativity; meaning the intensive time a child spends at an educational facility creates a strong modelling environment. The Process

creative thinking skills is comprised of motivation, perception, learning, thinking, and communicating.

Rhodes cited in Riga and Chronopoulou (2014) affirms that the creative process can be taught, which is supported by other researchers believing it is possible to foster creativity in the appropriate environment and given the right experiences. The Product which includes creative thought processes typically result in a creative product, which is the embodiment of one's original idea or thought into a tangible form A creative product is one that satisfies the conditions of novelty; how original, unique, or statistically rare it is, and practicality; the product's functionality, usefulness, or ability to satisfy the question or context (Abraham, 2016). Abosede (2017) study discovered several ways in which effective quality control measures can be utilized to promote children creativity in schools. These include application of effective policy framework for education, through effective supervision, curriculum review, establishment of a National Quality Framework for education, and provision of benchmarks for quality control of education, among others. Also, teaching force is one of the important machineries that will enhance children creativity and aid re-engineering of primary education. Quality teachers are the ones to transform and make significant impact in every teaching and learning situation. Without quality teachers, it becomes difficult to effectively improve children creativity at the primary schools for attainment of the goals and objectives of primary education. However, teachers need adequate and constant motivation in order to boost their high morale and commitment towards quality job performances. With motivation like constant training and retraining, good salary, conducive work environment and good school arrangements, among others. teachers would make positive impacts on improving the pupils' creativity in the schools. Manyara and Murungi (2018) attested that motivationis a set of energetic forces that originate both within as well as beyond an individual's being, to initiate work-related behaviour and to determine its form, direction, intensity, and duration". According to Lock and Lotham cited in Manyara and Murungi (2018), teacher motivation is viewed as such an energetic force that energizes and directs a person to work. Well-motivated teachers are likely to use play as a medium of instruction and participate fully in children's play activities and creativity. They are likely to be fully involved in planning age-appropriate activities and creativity for children, organize on their sharing of play, turn taking and the direction to follow during play for safety. This goes in line with Brown and Marchant equity theory of motivation also cited in Manyara and Murungi (2018), which calls for a fair balance to be struck between teachers' inputs (e.g., hard work, skill levels, tolerance, and enthusiasm) and their' outputs (e.g., salary, benefits, and intangibles such as recognition). According to the theory, a fair balance serves to ensure a strong and productive relationship between teachers' motivation and their overall participation in children's activities.

Hännikäinen and Rasku-Puttonen (2010) observed in their study that teacher motivation has significant impact on teacher support of active classroom participation and friendly relationships, together with creative and playful activities in the preschool, which enriches children's curiosity, and nourish children's motivation for and interests in academic learning in order to boost their creativity. Other studies like those of Manyara and Murungi (2018),Unsworth (2001) reported that both internal and external motivators increased teachers' zeal, morale, dedication, commitment, and job performance which positively impacted on children creativity in the classroom. Motivation however, shares a connection with teacher job satisfaction which can positively or negatively affect their teaching task to a greater extent. Lapenienea and Dumciene (2014) likewise reported in their study that extrinsic motivation impacted on teachers' creativity that improve students learning and creativity for national development. Moreover, the poor situation in the management of primary schools has warranted the present study to investigate the need for managing children creativity for national development giving adequate attention and focus on the re-engineering of primary education. It is however upon this background that the present study sought to determine the importance of managing children creativity for national development in COVID-19 era through re-engineering education at the primary school level in Anambra State.

Statement of the Problem

Primary education or schooling is one of the important educational levels necessary for the development of children creativity. This type of education has lots of advantages or benefits towards improving children creativity for national development. This is so because primary education forms the foundation on which other levels of education such as secondary and tertiary education. Notwithstanding the benefits and role of primary education in developing children creativity at early stages of their life time for national development, yet, the management of primary education suffers a lot of challenges and dilemmas which negatively affects children learning, therefore, calling on absolute re-engineering of primary schools in order to improve children creativity for national development. Preliminary examination and tour of many primary schools in Anambra State showcased that they suffer mismanagement which affects other areas as well. This poor situation of many primary schools has become worrisome making it difficult for children creativity to be highly promoted and have equally, created a gap that needs to be filled by the present study. Failure for the primary schools to negatively impact on children creativity and attainment of educational goals and objectives which would affect national development. However, for effective re-engineering of primary education which will boost children creativity for national development in the country, there is need to look into such factors relating to the use of technological educational resources, use of effective quality control measures and paying adequate attention to the teaching force by establishing adequate teacher motivation. Therefore, the need find out the importance of managing

children creativity for national development in COVID 19 era through re-engineering education at the primary school level in Anambra State has become the problem of this study.

