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

## **Preparation for the Main Teaching and Learning Survey**

**Report Number: ESSPIN 303** 

A.J.Davison

09 May 2009





#### **Report Distribution and Revision Sheet**

Project Name: Education Sector Support Programme in Nigeria

Report Title: Preparation for the Main Teaching and Learning Survey

Report No: ESSPIN 303

Rev No*	Date of issue	Originators	Checker	Approver	Scope of checking
1	July 2009	A.J. Davison	John Kay	Steve Baines	Formatting/Content

#### **Distribution List**

Name Position				
DFID				
Kathleen Richmond	Human Development Programme Coordinator, DFID			
lan Attfield	Education Adviser, DFID Northern Nigeria Office			
ESSPIN				
John Martin	National Programme Manager			
Ron Tuck	Deputy Programme Manager			
Richard Hanson	Assistant Programme Manager			
Steve Baines	Technical Team Coordinator			
Abolaji Osime	State Team Leader Lagos			
Emma Williams	State Team Leader Kwara			
Richard Dalgarno	State Team Leader Kano			
Steve Bradley	State Team Leader Kaduna			
Kayode Sanni	State Team Leader Jigawa			
John Kay	Lead Specialist, Education Quality			
Alero Ayida-Otobo	Lead Specialist, Policy and Planning -Federal Level			
Fatima Aboki	Lead Specialist, Community Interaction			
Nguyan Feese	Lead Specialist, Inst. Development and Education Mgt			
Francis Watkins	Lead Specialist, Social Development			
Penny Holden Lead Specialist, Inspectorates				

#### **Quality Assurance Sheet and Disclaimer**

"This document has been prepared for the titled project or named part thereof and should not be relied on or used for any other project without an independent check being carried out as to its suitability and prior written authority of Cambridge Education Ltd. (CE) being obtained. Cambridge Education Ltd. accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purpose for which it was commissioned. Any person using or relying on the document for such other purposes agrees, and will by such use and reliance be taken to confirm his agreement to indemnify Cambridge Education Ltd. for all loss and damage resulting there from. Cambridge Education Ltd. accepts no responsibility or liability for this document to any party other than the person by whom it was commissioned."

"To the extent that this report is based on information supplied by other parties, Cambridge Education Ltd. accepts no liability for any loss or damage suffered by the client, whether contractual or tortuous, stemming from any conclusions based on data supplied by parties other than Cambridge Education Ltd. and used by Cambridge Education Ltd. in preparing this report."

#### **Note on Documentary Series**

This document is one of the series to be produced by Cambridge Education Consultants in support of their contract with the Department for International Development for the Education Sector Support Programme in Nigeria.

#### The documents include:

ESSPIN 001	ESSPIN 1 <sup>st</sup> Quarterly Report
ESSPIN 002	MTSS Strategy
ESSPIN 003	M&E Strategy
ESSPIN 004	Inception Strategy
ESSPIN 005	Report Re-assigned ESSPIN 204
ESSPIN 006	ESSPIN 3 <sup>rd</sup> Quarterly Report
ESSPIN 007	Report Re-assigned ESSPIN 205
ESSPIN 008	National Consultant Capacity Building Programme
ESSPIN 009	Report Reassigned ESSPIN 206
ESSPIN 010	Institutional Development, Public Finance Management – Scoping Visit
ESSPIN 011	Development of State – level Logframe for Kano and Jigawa States
ESSPIN 012	School Case Study Reports – Kaduna, Kano & Kwara States
ESSPIN 013	ESSPIN 4 <sup>th</sup> Quarterly Report
ESSPIN 201	Analysis of the Role of LGAs and LGEAs in Supporting Basic Education in
	Nigeria, December 08
ESSPIN 202	MTSS preparation in Jigawa, Kaduna and Kano State: Planning Task Specialist
	Visit 1
ESSPIN 203	Analysis of the Role of LGAs and LGEAs in supporting basic education in
	Nigeria, May 09
ESSPIN 204	Initial Report from the MTSS Task Team Leader
ESSPIN 205	Support to completion of MTSS in Lagos and Kwara States: Finance Task
	Specialist Visit 1
ESSPIN 206	Service to support the completion of MTSS in Lagos State: Task Team Leader $$
	Visit 2
ESSPIN 207	Further Support to the Completion of MTSS in Lagos & Kwara states: Task
	Team Leader Visit 3
ESSPIN 208	Progress Report on the MTSS Preparation in Jigawa, Kaduna and Kano:
	Planning Task Specialist Visit 2
ESSPIN 209	Support to the completion of Medium-term Sector Strategy (MTSS) for
	Jigawa, Kaduna and Kano: Finance Task Specialist Visit 1
ESSPIN 210	Support to the completion of Medium-term Sector Strategy (MTSS) for
	Jigawa, Kaduna and Kano: Finance Task Specialist Visit 2

