

**Education Sector Support Programme in Nigeria
(ESSPIN)**

Input Visit Report

Assessment of Teacher Development Needs

Report Number ESSPIN 304

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ESSPIN 0--	Programme Reports and Documents
ESSPIN 1--	Support for Federal Level Governance (Reports and Documents for Output 1)
ESSPIN 2--	Support for State Level Governance (Reports and Documents for Output 2)
ESSPIN 3--	Support for Schools and Education Quality Improvement (Reports and Documents for Output 3)
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Reports and Documents produced for individual ESSPIN focal states follow the same number sequence but are prefixed:

JG	Jigawa
KD	Kaduna
KN	Kano
KW	Kwara
LG	Lagos

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Acronyms and Abbreviations

EMIS	Education Management Information System
ESSPIN	Education Sector Support Programme in Nigeria
JSS	Junior Secondary School
LGAs	Local Government Authorities
NBS	Nigerian Bureau of statistics
STL	State Team Leader
SUBEB	State Universal Basic Education Board

Abstract

1. The terms of reference for the assignment are¹: to develop a workplan; design an assessment tool that can be used to assess a representative sample of primary and junior secondary school teachers currently employed in each of the four states; trial the instruments; train a team of enumerators to undertake and supervise the assessment exercise; field test and revise where necessary assessment instruments; enumerate and analyse the results; present a report to the States, including recommendations
2. The consultants visited the four states. A two day workshop attended by the reference group was held in each State. The research framework was validated and met the five criteria set by the consultant: that the conceptual framework for assessing the professional knowledge of teachers is applicable in Nigeria ; that the test items are reasonable; that the marking framework is fair; that the testing process is ethical and respectful of teachers as professionals; and that the findings are likely to be policy relevant.

Executive Summary

3. Reference groups had been established in each State. These were typically between 7 and 12 people from the various education sectors.
4. Two-day workshops were held in Kaduna, Kano, Jigawa and Lagos. Lists of attendees are attached in appendix 1.
5. The purpose of this visit was to meet with the established reference groups in each of four States and present workshops designed to:
 - Outline the conceptual framework for the assessment
 - Present and discuss test items on each test paper used in the Kwara study
 - Develop new test items
 - Present and discuss the marking scheme
 - Discuss the implications for the assessment for policy and strategies to improve the quality of education
6. The purposes outlined above were achieved in each State. When considering the potential policy relevance of the findings, the consultant presented the advantages associated with the assessment of the entire teacher population.

¹ These terms of reference apply to the test design consultant (Johnson) and vary slightly for the logistics consultant.

7. **The conceptual framework:** reference groups in each of the four states were in agreement with the conceptual framework and confirmed that it was appropriate for the State and the country as a whole.
8. **Test items:** The test items used in the Kwara study were discussed in detail in each State. The reference groups in each state confirmed that the test items constituted a reasonable assessment of teacher professional knowledge.
9. **The development of new items:** A number of new items were developed for the test of English Language
10. In each state the question of the sample size for the study arose. States approved the idea that in the first instance the study followed the sampling strategy adopted for the school observation studies.
11. In some states, examples of curriculum materials and textbooks were collected to aid in the design/adaptation of the assessment tools

Purpose of the Consultancy

12. The purpose of the consultancy is to design and undertake an assessment of primary and JSS teachers' subject and pedagogical knowledge in relation to the school curriculum, and identify areas needing remediation. The assessment would aim to enable teachers to be differentiated into three groups:
 - Those whose levels of knowledge of their subject and pedagogical skills is sufficiently high that they need only routine on-going professional development activities;
 - Those whose knowledge and skills fall below an acceptable standard but who could with additional support achieve a sufficiently high standard;
 - Those whose knowledge and skills fall so far short that they are unlikely to achieve a sufficiently high standard even with additional support.

