

NCE CURRICULUM IMPLEMENTATION FOR THE ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT 4C USING THE NCE QUALITY INDICATORS

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ABSTRACT

The study examined the relationship between The NCE Curriculum Implementation and the Achievement of Sustainable Development Goal 4c in the South-West of Nigeria. It raised and answered the research question and formulated the hypothesis. A survey design was used on the study population of 2702 across 16 colleges of education in South-West Nigeria. The study sampled 735 lecturers and 19 deans. Three research instruments were used: a questionnaire, interview, and checklist. These instruments were validated using the face and content technique, while a one-shot test reliability technique was used to determine the internal consistency. 735 copies of the questionnaire were distributed, and 710 instruments were returned and analysed. Descriptive and inferential statistics were used to analyse the data collected from the field with a 96.6% return rate. The study's findings showed that the NCCE Quality Indicators for the NCE Programme could predict the attainment of the SDG 4c in colleges of education in South-West Nigeria. The study resolved the need for administrators of Colleges of Education in South-West Nigeria to devise techniques for efficiently monitoring academic and non-academic activities within their institutions to improve their functionalities.

KEYWORDS: Teacher Education, Curriculum Implementation, NCCE Quality Indicators Sustainable Development Goal 4C.

1. INTRODUCTION

On 25th September 2015, 193 countries of the United Nations (UN) General Assembly adopted the 2030 Development Agenda titled "Transforming our world: The 2030 Agenda for Sustainable Development", with 169 targets to be achieved by 2030. These 17 Goals are built on the Millennium Development Goals' successes and include new areas such as climate change, economic inequality, innovation, sustainable consumption, peace, and justice, among other priorities. These goals are blueprints developed to attain a better and more sustainable future. The plans are interconnected – oftColleges of Education in Nigeria offer teacher education, which is vital in producing qualified instructors as teachers in primary and junior secondary schools.

The teacher education world's concern is the training and preparing would-be teachers for best practices in curriculum instructional delivery. Ekpiken and Ukpabio (2014) posit that teacher education is a specialised area of training, with policies and procedures designed to equip prospective teachers with knowledge, attitudes, behaviours, and skills required to perform in the classroom, the school and the wider society. Ogunyinka, Okeke, and Adedoyin (2015) also refer to Teacher Education as the professional education of teachers towards the attainment of attitudes, skills and knowledge which are considered desirable to make them efficient and effective in their work, following the need for a given society at any point in time. It includes training and education occurring before service commencement (preservice) and during service (in-service or on-the-job). This task can only be performed through programmes run by higher educational institutions such as universities, faculties and colleges of education saddled with teacher education's responsibilities in Nigeria. These higher educational institutions are established to develop and prepare prospective teachers for the education system. The Nigerian government addresses quality factors in teacher education through its agencies (National Commission for Colleges of Education and National Universities Commission). One of the quality indicators listed by the government regulatory agency (NCCE) is curriculum implementation.

Curriculum implementation is essential in higher education so that graduates can be self-reliant, stimulate the economy, and be enabled without relying on the government to supply white-collar employment. The curriculum can be defined as the planned learning experiences offered to a learner within a school system. According to Offorma (cited in Ogar and Awhen, 2015), the curriculum comprises three components: the programme of studies, the schedule of activities, and guidance. Offorma further defined the term curriculum as the blueprint or instrument by which the school seeks to translate the values of the society in which it operates into reality. According to Nwakpa (2017), the curriculum is the overall learning experiences and intended learning outcomes offered to the learners within the school's system, making it the tool for achieving educational aims, goals and objectives.

The term curriculum implementation has been defined in different ways by different scholars. According to Afangideh (2009) (as cited in Ogar & Awhen, 2015), curriculum implementation is the active participation of students in scheduled educational opportunities. According to Mkpa (2007) (as cited in Ofor-Douglas, 2020), curriculum implementation is responsible for transforming curriculum materials into the operational curriculum through the collaborative efforts of learners, instructors, and other stakeholders (like librarians, laboratory attendants, etc.) away from the curriculum. Curriculum implementation, according to Oviawe (2017), is the process of putting all that has been planned as a curriculum document into practice in the classroom through the combined effort of the teachers, learners, school administrators, parents, as well as interaction with physical facilities, instructional materials, psychological and social environment. This integrates the structured curriculum into the functional curriculum, also known as the curriculum document's implementation. In the context of higher education, this is the united effort of teachers and students in Colleges of Education to produce valuable members of society.

