

FEDERAL REPUBLIC OF NIGERIA



NATIONAL COMMISSION FOR COLLEGES OF EDUCATION ABUJA

NIGERIA CERTIFICATE IN EDUCATION MINIMUM STANDARDS FOR SCIENCES

2012 Edition



TETF PROJECT, 2012

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FOREWORD

The National Commission for Colleges of Education, NCCE, was established by an Act in 1989 as the third leg of the tripod of excellence in the supervision of tertiary education in Nigeria. Its mandate includes, inter alia, the laying down of Minimum Standards for all programmes of teacher education and accrediting their certificates and other academic awards. Since its inception, my Ministry has been pursuing very doggedly and supporting the Commission's goals of **quality assurance**. We shall not relent in our match towards the realization of the set goals of producing quality teachers for our rapidly expanding basic education sector.

In response to the transformation agenda of the present administration and the widespread criticism that the existing NCE programme is tunnel visioned, the NCCE has revised and updated the existing **NCE Minimum Standards** documents. New programmes have been added to address the existing teacher needs at the basic education level.

The new programmes are now more focused toward the attainment of **Education for All (EFA)** demands and **the Millennium Development Goals (MDGs)**. In addition to the existing two subjects' combination in NCE programme, which is suited for the preparation of the B.Sc. (Ed)/B.A (Ed) degree programmes, the new Minimum Standards document is now targeted at producing specialist teachers for:

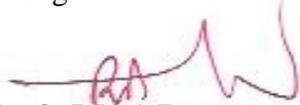
- (i) Pre-Primary Education or Early Childhood & Care Education,
- (ii) Primary Education,
- (iii) Junior Secondary Education,
- (iv) Adult and Non-Formal Education,
- (v) Special Needs Education.

Thus, for those who are aspiring to go further, the new programmes are suited for B.Ed degrees. The new programmes are level specific. This simply means that we are beginning to prepare specialized teachers for each of the five levels of basic education listed above.

In view of the fundamental changes in teacher education that the above new programmes represent, an **Implementation Framework** to guide NCE-awarding institutions has been produced to accompany the revised and expanded Minimum Standards documents. The Framework sets standards for curriculum practice. It provides the background that has informed the development of the new teacher education programmes and also gives practical guidelines as to what is expected to be done by administrators, teachers and students in the process of implementing the curriculum. It is believed that this, along with other innovative ideas that have been woven in, will ensure that there is uniformity in practice across all the NCE-awarding institutions.

I commend the efforts of NCCE in its timely response to challenges and its bid to raise the quality of our pre-service teachers.

I congratulate the Executive Secretary and his staff for accomplishing this national assignment.


Prof. (Mrs.) Ruqayyatu A. Rufa'I, OON
Honourable Minister of Education
Federal Republic of Nigeria

February, 2013

INTRODUCTION

In the last five years, the NCCE has been involved in a number of activities (including conferences, workshops, critiquing sessions, etc.) to address the discrepancy between teacher certified qualifications and the quality of their on-the-job performance. It has become clear that a major part of the problem has been an observed dislocation of the existing NCE programme from its service sector.

The mandate of the teacher training programme at the NCE level, which is the recognized minimum teaching qualification in Nigeria, is to produce quality teachers for the Basic Education sub-sector. The Basic Education sub-sector encompasses the following categories of education:

- (i) Pre-Primary Education or Early Childhood & Care Education,
- (ii) Primary Education,
- (iii) Junior Secondary Education,
- (iv) Adult and Non-Formal Education,
- (v) Special Needs Education.

Each of these categories of education has an approved national curriculum which is distinctive and extensive in addition to those of the Senior Secondary Education (which remain content specific). Thus, if the NCE is to remain relevant to the sub-sector it is intended to serve, it must do more than it is presently doing. It must prepare teachers with knowledge and skills required to teach effectively at the different levels and areas of the basic education programme, without being oblivious of the needs for higher education of the beneficiaries. The new Minimum Standards document is the output of the thinking in this regard.

The emergent Minimum Standards documents, especially those for the Vocational and Technical education programmes, are accompanied with Curriculum Implementation Guidelines to assist institutions and especially the educators, in the implementation of the new ideas.