ESSPIN 211	Services to support the completion of Medium–term Sector Strategies
	(MTSS) in Lagos & Kwara states: Task Team Leader Visit 4
ESSPIN 212	Support to the Completion of Medium-term Sector Strategy (MTSS) for
	Jigawa, Kaduna and Kano: Finance Task Specialist Visit 3, May 09
ESSPIN 213	Services to support the completion of Medium–term Sector Strategies
	(MTSS) in Lagos & Kwara states: Task Team Leader Visit 5
ESSPIN 214	Support to the Completion of Medium-term Sector Strategy (MTSS) for
	Jigawa, Kaduna and Kano: Finance Task Specialist Visit 4, June 09
ESSPIN 215	Support to the Completion of Medium-term Sector Strategy (MTSS) in Lagos
	and Kwara: International Finance Task specialist Visit 2 July 09
ESSPIN 216	Progress Report on the MTSS Preparation in Jigawa, Kaduna and Kano:
	Planning Task Specialist Visit 3 July 09
ESSPIN 217	Support to the Completion of Medium-term Sector Strategy in Lagos and
	Kwara: National Finance Task Specialist Visit 1 – 3
ESSPIN 301	Teaching and Learning Survey
ESSPIN 302	School Infrastructures and Maintenance Review for ESSPIN States
ESSPIN 303	Preparation for the Main Teaching and Learning Survey, May 2009
ESSPIN 401	School Based Management Committees Research February 09
ESSPIN 402 ESSPIN 403	School Based Management Committees Research March 09 IQTE integration work in Kano, Kaduna and Jigawa: Task Specialist Visit
	Reports 1 - 4
ESSPIN 501	Communications and Knowledge Management Strategy
ESSPIN 502	Communication Task Specialist Visit Report, December 08
ESSPIN 503	Education Management Information Systems (EMIS) - Scoping Mission
ESSPIN 504	Communication Task Specialist Visit Report, February 09
ESSPIN 505	Report on Scoping Visit to Develop BBCWST Communications Strategy for ESSPIN
ESSPIN 506	Education Management Information Systems (EMIS) May 09
ESSPIN 507	Communications Task Specialist Visit Report, April/May 09
ESSPIN 508	Knowledge Management Task Specialist Support Visit Report, Mar/April 09
ESSPIN 509	ICT Strategy Draft Report, April 09
ESSPIN 510	ICT Strategy Implementation Plan Draft Report April 09
ESSPIN 511	Development of ESSPIN Programme and Management Information
	Communication System
ESSPIN 512	Knowledge Management Support Visit Report, Oct 08
ESSPIN 513	Mapping ESSPIN Research Strategy, April 09
ESSPIN 514	Education Management Information Systems: Fourth Visit Report, June 09