Purpose of the Study

The purpose of this study was to determine the importance of managing children creativity for national development in COVID 19 era through re-engineering education at the primary school level in Anambra State. Specifically, the study sought to ascertain;

1. Several ways in which the consistency in use of technological resources essential for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.
2. The various ways in which effective quality control measures when appropriately put in place are required for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.
3. The various ways through which adequate teachers motivation are important for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.

Research Questions

The following research questions were raised to guide the present study:

1. In what several ways would the consistency in use of technological resources essential for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?
2. What are the various ways in which effective quality control measures required for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?
3. What are the various ways through which adequate teacher motivation are important for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?

Method

A descriptive survey research design was employed in the study. This research design entailed using a research instrument, that is, a questionnaire, to collect data from a sample of head teachers and teachers within a large population of head teachers and teachers in public primary schools in Anambra State. Information retrieved from the sample of head teachers and teachers was thereafter analyzed using a statistical tool in other to generate data and draw generalization given based on the findings. Population of the study comprised 1,067 head teachers and 8,396 teachers from 1,067 public primary schools within the 6 education zones in Anambra State. Sample of the study consisted of 633 respondents which included 213 head teachers and 420 teachers from 213 primary schools selected at 20% and 5% from the entire head teachers and teachers population using the

proportionate stratified random sampling technique. To draw the sample, both the entire population of head teachers and teachers were stratified according to the six education zones, thereafter, 20% of the head teachers and the primary schools population together with 5% of the teachers'population were proportionately and randomly selected using the technique. A 24-item questionnaire titled "Managing Children Creativity for National Development Questionnaire (MCCNDQ)" developed by the researchers and structured on a 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was used for data collection. Two experts from Educational Management and Policy Department, and one expert from Educational Foundations Department (Measurement & Evaluation expert), Faculty of Education, Nnamdi Azikiwe University validated the questionnaire. The experts determined the face and content validity of the questionnaire to make some necessary corrections on few items on the instrument and which were equally incorporated before the final distribution of the questionnaire.

Reliability of the questionnaire was established through a pilot test using a sample of 4 head teachers and 20 teachers selected from four public primary schools in Enugu State. The scores obtained after the pilot-test were computed using Cronbach Alpha statistics which gave internal consistency reliability value of 0.85, 0.82 and 0.87 for each of the three clusters respectively and summed up to yield an overall reliability value of 0.85, showing that the questionnaire was reliable for conducting the study. Method of data collection involved a direct and face to face contact, with the help of six researcher assistants and a teacher representative from each of the primary schools sampled in the study. In distributing copies of the questionnaire, both the researchers and research assistants met with one teacher who served as representative of the school sampled in the study. An on-the-spot method was employed as well, which enabled the researchers and the research assistants to meet the respondents, that is head teachers and teachers, in their respective primary schools to wait and collect the necessary information from them. These six research assistants were instructed on how to collect the necessary information from both the head teachers and teachers using the questionnaire. At first, the research assistants took permission from the head teachers before administering the questionnaire to them and the primary school teachers. Distribution of the questionnaire to the respondents took a period of one week. A total of 633 copies of the questionnaire were distributed to 213 head teachers and 420 teachers (that is, 633) and all of them were retrieved at a 100% rate of return. Data collated were analyzed using mean scores rated at 2.50 and standard deviation. The decision rule for taking decisions on the items on the questionnaire was that any mean score which rated at 2.50 and above was regarded to be in support of the statement and therefore termed as agree (A). Any mean score that rated below 2.50 was regarded as not in support of the statement and therefore termed disagree (D).

Results

Research Question 1: In what ways would the consistency in use of technological resources essential for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?