While the debates on the focus of the new Minimum Standards document were going on, the Commission was also engaged in a number of related activities. A separate group was engaged in the review of the methods of instruction. Another looked at how to provide an enabling child/learner friendly environment for our teachers and yet another reviewed the minimum professional standards for teacher educators.

The minimum standards for teacher educators define the minimum the educators should know and be able to do as well as their expected minimum dispositions towards their work, if they are to remain/progress in their career.

The need to review our system of evaluation to align with the new thinking was also recognized. Therefore, a new instrument, **Quality Assurance Toolkit**, that would address institutional evaluation as well as the needs of educators in the performance of their tasks, has been developed and circulated.

The revised Minimum Standards document has taken cognizance of these developments and has thus been expanded to meet the identified needs. It has also taken the advantage of the review exercise to update the minimum contents, using those provided in the Basic Education Curriculum. The document retains the present 2-subject combinations to allow for the

preparation of would-be teachers in the senior secondary school and as entry qualification into the B.Sc. (Ed)/B.A (Ed) programmes.

As can be inferred, considerable hard work has gone into these various documents and particularly, into the putting together of all these into the revised Minimum Standards documents.

I wish to acknowledge the contributions of our Development Partners. The COL and DFID, through the ESSPIN programme provided the initial impetus, technical assistance as well as materials that aided the development of the new Quality Assurance Toolkit. The Commonwealth of Learning (COL) also, assisted the Commission in mainstreaming the principles and methods of child-friendly schools into the NCE curriculum as well as built capacities of teacher educators in ICT. UNICEF must be commended for its assistance in the development of the curriculum for Early Childhood Care and Education (ECCE).

I also acknowledge the efforts of the Academic Programmes Department of the NCCE, which coordinated the various activities that led to the emergence of the revised NCE Minimum Standards documents for Colleges of Education and their sister institutions. In particular, I commend all those who contributed to the planning, writing, debating and critiquing of the documents. I should also thank the FCE (T) Potiskum that served as a guinea pig during the trial-testing stage of the Quality Assurance/ Accreditation Instrument.

Special thanks are also due to the Provost of FCE Zaria where the final review workshops for the new Minimum Standards for NCE and Pre-NCE programmes were held.

The production of these new Minimum Standards documents would not have been possible without the assistance of TET fund. This intervention is very much appreciated.

Finally, I appreciate the efforts of the Federal Government of Nigeria through the Honourable Minister of Education, **Prof. (Mrs.) Ruqayyatu A. Rufa'I, OON** for providing the much needed 'Federal Might' for the transformation of the education sector.

It is my fervent hope that all teacher training institutions for the Basic Education sub-sector will avail themselves with the opportunities offered by this revised **NCE Minimum Standards document**. With the provision of this document, the NCCE would henceforth be guided in its assignment, as the Commission goes round the Colleges of Education to ensure quality delivery and accreditation of our institutions and programmes.



Prof. M. I. Junaid
Executive Secretary
National Commission for Colleges of Education

February, 2013

ACKNOWLEDGMENT

The development and publication of this Specialist NCE Minimum Standards Document would not have been possible without the support and contributions of a number of individuals and organizations. The restructuring process, which entails a series of activities including experts meeting, stakeholders' consultative workshop and critique workshops were supported by funds provided by the Federal Government of Nigeria in our regular capital projects. The Department would like to acknowledge the importance of this support.

The Department would also like to acknowledge the contributions of the numerous resource persons who participated at the various stages of the restructuring process, and commend them for job well done. In the same vein, we acknowledge the support of the Provost of the Colleges of Education who either participated personally in the activities that culminated into this edition of the Specialist NCE Minimum Standards or sponsored their staff to make presentations and inputs during the development and critique exercise.

Finally, the Department would like to appreciate the efforts and support of the Management of the Commission under the leadership of the Executive Secretary, Prof. M.I. Junaid who provided us with academic leadership for restructuring and expanding NCE Minimum Standards in line with basic education programmes.



Dr. A.Y. Abdulkareem
Ag. Director
Academic Programmes Department

February, 2012