ESSPIN 515	Task Specialist Support Communication Visit Report, June 09
ESSPIN 516	Monitoring and Evaluation Inception Phase Visit Reports 1 – 4
JG 301	An Assessment of Teacher Education in Jigawa State: Task Specialists Visit 1
JG 302	An Assessment of Teacher Education in Jigawa State: Task Specialists Visit 2
KD 301	Institutional Analysis of Teacher Education Structures in Kaduna State with
	Particular Focus on Gidan Waya College of Education: Task Specialists Visit 1
KD 302	Institutional Analysis of Teacher Education Structures in Kaduna State with
	Particular Focus on Gidan Waya College of Education: Task Specialists Visit 2
KN 301	Education Institutional Development: Teacher Education Strategy for Kano
KN 301	State, Task Specialists Visit 1
KN 302	Education Institutional Development: Teacher Education Strategy for Kano
KIN 302	· · · · · · · · · · · · · · · · · · ·
	State, Task Specialists Visit 2
KN 401	IQTEB Proposal for the Approval of Kano State Government, Jun 09
KW 301	An Assessment of the Development needs of Teachers in Nigeria – Kwara
	State Case Study
KW 302	Oro College Review of Strategic Priorities
KW 303	Curriculum Transformation for College of Education Oro
KW 304	Towards a Transformed Pre-Service Teacher Education Curriculum for
	College of Education Oro
KW 305	Institutional Strengthening of Oro College
KW 306	Teacher Strategy; Improving the Teaching of Literacy and Numeracy: Scoping
	visit
KW 307	Institutional Strengthening at Oro College and Teacher Development
	Strategy
KW 308	Curriculum Transformation at Kwara State College of Education
	<b>3</b>

### **Contents**

Report Distribution and Revision Sheetii	i
Quality Assurance Sheet and Disclaimerii	i
Note on Documentary Seriesiv	,
Acronyms and Abbreviationsvii	i
Abstract	L
Executive Summary	2
Purpose of the Consultancy	2
Achievement of the terms of reference	3
Background4	1
Findings and Issues Arising 4	1
The Instruments and Training Programme4	1
The Sample 5	5
Data Entry	7
The Pilot8	3
Options and next steps 9	)
Annex 1 Terms of Reference for Dr Tony Davison	2
Annex 2 Terms of Reference for Dr Elisha Fanfunmi	3
Annex 3: Suggested Terms of Reference for Visit of Dr Tony Davison 10-17 August 2009 15	5
Annex 4 Training Programme	õ
Annex 5: Revised Action Plan 22	2

#### **Acronyms and Abbreviations**

EMIS Education Management Information System
ESSPIN Education Sector Support Programme in Nigeria

LGAs Local Government Authorities
NBS Nigerian Bureau of statistics

STL State Team Leader

#### **Abstract**

A planning workshop was held to prepare for the pilot and main survey. A revised
pilot training programme was developed. All future activities for the production of a
report were defined, together with roles and responsibilities. Data formatting and
data entry procedures were agreed with the Nigerian Bureau of Statistics which
agreed to be responsible for these processes. A pilot was held. Manuals and
instruments were revised.

#### **Executive Summary**

- 2. A planning workshop was held with representatives from four states. The workshop achieved its objectives; (a) The teaching and learning survey instrument was reviewed. It was decided to add a learning resources sheet to the instrument in order to establish the current position in the states and also to enable a wider range of analyses to be attempted. (b) A detailed training programme was designed including both content and methods. Roles and responsibilities in the training programme were assigned; (c) Detailed discussions were held on all activities subsequent to the pilot and agreements reached on how each was to be conducted.
- 3. Agreement was reached with the Nigerian Bureau of Statistics as to how it might support the survey. The NBS agreed (a) to make its scanning facilities available; (b) to format the instrument to ensure that completed sheets can be read by the scanners in the Institute; (c) to receive lists of schools from the five states; merge the lists; format to SPSS; and draw a sample from the list using the SPSS facility. The list will be treated as a single population, but the number of schools from each state will be proportionate to size ie the number of schools in each state. There is a small risk of delay in scanning in July, but assurances were given that the small scale of the survey would mean that risks are negligible.
- 4. Delays were encountered in obtaining lists of schools from the states, particularly Jigawa. Formatting of the list was further delayed when it was found that the Jigawa list could not be formatted and had to be re-entered.
- 5. A pilot was held in which the training programme for field workers, the field procedures and the feasibility of the instrument were all tested. Feedback was obtained from field workers on all stages of the process, as a result of which final modifications were made to the training programme, the procedures and the instruments.