Mean Scores and STD (Standard Deviation) of Respondents on the Several Ways in which the Consistency in the use of Technological Resources Essential for Managing Children Creativity for National Development in COVID 19 Era for Re-Engineering Education at the Primary School Level in Anambra State

N = 633 (213 head teachers and 420 teachers)

S/N	Statements: Please determine several ways in which the use of technological resources are essential for managing children creativity for national development in the school	Head Teachers			Teachers		
		Mean Score	STD	Decision	Mean Score	STD	Decision
1.	The Internet is very useful in improving children creativity by increasing their problem-solving creativity for national development	3.28	0.75	**Agree**	3.04	1.10	**Agree**
2.	The use of tablets helps children to increase their manipulative creativity for national development	3.19	0.75	**Agree**	2.92	1.14	**Agree**
3.	Computer graphics provides teaching that enhances children creativity for national development	3.12	0.86	**Agree**	3.00	1.02	**Agree**
4.	Virtual reality helps to promote children artistic creativeness for national development	3.29	0.84	**Agree**	2.69	0.99	**Agree**
5.	The use of projectors would project the reality of lesson which increases children creativity for national development	3.27	0.74	**Agree**	3.23	0.85	**Agree**
6.	The use of such audio-visual like smart television, video games, movies, DVD and	3.09	0.95	**Agree**	3.02	0.94	

	video players etc would increase children creative and reflective thinking for national development						**Agree**
7.	Use of software engineering and applications would also assist to promote different aspects of children creativity in areas of literacy, numeracy, interactions and communication, etc for national development	3.31	0.77	**Agree**	3.00	1.09	**Agree**
Grand Mean and Standard Deviation Score		**3.22**	**0.81**	**Agree**	**2.99**	**1.04**	**Agree**

Analysis of data from Table 1 revealed that all the items from 1 to 7 of the of the respondents' responses (head teachers and teachers) were rated above 2.50 of the acceptable mean score to agree with the statements. None of the items were rated below 2.50 of the acceptable mean score by the head teachers and teachers in order to disagree with any of the statements by the respondents. However, the grand means of 3.22 with SD of 0.81; 2.99 with SD of 1.04 of both the head teachers and teachers indicated that they reacted positively in agreement with the statements indicating several ways in which the consistency in the use of technological resources essential for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.

Research Question 2: What are the various ways in which effective quality control measures required for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?

Mean Scores and STD (Standard Deviation) of Respondents on the Several Ways in which Effective Quality Control Measures are required for Managing Children Creativity for National Development in COVID 19 Era for Re-Engineering Education at the Primary School Level in Anambra State

N = 633 (213 head teachers and 420 teachers)

S/N	**Statements: Please determine several ways in which effective quality control measures are required for managing children creativity for national development in**	**Head Teachers Mean Score**	**STD**	**Decision**	**Teachers Mean Score**	**STD**	**Decision**

	the school						
8.	Consistency and efficiency in supervision of instructions in the primary schools for enhancement of children creativity for national development	3.46	0.65	**Agree**	3.09	1.08	**Agree**
9.	Promoting quality evaluative and assessment procedures that will significantly impact on children creativity for national development	3.38	0.67	**Agree**	3.04	1.08	**Agree**
10.	Quality control of children enrolment in the primary school to maintain actual class sizes for portion of children creativity for national development	3.34	0.76	**Agree**	2.82	0.98	**Agree**
11.	Reviewing of the present primary school curriculum for improvement of children creativity for national development	2.03	1.10	**Disagree**	1.94	1.11	**Disagree**
12.	Establishment of a National Quality Framework for primary schools for promotion children creativity for national development	3.44	0.67	**Agree**	3.00	1.06	**Agree**
13.	Provision of quality control benchmarks for primary schools for enhancement of children creativity for national development	3.36	0.81	**Agree**	3.22	0.89	**Agree**
14.	Improving the use of practicals in teaching and learning process for promotion children creativity for national development	3.17	0.89	**Agree**	3.20	0.89	**Agree**

15.	Allowing participatory decision-making through active involvement all stakeholders including children in order to make positive impact on children creativity for national development	3.39	0.67	**Agree**	3.08	0.99	**Agree**
16.	Creating a supportive learning environment that will increase children creativity for national development	3.27	0.88	**Agree**	2.98	0.93	**Agree**
17.	Change in teaching methodologies that would make significant impact on children creativity for national development	3.25	0.88	**Agree**	2.95	0.92	**Agree**
18.	Establishment of quality control department or units in primary schools which will ensure that excellent standards are maintained in order to safeguarded children creativity for national development	3.23	0.80	**Agree**	3.21	0.85	**Agree**
Grand Mean and Standard Deviation Score		**3.21**	**0.90**	**Agree**	**2.96**	**1.04**	**Agree**

Analysis of data from Table 2 revealed that items 8 to 10 and 12 to 18 of both the head teachers and teachers responses were rated above 2.50 of the acceptable mean score to agree with the statements. Except for only item 11 which was rated below 2.50 of the acceptable mean score by the head teachers and teachers in order to disagree with the statement. However, the grand means of 3.21 with SD of 0.90; 2.96 with SD of 1.04 of both the head teachers and teachers indicated that they reacted positively in agreement with the statements showcasing several ways in which effective quality control measures are required for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.