The transmission of the organised learning opportunities, the resource availability to accomplish its goals correctly, and the implementation of the plan in the classroom environment where teacher-student interactions occur demonstrates that the learners must apply actual classroom instruction that would impact society. Curriculum implementation is the process of putting all that has been planned as a curriculum process into practice in the classroom through the combined efforts of teachers, students, school administrators, parents, and the interaction with physical facilities, instructional materials, psychological and social environments (Onyeachu, 2008 as cited in Ofor-Douglas, 2020). Implementing the curriculum involves using school facilities and appropriate educational strategies and methodologies. The quality of a society's curriculum implementation is the foundation of its political, economic, scientific, and technological health. It is commonly stated that no society can surpass the quality of its educational system. According to Wogu, (2017) (as cited in Ofor-Douglas, 2020), like most nations, Nigeria has selected education as the premier tool for accomplishing natural objectives, and this purpose can only be achieved through a well-designed and implemented curriculum.

Actualising a well-designed and stated curriculum through practicality and dedication to large-scale implementations should be a fundamental challenge for the Nigerian education sector. Some researchers (Nwaokuhga & Ezeugwu, 2017; Ofor-Douglas, 2020) have highlighted that many curricular suggestions or conceptualised curricula have become dormant since they were not implemented. Even if a well-designed curriculum is well designed, it will be irrelevant if not executed. There are well-thought-out and valuable curricula in Nigeria that may have collapsed and failed to provide the desired results due to bad execution. No matter how carefully a curriculum is designed, its effective execution is a prerequisite for achieving the targeted educational goals. In Nigeria, it appears that many outstanding curriculum blueprints and other educational policies are compromised during the implementation phase. Even when measures have been made to ensure actual operation, curricula have not given satisfactory and recommendable results; hence, parents and important others are dissatisfied with the educational system's poor performance, which is characterised by crises and the curriculum's abject failure.

Despite the purported progress toward the Millennium Development Goals, the sustainable development goals have assumed a pivotal place today. Sustainable Development Goal 4 seeks to ensure inclusive, equitable, and high-quality education for everyone and to foster lifelong learning opportunities. Despite the universal character of the aims, we need formal and non-formal education to end poverty and hunger, promote lifelong education, ensure healthy lives and well-being, and encourage sustainable use of the planet's ecosystems. Education for Sustainable Development (ESD) takes this shape. However, Nigeria's inability to participate in the contemporary international effort to attain sustainable development goals is probably attributable to its lack of access to high-quality education. Implementing the teacher education curriculum in Colleges of Education seems dysfunctional, the main concern affecting the nation today. According to Adegami and Adesanmi (2018), the significance of SDG4 lies in the fact that quality education is a requirement for society's

transformation. Education is about acquiring necessary skills and gaining confidence to reach one's full potential. Through education, knowledge can also be inculcated, especially in protecting and freeing people from poverty, labour, exploitation, hazards, and disease.

According to Osunwusi (2020), there is growing awareness that education can play a significant role in tackling the challenges of the 21st century as education has been recognised as having the potential to promote and assuring environmental, economic, and social sustainability. Education is, therefore, a crucial instrument for accomplishing Global Goals when it is packaged and appropriately implemented. Poverty, violent conflict, and other crises prevent many youngsters from attending school. Children from the poorest homes are four times more likely to be out of school than their wealthier counterparts.

SDG Target 4c: Increase the Supply of Qualified Teachers

By 2030, substantially increase the supply of qualified teachers, including international cooperation for teacher training in developing countries, especially the least developed countries and Small Island Developing States.

Curriculum implementation seems to play a significant role in attaining Sustainable Development Goal 4c in Colleges of Education, Nigeria. The NCCE curriculum appears to be implemented on inert and dysfunctional practices and strategies. Implementing the teacher education curriculum in Colleges of Education seems dysfunctional. Ossai and Nwalado (2012) affirm that the teacher education curriculum has not adequately included the value of work dignity and self-discipline to promote new attitudes and culture to attain Sustainable Development Goal 4c.