#### **Purpose of the Consultancy**

The main purpose of the consultancy was to conduct a pilot to test all dimensions of the main teaching and learning survey; the instruments; the training programme and the procedures.

#### Achievement of the terms of reference

TOR Tasks	Progress made and agreements reached (with whom)	Proposed/agreed follow up (by whom and when)	
Conduct pilot of the instruments, procedures and training to be used in the main survey	Pilot conducted as planned in Kaduna State	Final revision of instruments and training manuals by consultant	
Monitor progress in drawing sample	School list from the five states compiled. Formatting in progress.  Agreement reached with Kano and Kaduna to take additional purposeful sample in selected LGEAs	Elisha Fanfunmi to draw the sample using the SPSS facility  Additional sample to be drawn after LGEAs known. Consultant will give procedures to States.	
Devise feasible technical solution to data entry and analysis, minimising data entry error	Instruments to be formatted and scanned using the facilities of the Nigerian Bureau of Statistics.  Agreement reached with the DG of NBS	NBS to format the instruments before printing, code and scan. Elisha Fanfunmi and Michael Akinola	
Instruments, manuals, training programme revised	Revisions made with agreement of all stakeholders; consultant, QTL team	Revised documents to be used in the main survey	
Plan for main survey timetable finalised	Agreement reached with QTL team and the NBS	Contained in action plan	

#### **Background**

- 6. On a previous visit by the consultant in March 2009, a draft observation instrument and three manuals (survey managers manual; trainers manual and consultants manual) had been drawn up in discussion with the quality team leaders from the five states. In addition, a consultant had been hired to undertake a feasibility study of the technical options for data entry and analysis.
- 7. The present consultancy was designed to follow up the initial discussions by conducting a pilot to test the approach. This involved planning the training programme and pilot in detail, revising the instruments and training as required, and testing data entry mechanisms. Attention was also to be paid to drawing the sample

#### **Findings and Issues Arising**

#### The Instruments and Training Programme

- 8. **The instruments** were revised by a two stage process. Firstly, they were reviewed in a planning workshop held with the state quality team leaders.
- 9. At the workshop it was decided to add an additional instrument entitled 'learning resources checklist' to determine the degree to which key learning resources were available in the classes being observed. There were two reasons for this decision. Firstly, all State logframes require the States to monitor the availability of learning resources. It was felt that the survey presented an ideal opportunity to collect the data at no additional cost. It should be observed however that although the overall sample will be broadly representative of the five states,( but see caveats below) there is no guarantee that the sample drawn from each state will be similarly representative of each state. Nevertheless the results should be indicative of the overall resource position.
- 10. A second reason for adding the learning resource checklist is that it will enable the analysis to be enriched. It will probably be possible to ascertain whether the presence or absence of key resources influences the patterns of teaching and learning behaviour. If, for example, it is found that the availability of textbooks enhances the range of teaching and learning strategies, the policy implication will be to emphasise the distribution of books. By contrast if no difference is found ( ie teachers are only rarely using the books to vary classroom activity), the implication might be to provide training in textbook use or improve the textbooks.

- 11. As a result of the pilot small but important changes were made to both classroom observation instruments; (a) one additional category was inserted into the teacher observation sheet and the wording of a few additional categories in both sheets were modified; (b) coding was inserted onto the observation sheets instead of being put on a front cover. This will simplify coding and field work procedures, as well as ensuring that each sheet is self sufficient. Even if sheets are misplaced from their school envelopes during the data entry process, the data will not be lost.
- 12. Corresponding changes were made to the Key to Behaviour protocol which defines each category. The pilot also indicated ways of clarifying the presentation of key categories
- 13. A detailed training programme was devised at the planning workshop, based on the material in the manuals developed in the previous consultancy visit, but with a few new activities added. The order of training was revised substantially from the original draft manuals. Responsibilities for pilot training were given to all State quality team leaders, as well as the consultant.
- 14. As a result of the training programme design, it proved necessary to modify the **trainer and consultant manuals**, adjusting the order of presentation and making some revisions to the material.