Research Question 3: What are the various ways through which adequate teacher motivation are important for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State?

Mean Scores and STD (Standard Deviation) of Respondents on the Several Ways through which Adequate Teacher Motivation are Important for Managing Children Creativity for National Development in COVID 19 Era for Re-Engineering Education at the Primary School Level in Anambra State

N = 633 (213 head teachers and 420 teachers)

S/N	Statements: Please determine several ways through which adequate teacher motivation are important for managing children creativity for national development in the school	Head Teachers			Teachers		
		Mean Score	STD	Decision	Mean Score	STD	Decision
19.	Constant and adequate training and retraining of teachers will motivate them to explore certain skills that will impact on children creativity in the classroom for national development	3.37	0.66	**Agree**	3.32	0.66	**Agree**
20.	Good salary coupled with adequate remunerations such as fringe benefits, incentives, reward, etc, will support likewise encourage teacher work in the classroom that will make positive impact on children creativity for national development	3.39	0.67	**Agree**	3.37	0.66	**Agree**
21.	Conducive learning environment highly promoted through school leadership support in the school enhances children creativity for national development	3.49	0.63	**Agree**	3.20	0.64	**Agree**
22.	Intangible motivators such as teacher recognition, freedom and autonomy will aid to strengthen their work in the classroom which will	3.32	0.69	**Agree**	3.32	0.64	**Agree**

	significantly influence children creativity for national development						
23.	Allowing teachers to actively participate in decision making processes of the teaching-learning activities would motivate them to make contributions that will improve children creativity in the classroom for national development	3.38	0.69	**Agree**	3.36	0.69	**Agree**
24.	Strengthening collaborations and teambuilding among teachers has great significance on engaging in activities that will sustain in building children creativity for national development	3.11	0.89	**Agree**	3.28	0.73	**Agree**
Grand Mean and Standard Deviation Score		**3.35**	**0.72**	**Agree**	**3.31**	**0.67**	**Agree**

Analysis of data from Table 3 revealed that all the items from 19 to 24 of both the head teachers and teachers responses were rated above 2.50 of the acceptable mean score to agree with the statements. None of the items rated below 2.50 of the acceptable mean score in order to disagree with the statements. However, the grand means of 3.35 with SD of 0.72; 3.31 with SD of 0.67 of both the head teachers and teachers indicated that they reacted positively in agreement with the statements indicating several ways through which adequate teacher motivation are important for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.

Discussion of Findings

Findings of the study revealed the various ways of managing children creativity for national development in COVID 19 era through re-engineering of education at the primary school level. It was found out that the use of technological resources was essential for managing children creativity for national development in the primary schools.

Technological resources such as the Internet are very useful in improving children creativity by increasing their problem-solving creativity for national development. The use of tablets helps children to increase their manipulative creativity for national development. Computer graphics provides teaching that enhances children creativity for national development. Virtual reality helps to promote children artistic creativeness for national development. The use of projectors would project the reality of lesson which increases children creativity for national development. The use of such audio-visual like smart television, video games, movies, DVD and video players etc would increase children creative and reflective thinking for national development. Use of software engineering and applications would also assist to promote different aspects of children creativity in areas of literacy, numeracy, interactions and communication, etc for national development. The finding corroborates and agrees with Fitriah (2018) study which found out that teachers could utilize a wide range of technological tools in their creative practices, such as a computer, mobile phone, Internet, LCD projector, and videos, among others. The implementation of these technological tools has different functions on both teachers and students creativity. For example, technology helps transfer their creativity into reality, makes the activities more authentic, and provides teaching materials on various topics. The Internet, interestingly, was the least common technology used in the classroom. Although the teachers believe that the Internet helps transform their creativity into reality, they did not use the Internet live in the classroom. They used the Internet as part of the preparation process leading up to doing the actual classroom activities. Some teachers, for instance, noted that when they did a 'class debate' or a class presentation on 'virtual travelling'; they had students use the Internet to search for information in advance, and directed them on how to search and what information they needed for that activity. In these cases, the Internet does the actual process of searching for information and teachers are able to apply the activities because of the existence of the Internet. Thus, the Internet has an important part in building teachers' creativity which functions as a tool to create a real situation and to find authentic information. In this case, by using technology in their lesson planning, it helps transfer the teachers' creativity into reality, makes the activities more authentic, and provides teaching materials on various topics. However, the implementation of the technology will be meaningful or effective if the teachers know how to integrate technology into classroom activities.