The rising diversity of the Nigerian people due to social progress has negatively impacted the implementation of the teacher education curriculum at the tertiary level. Unfortunately, Izuagba and Afurobi (2009) (as cited in Ogar & Awhen, 2015) indicate that in the last two decades, public and private educational institutions have found a significant percentage of graduate teachers of these institutions to be significantly inadequate in practical and professional skills. In reality, Colleges of Education in Nigeria had poorly supplied the society's requirements for the needed teachers. Today, there is an outcry regarding the quality of teachers produced by higher education institutions since their work performance is evidence of curriculum implementation failure. This is because the learner's proper conduct, behaviour, and performance demonstrate the effectiveness of a programme's practical translation. This has produced a generation of unemployed graduate teachers, which has become one of the most severe challenges confronting Nigerian youths.

The study aimed to achieve the following objectives: assess the extent of curriculum implementation at the Colleges of Education in Southwest Nigeria; and determine the extent of achieving the Sustainable Development Goal 4C in Colleges of Education in Southwest Nigeria. Based on this, the study raised the following questions:

1. In what way does curriculum implementation relate achievement of Sustainable Development Goal 4c?
2. What is the extent of Sustainable Development Goal 4c achievement at the Colleges of Education in South-West Nigeria?

The following null hypothesis was formulated to guide the study:

H₀₁: There is no significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c at the Colleges of Education in South-West Nigeria.

2. RESEARCH METHODOLOGY

A descriptive survey research design was used for the study. This allows sequential collection and analyses of quantitative and qualitative data to interpret the association between curriculum implementation and achievement of Sustainable Development Goal 4c at the Colleges of Education in South-West Nigeria. The population for this study was 2702 lecturers in 16 colleges of education, South-West, Nigeria. These are federal, state, and private Colleges of Education that have been in operation for ten years and above. A proportionate stratified random sampling technique was used to select 730 lecturers from 14 Colleges of Education in four states (Lagos, Ogun, Oyo and Ondo). Lagos State has seven (7) Colleges of Education and 819 lecturers. Ogun State has three (3) Colleges of Education and 614 lecturers. Ondo State has two (2) colleges of education and 371 lecturers, and Oyo State has four (4) Colleges of Education and 898 lecturers. The sample of this study was 730, which was 27% of the total population.

This study used a self-structured "Curriculum Implementation and SDG4C Assessment Questionnaire". Section A of the questionnaire was structured in line with a five-point Likert-type scale of Very Good, Good, Fair, Poor and Very Poor. Section B was structured to be a four-point modified Likert-type scale of Very High Extent

(VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE). Section C was structured on the Sustainable Development Goals (SDG) 4C. Three (3) experts, two (2) from the Department of Curriculum and Teacher Education and one (1) from Measurement and Evaluation, all in the Faculty of Education, Abia State University, Uturu, validated the instrument. The modifications and corrections made by the validators were strictly adhered to in producing the final draft instruments. The instrument was administered once to 20 lecturers who were not part of the study at Michael Otedola College of Primary Education in Lagos State. The reliability of the instruments was determined using the one-shot test reliability technique. Cronbach Alpha coefficient was used to check the internal consistency reliability, and a coefficient of 0.764 was obtained, which implied that the instruments were adequate for the research.

Direct delivery and retrieval methods were used for questionnaire administration. The researcher administered the research instrument (questionnaire) with six (6) research assistants within three weeks. The research assistants were briefed on how to go about the research processes. The researcher and her assistants administered 730 copies of the questionnaire. However, 710 instruments were filled correctly, returned, and used for analysis. This showed a 97.26% return rate. The data acquired from the field were analysed using Statistical Package for the Social Sciences (SPSS) software. Mean and standard deviation were used to answer the study's research questions, and Pearson Product Moment Correlation was utilised to test the study's hypothesis.

Result Presentations

Answer to Research Questions

The research questions raised were answered as follows:

Research Question One:What is the relationship between curriculum implementation and achievement of Sustainable Development Goal 4c?