#### The Sample

- 15. Discussions were held with the monitoring and evaluation consultant an State team Leader, Kano, on the nature of the sample.
- 16. The question arose as to whether the manner in which the sample was being drawn could adequately provide for treatment and control groups. This is an important issue, as we will need both groups to determine the impact of the programme in subsequent surveys.
- 17. One way of obtaining a control group would be to select a sample of schools from states other than those being covered by ESSPIN. This was considered but rejected by the consultant on two grounds. Firstly, the logistic and protocol issues of undertaking a survey in other states would be severe as well as costly. The difficulties of designing a reasonably small sample in control states that matched the schools in the ESSPIN sample would also be considerable, as would be the difficulty of tracking interventions in the schools in the control states over the course of the ESSPIN project. For example, teacher training programmes in control states could conceivably be undertaken and have similar effects to those mounted by ESSPIN. Comparison between control and ESSPIN states might therefore show little difference precisely because both interventions had a similar impact.

- 18. It was therefore decided to adopt the more feasible course of sampling only from ESSPIN states. The potential problem with this procedure is that it might not be possible to identify control schools from within the sample, particularly as detailed information on the geography of project implementation is not yet available. However, there are practical grounds for assuming that the problem of identifying control schools from within the sample will not be insuperable. Firstly, States will be pursuing different interventions and according to different timescales. Schools within the sample will be subject to different combinations of intervention – or none at all. The latter is certain as Kano and Kaduna are not planning universal coverage. Secondly, even those States that are planning to universalise training (such as Kwara) are highly unlikely to achieve universal coverage, or if they do, will probably not succeed in so doing within a calendar year. In such states two forms of control are possible; (a) comparison of let us say, trained and untrained schools and (b) schools trained in Year 1 and schools trained in year 2 etc. The former will give us a measure of the impact of initial impact; the latter will cast light on the sustainability of the training provided.
- 19. A further discussion was held with State Team Leader Kano and the monitoring and evaluation consultant on the desirability of designing and additional sample in selected LGEAs on which the programme will focus in the first years of the project. This idea was initially proposed by the consultant to the quality team ( see survey managers manual) but shelved in the first consultancy. STL Kaduna has also indicated interest in this approach.
- 20. The idea is a good one, particularly for those States which intend to focus their efforts on a few LGEAs. It will increase the number of schools in the sample which are being targeted by the programme and therefore, at analysis, of the cell size of cases being studied. This is advantageous because it is easier to derive statistically significant measures of change from larger numbers of cases. This might prove useful if we are attempting to measure the impact of interventions in combination.
- 21. These additional samples can only be drawn once the LGEAs to be included are confirmed. The sample will be drawn from the school lists of these LGEAs minus any schools that happen to be in the main sample. STLs might consider how large this sample might be. The sample could be drawn using SPSS once again or the consultant could suggest a list using Gaussian numbers. This sample need not necessarily be representative. If STLs wish to focus on small rural primary schools for example, this would be possible.
- 22. Jigawa might also be another State which could benefit from the additional sample if a geographically focused approach is to be followed in that State.

- 23. Problems have been encountered in drawing the main sample as most States were rather slow in providing school lists. Jigawa never provided a list of junior secondary schools, so that the central NEMIS list of such schools has had to be used instead. Moreover the Jigawa list provided was not susceptible to formatting and had to be redone from scratch. The final sample will be available in the week beginning 11 May.
- 24. In order to allow States to proceed with the recruitment of field workers, the consultant calculated the number of schools that each State was likely to have in the final sample. This was possible because it had been decided to sample proportionately to size i.e. number of schools in the list. The numbers were communicated to quality team leaders during the consultancy.
- 25. The quality of data is such that we cannot be sure that we will have a precisely representative sample. This is partly because all data is slightly out of date. Possibly more important is the quality of data itself. Data received from Lagos and Kwara seemed to be accurate, but it is not certain whether the same can be said of Jigawa and Kano. It is impossible to estimate the potential degree of inaccuracy without detailed investigation. We can therefore say that the final list is the best that could be obtained within the time available, and is certainly far more comprehensive than centrally held data.
- 26. To what extent do these reservations affect the utility of the analyses to be produced from survey data? The answer is probably very little. Programme managers will not necessarily be interested in the minutiae of different behaviours, but of reasonably well defined trends. If a training programme for teachers has an impact, it will register on the instrument that has been defined. The precise degree of change (eg whether whole class teaching has declined by 12% or 15%) is less important than the identification of patterns of change that are sufficiently large not to have occurred by chance. Much more can be said on this issue, but this report is perhaps not an appropriate place to do so.