Achievement of the terms of reference

TOR Tasks	Progress made and agreements reached (with whom)	Proposed/agreed follow up (by whom and when)
Develop a work plan for the assignment ²	An outline work plan to achieving the objectives of the study has been developed and agreed with the lead specialist	<p>Lead specialist to contact States and request that they assemble a working group made up of no fewer than 3 and no more than 10 people, preferably drawn from the Ministry, SUBEB, TEPO, the inspectorate, etc.</p> <p>The working group should be prepared to meet by beginning of July.</p> <p>A three to four day workshop is envisaged in each state in July.</p>
Design assessment tools that can be used to assess a representative sample of primary and junior secondary school teachers currently employed in each of the four states; trial the instruments	The assessment tools are completed and attached to this report in appendix 2.	<p>Test design consultant to produce test papers for trialling at the beginning of September 2009; Johnson, by 7th September</p> <p>Test papers to be printed (good photo copies) by 14th September; John Kay to follow up.</p>

² This TOR was achieved in March/April

		<p>Test papers to be approved by reference groups in each State. One day workshops to be arranged in period 14 to 18th September. Johnson to follow up with John Kay</p> <p>Presentation of study design and policy implications to High Level group in each State. Johnson to follow up with Kay.</p> <p>Pilot tests to take place in Abuja on 21st and 22nd September. Proposed sample of 40 teachers. Logistics to be arranged by Sergij Gabrscek.</p>
Field test and revise where necessary assessment instruments ³		
Train a team of enumerators to undertake and supervise the assessment exercise;		
Enumerate and analyse the results;		

³ The TORs that follow will be reported upon in successive reports.

Background

13. A study of teacher development needs in Kwara state found that the levels of teachers subject knowledge and pedagogical skills are low, and are largely responsible for poor pupil performance. Formal teacher qualifications are not necessarily a guide to competence.
14. The aim of the study is to assess levels of teacher knowledge and competencies in all five ESSPIN states. The assessment would aim to identify the development needs of teachers according to the following profiles:
 - Those whose levels of knowledge of their subject and pedagogical skills is sufficiently high that they need only routine on-going professional development activities;
 - Those whose knowledge and skills fall below an acceptable standard but who could with additional support achieve a sufficiently high standard;
 - Those whose knowledge and skills fall so far short that they are unlikely to achieve a sufficiently high standard even with additional support.

Findings and Issues Arising

15. As stated above, the consultants visited four states: Kaduna, Kano, Jigawa and Lagos and held meetings there to discuss the framework for the study and to validate the conceptual framework and agree the test items.
16. In Lagos the reference group agreed the framework for the study and validated the conceptual framework, test items, and marking scheme. During the second day of the workshop, samples of pupil's work (English Language exercise books) were collected from two schools. These materials were used for the development of new test items for the English subject paper and the Reading Comprehension (Lesson Preparation) test paper .
17. In Kano the reference group similarly agreed the framework for the study and validated the conceptual framework, test items, and marking scheme. Here again, during the second day of the workshop, samples of pupil's work (Social Studies exercise books) were collected from two schools. These materials were used for the development of new test items for the test paper on Classroom Administration.
18. In Jigawa the reference group there also agreed the framework for the study and validated the conceptual framework, test items, and marking scheme. During the second day of the workshop, samples of report cards were collected from two

schools. These materials were used for the development of new test items for the Classroom Administration test paper.

19. In Kaduna the reference group there also agreed the framework for the study and validated the conceptual framework, test items, and marking scheme. The materials collected in Lagos, Kano and Jigawa had been incorporated into new sample papers and considered by the reference group in Jigawa. Several minor revisions were made to the papers (mainly the new items that had been incorporated).

20. The conceptual framework for the assessment is attached.

Options and next steps

21. The next steps are set out in the table below (see footnotes, 7 to 11)

Tasks	May	June	July	August	September	October	November	December	January
Workplan	⁴								
Workshop preparation		⁵							
Workshops			⁶						
Trial				⁷					
							⁸		
								⁹	
									¹⁰
									¹¹

⁴ May: A workplan was developed and agreed in May (see previous visit report)

⁵ June: The conceptual framework for the study was finalised in June

⁶ July: 4 times 2 day workshops were held with reference groups in each State. The research framework was accepted, conceptual framework validated, test items agreed and marking scheme accepted.