Table 1: Descriptive Analysis of Statement on Curriculum Implementation

S/N	Statements	Mean	SD
1.	The learner-centred approach used for curriculum implementation programmes at the college is	3.75	0.80
2.	Time-tabling system of time allocation of courses and examinations at the college is	3.85	0.87
3.	The use of ICT gadgets for teaching-learning processes is	3.26	1.01
4.	The procedure used for students' teaching practice is	3.89	0.85
5.	The modalities used for distribution between theory and practices is	3.65	0.85
6.	The structuring of curriculum programmes at the college is	3.81	0.80
7.	The progression in the implementation of curriculum programmes is	3.79	0.79
8.	The institution's coverage of minimum content following the NCCE minimum standards is	3.94	0.84

Table 1 shows participants' responses to: The learner-centred approach used for curriculum implementation programmes at the college (M=3.75>3.00); the Timetabling system of time allocation of courses and examinations at the college (M=3.85>3.00); The use of ICT gadgets for the teaching-learning processes (M=3.26>3.00); the procedure used for students' teaching practice (M=3.89>3.00); the modalities used for distribution between theory and practices (M=3.65>3.00); the structuring of curriculum programmes at the college (M=3.81>3.00); the progression in the implementation of curriculum programmes (M=3.79>3.00); the institution's coverage of minimum content following the NCCE minimum standards (M=3.94>3.00).

Research Question Two

What is the extent of Sustainable Development Goal 4c achievement at the Colleges of Education in South-West Nigeria?

Table 2: Descriptive Analysis on Statement on achievement of Sustainable Development Goal (SDG) Goal 4 -SDG 4c

S/N	Statement	Mean	SD
1.	The acquisition of life skills training by the student-teachers at the college is	3.64	0.94
2.	The willingness to participate in the school professional development programmes by lecturers is	3.79	0.97
3.	The monitoring of lecturers' participation in professional development is	3.69	0.93
4.	The mentor-mentee programme initiated for the school lecturers is	3.52	0.99
5.	The on-the-job orientation programme provided for the newly employed college	3.55	1.01

	lecturers is		
6.	Access to online/virtual professional development programmes is	3.39	1.02
7.	Access to internationally sponsored training is	3.25	1.16
8.	The availability of school-based professional development programmes is	3.37	1.09
9.	The collaboration with international institutions on staff development is	3.11	1.19
10.	Access to international funding for professional development programmes is	3.04	1.28

Table 2 shows participants' responses to: the acquisition of life skills training by the student-teachers at the college ($M=3.64>3.00$); the willingness to participate in the school professional development programmes by lecturers ($M=3.79>3.00$); The monitoring of lecturers' participation in professional development ($M=3.69>3.00$); The mentor-mentee programme initiated for the school lecturers ($M=3.52>3.00$); The on-the-job orientation programme provided for the newly employed college lecturers ($M=3.55>3.00$); The access to online/virtual professional development programmes ($M=3.39>3.00$); The access to internationally sponsored training ($M=3.25>3.00$); The availability of school-based professional development programmes ($M=3.37>3.00$); The collaboration with international institutions on staff development ($M=3.11>3.00$); and the access to international funding for professional development programmes ($M=3.04>3.00$).

Test of Hypothesis

The research hypothesis formulated was tested using Pearson Product Moment Correlation statistical tool. The result is as follows:

Hypothesis One: There is no significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c at the Colleges of Education in South-West Nigeria.

Table 3: Relationship between Curriculum Implementation and Sustainable Development Goal-SDG 4c

Variable	Mean	SD	N	r-cal	p-value	Remarks	Decision
Curriculum Implementation	29.88	4.71	710	0.384	0.000	Significant	H0: Rejected
Achievement of Sustainable Development Goal 4c	70.22	14.80					

***Correlation is significant at a 0.05 level (2-tailed)**

Table 3 shows a positive correlation between curriculum implementation and achievement of Sustainable Development Goal 4c ($r=0.384$; $p<0.05$). This implies a significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c. Thus, the null hypothesis was rejected, which states no significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c.