#### **Data Entry**

- 27. One of the objectives of the consultancy was to identify a secure means of data entry. The two observation sheets are both more complex than a standard questionnaire and therefore potentially subject to a greater degree of error if manual data entry is used. A further problem with manual data entry is that it takes time and requires supervision and cleaning.
- 28. It was therefore important to find a means of scanning completed observation sheets into a software programme such as SPSS to mitigate errors in data entry and allow analysis to be conducted. A consultant was hired to investigate the issues and provide support for data entry (Dr Elisha Fanfunmi; Terms of Reference in *Annex 2*).

- 29. With Fanfunmi's assistance agreement was reached with the Director General of the Nigerian Bureau of Statistics that assigned the following tasks to the NBS;
  - Ensuring that the format of the instruments was readable for the scanners used by NBS
  - Coding SPSS prior to scanning completed instruments into the programme
  - Scanning instruments into SPSS
- 30. The task of ensuring correct formatting of the instruments is critical. Unless the scanner can read the completed instruments, no data can be entered. After discussions with NBS, small changes were made to the instruments and the instructions for their completion to ensure readability.
- 31. Coding for the instruments will be a simple matter for the baseline as there are only 40 behavioural categories to code and a small additional number of variables in the learning resources sheet. The addition of short questionnaires in any subsequent survey will require additional codes.
- 32. Scanning can be done within two days according to the NBS. NBS has already been alerted that scanning will be required in July, but progress with scanning will need to be monitored, given that delays could be experienced as entry for the Nigeria Household Survey might not be fully completed by mid-July.
- 33. The action plan (see below) indicates that State quality team leaders will be responsible for delivering complete sets of completed instruments to ESSPIN Abuja. Once sets have been received from all five States, the complete package should be taken to the NBS (Dr Fanfunmi or Michael Akimola). The latter will be responsible for scanning.

#### **The Pilot**

- 34. The pilot achieved its objectives which were (a) to trial the training programme for field workers and to make any necessary revisions. A secondary, but very important purpose of the training programme was for the five quality team leaders to become thoroughly conversant with all concepts and practices underlying the survey. (b) trial field procedures; trial instruments.
- 35. **Training Programme.** A detailed timetable of the revised training programme is found in *Annex 4*. There are several points that need to be emphasised;
  - The choice of teacher trainers with a background in new pedagogies proved absolutely right. All but one of the participants came from universities or colleges of education. They proved adept at understanding the instrument and fully appreciated the need for a code of conduct that put teachers at ease in the

classroom. One participant was a school inspector and had considerable difficulty in grasping the observation instrument. Teacher trainers should also be selected for the main survey. The vast majority of the pilot field workers demonstrated both a competence at administering the instrument and a willingness to be included in the main survey. They should be accepted, particularly as they will be valuable resource persons for the main survey training programme.

- The revised training programme was most appreciated by participants. Use was made of DVD material supplied by the quality assurance adviser. It proved invaluable. Overall the course proved to have the variety and pace that suited participants.
- The course is probably a little too long to be completed readily within two days. While the quality of participants on the pilot was high, and the course successfully completed, it cannot be guaranteed that a similar quality of participant will prevail next time. State quality team leader Kwara suggested that she was going to extract the coding and logistics sections from the course and run them as a separate session. This is an excellent idea which could be considered by all states. It may be wise to allow three days for the course when it is held in May and June. Alternatively the session on the theory of systematic observation could be omitted. Please see recommended course structure in paragraph 39 below.
- 36. **Field Visit**. The instruments and procedures were tested in a field visit to three schools in Kaduna. The visits to schools demonstrated that the vast majority of trainees thoroughly understood the instruments. It also showed that the instruments could capture all major behaviours in the classroom. As a result of the visits the instruments were marginally revised. The importance of careful logistic planning was revealed.
- 37. **Feedback**. Useful feedback was obtained from pilot field workers, changes agreed, and incorporated in to the documents attached to this report.