The use of technology enables and encourages teachers to become more creative in their language teaching when there is a confluence of other variables such as teachers' willingness to learn, students' participation, frequent interaction and cooperation. Fautley and Savage (2007) study believe that the application of technology can affect the ways teachers and students are able to work in educational activities. In this case, technology has potential to transform teachers and students mind views (Charlile& Jordan, 2012) as it can open up new and authentic ways of being creative due to the features of information

technology it has, including provisionality, interactivity, capacity, speed, and automatic functions (Loveless, 2002). The type of technology the teachers used in the study of Fitriah (2018) assisted them to improve their communication skills and discussion or they use it to create authentic situations. This finding, particularly in the use of technology for creating authentic situations, confirmed the results of Chao's study (2009). Chao also identified that teachers utilized Internet technology to create authenticity in the learning context, for example, using real-world tools (YouTube, movies, videos, Wikispaces), assigning an authentic task and allowing learners to work on projects. The study revealed that the use of technology provides refreshing and varied context to make meaningful and enjoyable learning. Teachers used the Internet as part of the preparation process towards the actual practices. It is a good example of displaying how creativity involves the conceptualization and manipulation of ideas, and technology assists students in relation to data manipulation, communication, collaboration, and self-expression (Charlile& Jordan, 2012). Richards and Cotterall (2016) state that the creative use of technology in the classroom can support the development of imagination, problem-solving, and risk-taking on the part of teachers and students. The example above shows the importance of technology to support teachers' creativity. Also, if the teachers are able to explore their creativity, there is the possibility that the students will be creative. Students' creative abilities are most likely developed in an atmosphere in which teachers' creative abilities are properly engaged (Jeffrey & Craft, 2004), and the use of technology is particularly valuable in enhancing 'small c' creativity. This is because technology can promote individual creativity by providing an easy way to transform an idea into reality (Charlile& Jordan, 2012; Fautley & Savage, 2007). The results of this present study therefore, indicates a positive response towards the use of technology in building children creativity at the primary school for national development which is equally a means of re-engineering primary education in Anambra State. This means that technology could transform children knowledge. However, as noted by the head teachers and teachers in this present study, the consistency in use technological resources could not replace the teacher's job, technology helped and facilitated the teaching-learning process with the teacher as the main actor. As stated by Saljo (2010), technology is not an 'independent variable' that can be integrated into a system to enhance learning. Technology does not provide ideas; technology can complement skills by providing a means of experimentation and exploration (Charlile& Jordan, 2012).

It was further revealed through the finding of this study, several ways in which effective quality control measures are required for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State. This effective quality control measures includes consistency and efficiency in supervision of instructions in the primary schools for enhancement of children creativity for national development. Promoting quality evaluative and assessment procedures that will significantly impact on children creativity for national development. Quality control of

children enrolment in the primary school to maintain actual class sizes for portion of children creativity for national development. Establishment of a National Quality Framework for primary schools for promotion children creativity for national development. Provision of quality control benchmarks for primary schools for enhancement of children creativity for national development. Improving the use of practicals in teaching and learning process for promotion children creativity for national development. Allowing participatory decision-making through active involvement all stakeholders including children in order to make positive impact on children creativity for national development. Creating a supportive learning environment that will increase children creativity for national development. Ensuring that there is change in teaching methodologies that would make significant impact on children creativity for national development. Establishment of quality control department or units in primary schools which will ensure that excellent standards are maintained in order to safeguarded children creativity for national development. This finding equally agrees with Abosede (2017) study which found out several ways in which effective quality control measures can be utilized to promote children creativity in the primary schools. These includes application of effective policy framework for education, through effective supervision, curriculum review, establishment of a National Quality Framework for education, and provision of benchmarks for quality control of education through various means such as Children should be able to complete their jobs and work with others, and have a good attitude toward honest occupations. Children should have a learning enthusiasm, love of reading and self-development. Children should have healthy habits, and good physical and mental health. Children should have a sense of aesthetics and dispositions for arts, music and sport. Teachers should have an ability to manage effective teaching-learning, especially child-centred instruction. Teachers should have virtues, morality, degrees/knowledge and competence relevant to their responsibilities; maintain steady self-development; and be able to get along with communities. A sufficient number of teachers should be available. Educational institutions should have educational administration and management with school-based indicators. Educational institutions should have organizational and structural arrangement, administrative systems and organizational development that are holistic and systematic. Educational institutions should have learner oriented curricular arrangements and learning process. Administrators should have virtues, morality, leadership and competence in educational administration and management. Educational institutions should cooperate with families, religious organizations, academic institutions and public and private organizations to develop learning paths in communities. Educational institutions should provide support and use local learning resources and wisdom, among others.