⁷ August - September: Finalise layout of papers in preparation for trial; Trial Instruments, finalise papers, finalise marking schemes

⁸ November: Tests carried out in each state

⁹ December: Workshop in Abuja – training of markers (drawn from Abuja), marking

¹⁰ January: Preparation of data base

¹¹ January/February: Analysis and Report

Annex 1: Names of reference groups

ATTENDANCE SHEET FOR TEACHERS' ASSESSMENT TECHNICAL MEETING 9 TH – 10 TH JULY 2009						
S/N	NAMES	DESIGNATION	OFFICE ADDRESS	PHONE NUMBER	SIGNATURE	E-MAIL ADDRESS
1	Daramosu H. I.	Deputy Director	Lagos SUBEB	0802 811 3954		ronksdara@yahoo.com
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3	Oredugba D. B. (Mrs)	Director	Curriculum Ser. Dept.	0802 522 2608		dboredugba@yahoo.com
4	Osuntuyi O. O. (Mrs.)	Director	Inspectorate	0803 327 7594		Funkeosuntunyi51@yahoo.com
5	Adebisi O. O.	Director	Lagos SUBEB	0703 861 6943		oladeleadebiyi@rocketmail.com
6	Olaogun A. O. (Mrs.)	Director	BES	0802 318 7673		tounolaogun@yahoo.com
7	Layiwola, A. O. (Mrs.)	Consultancy Lagos		0805 546 1116		blayiwola2003@yahoo.com
8	Oyeyemi, O. W.	Director	TEPO	0802 873 5595		oyewoleoyeyemi@yahoo.com
9	Adebanjo I.M. (Mrs.)	Deputy Director	SUBEB	0708 642 8441		
10	Soname A. A. (Mrs.)	Director	Edu. Dist IV	0802 314 7535		derinsoname56@yahoo.com
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12	Abiodun Fowomola	A & E Specialist	ESSPIN	0803 361 9636		abiodun.fowomola@esspin.org
13	Lawal Nurudeen	Education Quality	ESSPIN	0805 569 0018		
14	Sergil Gabasceu	Consultant				Serge_gabasceu@gmail.com
15	David Johnson	Consultant				David.johnson@sant.ot.ac.uk

Knowledge Domains	Assessment	Teacher knowledge Descriptors	Levels of Achievement			
			Level 1	Level 2	Level 3	Level 4
Knowledge of content (includes subject matter knowledge and pedagogical (how to teach) knowledge	Basic knowledge of Primary Mathematics (as in syllabus for children aged 10 - 12 years).	Primary school teachers are responsible for teaching primary mathematics. It is reasonable to expect that they have knowledge of those items in the Nigerian Grade 4 syllabus, for students aged ten. This includes a basic manipulation of numbers, place values, time, measurement, and fractions. At minimum, therefore they should have a basic knowledge of numbers sufficient for the teaching of primary mathematics, as given in the Nigerian Grade 4 syllabus, for students aged ten and to mark children's written work.	Teachers mark correctly (right or wrong answers) at least 80% of items in a test paper in the subject of Mathematics relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) at least 60% of items in a test paper in the subject of Mathematics relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) at least 40% of items in a test paper in the subject of Mathematics relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) only 40% or below of items in a test paper in the subject of Mathematics relevant to pupils in Grade 4