#### **Options and next steps**

- 38. An action plan was finalised during the visit (Please refer to *Annex 5*). Comments on key issues are set out below
- 39. **Training course for consultants.** Prior to the pilot it was agreed that the training course for consultants should comprise a two day training course plus one day field visit. As mentioned in paragraph 36 above, it was found that two days was a little brief for the entire training. It was also found that one or two of the initial group had not fully grasped the nature of the exercise even after being trained. It is therefore **recommended** that;

- Four more consultants be invited to training in each state than will actually be
  required. After the training programme field visit, the completed observation
  sheets of each consultant will be reviewed. Consultants who have completed the
  sheets unsatisfactorily should be dropped and paid only for the time spent thus
  far. Quality team leaders should examine the frequency with which behaviour is
  recorded, and the pattern of the recordings, noting any obvious discrepancies. (
  eg by comparing the records against classroom organisation with those recorded
  against activities.)
- The training should continue to be two days, followed by the field visit, but be followed by a session on logistics and coding attended only by those who have completed the observation sheets satisfactorily
- 40. The field instruments should be printed to ensure clear definition. It would be preferable if the printing could be done centrally in Abuja as a single print run would be cheaper. Printing requirements are shown in the box below. Printing cannot be started before formatted sheets are received from the Nigerian Bureau of Statistics

Printing requirements for the main survey

For the survey;

- 760 teacher observation sheets plus 10% spares = 840
- 760 learner observation sheets plus 10% spares =840
- 760 learning resource checklist sheets plus 10% spares =840

No special paper is needed for the scanner, but it must be quite durable as the scanner will not be able to read paper that is creased or folded.

It will be essential to check that the sheets have been printed in exactly the same format as recommended by the Nigerian Bureau of Statistics.

For the training, sheets can be photocopied by the States. States will need to photocopy 5 sheets per trainee consultant. The number will vary by State.

41. The number of sheets to be distributed to each State will be dependent on the number of schools in the sample from each State. The consultant will inform all parties by May 16 of the numbers required.

- 42. After the survey has been completed each State will undertake the checks recommended in the trainers manual and send a complete package in one envelope to Abuja. It would be advisable to take a photocopy of the returns to act as a back up.
- 43. After Abuja has received envelopes from all five States, the five packages should be taken to Dr Elisha Fanfunmi of the Nigerian Bureau of Statistics for data entry.
- 44. A data analysis and writing workshop will be held after the NBS has completed data entry. The precise timing of the workshop will of course be contingent on when data entry has been completed, but provisionally it has been set for the week beginning 10 August.
- 45. Some readjustment of the planned dates will be required as a result of delays in securing the final school lists. These can still be readily accommodated as the maximum time any state will need for the survey is three weeks.

#### Annex 1 Terms of Reference for Dr Tony Davison

#### Visit 16 April-30 April 2009

#### Context

This follows up the first visit made by the consultant which laid the preparations for the teaching and learning survey by designing an observation instrument with the quality team; prepared three manuals; and prepared the ground for examining technical options for data entry and analysis.

#### **Purpose of the Visit**

To finalise preparations for the main teaching and learning survey by conducting a pilot with the quality team and setting up the most appropriate technical option or data entry and analysis

#### **Outputs of the Consultancy**

- A pilot study which has trialled all elements of the main teaching and learning survey, and amended manuals and instruments in the light of its findings
- A feasible technical solution to data entry and analysis which eliminates the errors of data entry
- Manuals and observation instrument amended as appropriate
- Plan for main survey and report revised as required.