3. DISCUSSION OF FINDINGS

Following statistical analysis of the data collected, the study's findings were discussed as follows:

The research question on the extent of Sustainable Development Goal 4c achievement at the Colleges of Education in South-West Nigeria shows that the study participants agreed that the acquisition of life skills training at the Colleges of education in South-West was good and appropriate. The study's finding was in line with the view of Aina, Abdulrahman and Ayodele (2020) that the life skills acquired by undergraduate students are appropriate to meet the needs of society. The study's findings also show that the willingness to participate in the school professional development programmes by lecturers; the monitoring of lecturers' participation in professional development; the mentor-mentee programme initiated for the school lecturers; the on-the-job orientation programme provided for the newly employed college lecturers; the access to online/virtual professional development programmes; the access to internationally sponsored training; the availability of school-based professional development programmes; the collaboration with international institutions on staff development; and the access to international funding for professional development programmes.

The study corroborates the survey of Hanachor and Wordu (2021), which states that the objectives of SDG4 can be achieved and sustained if stakeholders (educational authorities, institutions, teachers, community members, and government at all levels) can recognise that education is not only as a fundamental human right but also a vehicle for confronting the challenges facing societies and as a catalyst for sustainable development. Morton (2017)'s study also affirmed the findings of the study that the achievement of SDG 4 will help to end poverty, protect all that makes the planet habitable, and ensure that everyone enjoys peace and prosperity, now and in the future. Therefore, the nation should be committed to achieving Global Goals embodied in the UNESCO

Sustainable Development Goals, especially Goal 4C (SDG 4), which emphasises the production of quality teachers for lifelong learning.

Research hypothesis one shows that the null hypothesis, which states no significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c, was rejected. This implies a significant relationship between curriculum implementation and achievement of Sustainable Development Goal 4c at the Colleges of Education in South-West Nigeria. Previous studies corroborate the findings of the study. For instance, Ofor-Douglas (2020) affirms that proper curriculum implementation (in the following areas: teaching, research, dissemination of existing and new information, services to the community, skill development and a storehouse of knowledge) at the Colleges of Education helps to achieve lofty goals of the college of education. Wordu and Pepple (2018) aver that appropriate curriculum implementation practices enhance the achievement of sustainable development goals. Salami, Oladipupo, Oloyede and Adefioye (2019) found that effective compliance with curriculum implementation at the Colleges of Education enhances higher institutions' goals and objectives. Ndifon and Igwebuike (2019) agree with the study that the appropriate operationalisation of well-articulated ideas packed as theory and practice often determines tertiary institutions' goals and objectives.

Conclusively, the findings showed that effective implementation of teaching approaches, timetabling, use of ICT gadgets, procedures used for students' teaching practice, structuring and progression of the curriculum programmes, and coverage of minimum content by the NCCE minimum standards have an effect on the achievement of Sustainable Development Goal 4C at the Colleges of Education in South-West, Nigeria.

4. CONCLUSION

Every college of education in Nigeria strives to provide its students with a high-quality education to contribute to the nation's future growth and development. Colleges of education in Nigeria are the source of society's well-educated, knowledgeable individuals due to a correctly implemented curriculum. Curriculum implementation promotes educational objectives. Implementation of the curriculum is a crucial component of the curriculum process. Therefore, it is the foundation of any academic success or failure. However, Nigerian tertiary institutions' curricula are plagued by ineffective execution. The failure is attributable to both implementation inactivity and inadequate educational policies. Only via the established curriculum that promotes sustainable development in Nigeria will the educational goals entirely be realised.

The study concludes that achieving Sustainable Development Goal 4c at the Colleges of Education in South-West Nigeria is possible and imminent. The study further found that the curriculum implementation being the independent indicator significantly relates to achieving Sustainable Development Goal 4c and concludes the positive correlation with achieving the Sustainable Development Goal 4c.

Recommendations

Based on the study's findings, the following recommendations are offered:

1. Curriculum implementation policies should be continually improved to meet the demands of quality teachers. There should also be training and retraining programmes for academic staff to understand Nigerian university curricula.
2. In addition, the College of Education system should adopt a more innovative curriculum that will catalyse the nation's economic development and sustainability.
3. For the curriculum to be implemented effectively, Colleges of Education should be provided with the necessary materials at the appropriate time.
4. Several education policies, including the lecturers' emphasis on seminars and conferences, methodology, and the "customised" insufficient budget allocation to education, require a paradigm shift to result-oriented policies that would improve the deplorable state of curriculum implementation in the research area.
5. The philosophies and ideas of Sustainable Development Goal 4c should be included in the Nigerian Certificate in Education curriculum, and educational systems should relate to sustainability's features and problems.

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