	Basic knowledge of primary English (as in syllabus for children aged 10 - 12 years).	Primary school teachers are responsible for teaching English as a subject. It is reasonable to expect that they have sufficient knowledge of those aspects of the subject as given in the Nigerian Grade 4 syllabus. This includes a basic understanding word meanings, synonyms, sentence completion, verbal reasoning, and punctuation. At minimum, therefore they should be able to mark a written paper completed by a Grade 4 pupil.	Teachers mark correctly (right or wrong answers) at least 80% of items in a test paper in the subject of English relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) at least 60% of items in a test paper in the subject of English relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) at least 40% of items in a test paper in the subject of English relevant to pupils in Grade 4	Teachers mark correctly (right or wrong answers) only 40% or below of items in a test paper in the subject of English relevant to pupils in Grade 4.
	A basic ability to read and comprehend simple non-fiction texts (such as those that are found in a Grade	Primary school teachers are expected to prepare lesson notes that will assist them in their teaching. It is natural that they will need to consult and will be expected to	Teachers score at least 80% on a reading comprehension test equivalent or drawn from a Grade 6 English textbook.	Teachers score at least 60% on a reading comprehension test equivalent or drawn from a Grade 6 English textbook.	Teachers score at least 40% on a reading comprehension test equivalent or drawn from a Grade 6 English textbook.	Teachers score below 40% on a reading comprehension test equivalent or drawn from a Grade 6 English textbook.

<p>General Knowledge (including the skills of reading, writing, mathematics and reasoning)</p>	<p>4 textbook) sufficient to make notes in preparation for the teaching of a lesson to Grade 4 pupils</p>	<p>read and comprehend a variety of source materials relevant to the subject matter of their teaching. At minimum therefore, teachers should be able to a simple text taken from a Grade 6 text book and extract factual information as is and to use this information for making notes in advance of teaching a lesson.</p> <p>Further, teachers should be able to write a simple letter which demonstrates knowledge of structure and form; the successful use of simple grammatical expressions and formal correctness (spelling and punctuation) such that it might serve as a model for teaching or as a tool for communicating with</p>	<p>Teachers score at least 80% on an assessment of those writing abilities (spelling, punctuation, grammar, sentence construction, form) similar to what might be expected from a Grade 6 pupil</p>	<p>Teachers score at least 60% on an assessment of those writing abilities (spelling, punctuation, grammar, sentence construction, form) similar to what might be expected from a Grade 6 pupil</p>	<p>Teachers score at least 40% on an assessment of those writing abilities (spelling, punctuation, grammar, sentence construction, form) similar to what might be expected from a Grade 6 pupil</p>	<p>Teachers score below 40% on an assessment of those writing abilities (spelling, punctuation, grammar, sentence construction, form) similar to what might be expected from a Grade 6 pupil</p>
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		parents or others in the educational system.				
Knowledge of general pedagogy (includes knowledge of classroom organisation and management and monitoring the attainment of learning goals)	Monitoring the progress of students in groups	Primary school teachers should have a basic understanding of the progress made by the children they teach. At minimum, they should be able to add up marks, turn raw scores into percentages, read simple bar charts, and make simple charts to show trends in children’s test scores or differences between boys and girls.	Teachers score at least 80% on an assessment of those mathematical abilities (addition, subtraction, calculating averages and percentages, plotting and interpreting simple graphs) similar to what might be expected from a Grade 4 pupil	Teachers score at least 60% on an assessment of those mathematical abilities (addition, subtraction, calculating averages and percentages, plotting and interpreting simple graphs) similar to what might be expected from a Grade 4 pupil	Teachers score at least 40% on an assessment of those mathematical abilities (addition, subtraction, calculating averages and percentages, plotting and interpreting simple graphs) similar to what might be expected from a Grade 4 pupil	Teachers score less than 40% on an assessment of those mathematical abilities (addition, subtraction, calculating averages and percentages, plotting and interpreting simple graphs) similar to what might be expected from a Grade 4 pupil
Knowledge of learners and learning (includes knowledge of learning theories and cognitive development of students)	Assessing the progress of individual students	Primary school teachers should have a basic understanding of those areas of the curriculum that children have difficulty with or do well in. They should be able to identify basic recurring errors made by children in areas such as writing	Teachers identify at least 80% of the recurring errors made by Grade 4 children in a variety of curriculum areas in mathematics (place values, addition, subtraction, multiplication, division, estimation and shapes)	Teachers identify at least 60% of the recurring errors made by Grade 4 children in a variety of curriculum areas in mathematics (place values, addition, subtraction, multiplication, division, estimation and shapes)	Teachers identify at least 40% of the recurring errors made by Grade 4 children in a variety of curriculum areas in mathematics (place values, addition, subtraction, multiplication, division, estimation and shapes)	Teachers identify fewer than 40% of the recurring errors made by Grade 4 children in a variety of curriculum areas in mathematics (place values, addition, subtraction, multiplication, division, estimation and shapes)