The finding of this study however indicated several ways through which adequate teacher motivation are important for managing children creativity for national development in COVID 19 era for re-engineering education at the primary school level in Anambra State.

This includes that adequate teacher motivation through constant and adequate training and retraining of teachers will motivate them to explore certain skills that will impact on children creativity in the classroom for national development. Good salary coupled with adequate remunerations such as fringe benefits, incentives, reward, etc, will support likewise encourage teacher work in the classroom that will make positive impact on children creativity for national development. Conducive learning environment highly promoted through school leadership support in the school enhances children creativity for national development. Intangible motivators such as teacher recognition, freedom and autonomy will aid to strengthen their work in the classroom which will significantly influence children creativity for national development. Allowing teachers to actively participate in decision making processes of the teaching-learning activities would motivate them to make contributions that will improve children creativity in the classroom for national development. Strengthening collaborations and teambuilding among teachers has great significance on engaging in activities that will sustain in building children creativity for national development. This finding corroborates and concurs with Unsworth (2001) study which found out that contributory creativity can be shown when teachers are motivated to work in teams and try to solve problems beyond the classroom. Collaboration, teamwork, shared responsibility and commitment are associated with teacher motivational variables that enhances contributory creativity (Unsworth, 2001). Proactive creativity occurs when individuals, driven by internal motivators, actively search for problems to solve. Proactively creative teachers use their personal creativity as the key resource for improving educational practice (Unsworth, 2001). Lapenienea and Dumciene (2014) confirmed in their study that extrinsic motivation impacted on teachers creativity that improve students learning and creativity for national development. Manyara and Murungi (2018) study found out that teachers need motivation for them to use play as a medium of instruction. There are a number of motivators that can increase the teachers' motivation to use play as a medium of instruction and participate in children's play and creativity such as good salary, good management, staff training and personal convenience. Hence, all the findings of this present study showcases that there is the need to show priority attention towards re-engineering education at the primary school level for managing children creativity for national development.

Conclusion

Managing children creativity at the primary education level is very crucial for a sustainable national development especially in the COVID 19 era. When children creativity are highly developed, they make significant impact and positive contributions towards national development. Given the present poor situation of many primary schools in Anambra State especially and beyond, achieving this process seems very difficult, therefore, calling on absolute re-engineering of education at the primary schools level. Therefore, re-engineering education at the primary school level attracts attention to some changes in different aspects affecting teaching and learning which includes the adequate use of

technological resources, adopting effective quality control measures, likewise, making provisions for adequate teacher motivation; which are all essential and important for managing children creativity for national development in COVID 19 era and re-engineering education at the primary school level in Anambra State. Although, it was discovered in this study that priority interest and attention have not been given to all these aspects in the primary schools, however, the various ways of managing children creativity for national development in COVID 19 era through re-engineering of education at the primary school level were discovered through the findings of the study.It is upon this benchmark that recommendations have been made below.

Recommendations

From the findings of this study, the following recommendations have been proffered:

1. The State government should support the funding of primary education in Anambra State through adequate budgetary allocation and financial assistance from the private sector, in order to encourage the use of technological educational resources such as internet, computers, tablets, computer graphics, among others, which is essential and necessary for managing children creativity for national development in COVID 19 era and for re-engineering education at the primary school level in Anambra State.
2. Adequate considerations should be given to the establishment of effective quality control measures such as consistency and efficiency in supervision of instructions in the primary schools, promotion of quality evaluative and assessment procedures, quality control of children admission and enrolment in the primary schools, among others, by the Anambra State Universal Basic Education Board (ASUBEB), which are required for managing children creativity for national development in COVID 19 era and also, for re-engineering education at the primary school level in Anambra State.
3. The State government and Anambra State Universal Basic Education Board (ASUBEB) should ensure that adequate teacher motivation is highly and constantly propagated through constant and adequate training and retraining of teachers, good salary/pay coupled with adequate remunerations and conducive learning environment, among others, which are all important for managing children creativity for national development in COVID 19 era and for re-engineering education at the primary school level in Anambra State.

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