		and mathematics. At minimum, they should be able to identify children who frequently make the same errors in their writing, for example the misspelling of common words, or recurring errors in mathematics that prevent them from progressing.	and English writing (spelling of common words, use of punctuation, shaping of letters)	and English writing (spelling of common words, use of punctuation, shaping of letters)	and English writing (spelling of common words, use of punctuation, shaping of letters)	and English writing (spelling of common words, use of punctuation, shaping of letters)
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Annex 2: Workshop Presentation and Materials

Teacher Assessment

Setting the benchmarks

Teachers: what do we expect from them?

- **What do we expect from our primary school teachers? What kinds of knowledge and skills should they have to be effective?**

Policy Research Question

- **Do primary school teachers have sufficient basic knowledge to carry out the functions of preparing lessons for teaching, marking children's work, identifying and correcting common mistakes that individual children make, and monitoring the progress of the whole class?**

Defining Teacher Knowledge

- Knowledge of content (includes subject matter knowledge and pedagogical (how to teach) content knowledge)
- General Knowledge (reading, writing, mathematics, and reasoning)
- Knowledge of general pedagogy (classroom organisation and achievement of learning goals)
- Knowledge of learners and learning
- Knowledge of curriculum
- Knowledge of context
- Knowledge of self

Basic knowledge of Primary Mathematics (as in syllabus for children aged 10 -12 years).

- Primary school teachers are responsible for teaching primary mathematics. It is reasonable to expect that they have knowledge of those items in the Nigerian Grade 4 syllabus, for students aged ten. This includes a basic manipulation of numbers, place values, time, measurement, and fractions. At minimum, therefore they should have a basic knowledge of numbers sufficient for the teaching of primary mathematics, as given in the Nigerian Grade 4 syllabus, for students aged ten and to mark children's written work..

Basic knowledge of primary English (as in syllabus for children aged 10 -12 years).

- Primary school teachers are responsible for teaching English as a subject. It is reasonable to expect that they have sufficient knowledge of those aspects of the subject as given in the Nigerian Grade 4 syllabus. This includes a basic understanding word meanings, synonyms, sentence completion, verbal reasoning, and punctuation. At minimum, therefore they should be able to mark a written paper completed by a Grade 4 pupil.

A basic ability to read and comprehend simple non-fiction texts (such as those that are found in a Grade 4 textbook) sufficient to make notes in preparation for the teaching of a lesson to Grade 4 pupils

- Primary school teachers are expected to prepare lesson notes that will assist them in their teaching. It is natural that they will need to consult and will be expected to read and comprehend a variety of source materials relevant to the subject matter of their teaching. At minimum therefore, teachers should be able to read a simple text taken from a Grade 6 text book and extract factual information as is and to use this information for making notes in advance of teaching a lesson.

Writing

- Further, teachers should be able to write a simple letter which demonstrates knowledge of structure and form; the successful use of simple grammatical expressions and formal correctness (spelling and punctuation) such that it might serve as a model for teaching or as a tool for communicating with parents or others in the educational system.

Monitoring student progress

- Primary school teachers should have a basic understanding of the progress made by the children they teach. At minimum, they should be able to add up marks, turn raw scores into percentages, read simple bar charts, and make simple charts to show trends in children's test scores or differences between boys and girls.

Assessing the progress of individual students

- Primary school teachers should have a basic understanding of those areas of the curriculum that children have difficulty with or do well in. They should be able to identify basic recurring errors made by children in areas such as writing and mathematics. At minimum, they should be able to identify children who frequently make the same errors in their writing, for example the misspelling of common words, or recurring errors in mathematics that prevent them from progressing.

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