#### **Activities**

- Review the feasibility study on data entry.. Contact the most appropriate source; define precisely the procedures to be employed; draw up draft contract for consideration of ESSPIN
- Review the procedures by which the sample was drawn
- Conduct two day planning workshop with quality team in preparation for pilot training, the pilot, and the main survey.
- Conduct pilot training with the quality team
- Visit schools with the pilot observers and the quality team to observe pilot process
- Review the results of the pilot with the quality team and pilot observers;
   amend instrument and manuals accordingly

A draft report will be presented before departure. A final report will be sent within one week of departure.

#### Annex 2 Terms of Reference for Dr Elisha Fanfunmi

#### Consultancy of 10 working days; 24 March 2009 to 15 May 2009

#### Context

A survey of teaching and learning in the five states covered by the ESSPIN project will take place in May/June 2009. The survey will use a quantitative approach to recording classroom behaviour which will involve entering data from observation sheets into SPSS for subsequent analysis.

#### **Purpose of Consultancy**

The purposes of the consultancy are;

- To undertake a feasibility to determine the most appropriate technology for entering the data. The technology selected must be capable of entering the data in an accurate manner from the observation sheets
- To prepare for the survey by drawing a random sample of primary and junior middle schools from the five states
- To prepare for the survey by managing the formatting of instruments to ensure that all can be read by the scanner to be employed.
- To prepare for the survey by coding SPSS to ensure that data can be analysed correctly

#### **Outputs of the Consultancy**

- A brief feasibility report outlining the most appropriate technology and procedure to employ. The report should describe the technology chosen; how it will operate; the procedures to be used for data entry; and approximate cost of providing the service
- A list of 380 primary and junior secondary state schools selected as a representative, random sample from State lists or possibly from NEMIS using the SPSS facility with the number of schools from each state selected in proportion to size
- Coding completed for data entry.
- Instruments formatted to be compatible with the chosen scanning facility

#### **Tasks**

- Investigate whether there are any suitable scanning facilities that can be hired. The scanning facility must have the capacity to be used in conjunction with Excel or SPSS
- Obtain a complete list of state primary and junior secondary schools from the EMIS of the following States; Jigawa, Kaduna, Kano, Kwara and Lagos. Merge the lists, format as appropriate for SPSS focusing on the columns for school code and LGEA; draw a sample of 380 schools to be used in the survey, treating the whole list as a single population. The sample data should include the name of the school, the LGA to which it belongs. Each school should be given a number from 001 to 380. The number of each LGA should also be included in the list of schools to be sampled.
- Design a code for data entry into SPSS. Draft copies of the two observation sheets to be used are attached.
- Participate in the pilot by managing the process of formatting the instruments for scanning

The list of schools in the sample should be provided by 4 May 2009 at the latest.

A brief complete report will be produced by May 15 2009. It should be sent to;

john.kay@esspin.org

and

#### tdavison45@hotmail.com

Note; as a result of problems in securing school list data from Jigawa, and subsequent problems with formatting the data from that State, the timetable set out in these terms of reference has been slightly delayed.

## Annex 3: Suggested Terms of Reference for Visit of Dr Tony Davison 10-17 August 2009

#### Context

The teaching and learning survey will be conducted in June/early July in the five States. Data will be entered by the Nigerian Bureau of Statistics in July/ early August. Once the data entry process has been completed, the Nigerian Bureau of Statistics should send a file of the results to the consultant and to each of the five state quality team leaders. This will enable preparation for the data analysis and report writing workshop to be made.

#### **Purpose of Consultancy**

The consultancy has three principal purposes; (a) To acquaint state quality team leaders of the kinds of analysis that can be undertaken using the systematic observation method; (b) To practice report writing skills; (c) To produce a final report of the first teaching and learning survey.

#### **Outputs of the Consultancy**

The outputs will be (a) A final report; (b) A brief agreed dissemination strategy

#### **Activities**

Prepare a list of key analyses that should be undertaken

Design and conduct a data analysis and report writing workshop which will include (a) data cleaning as required; (b) analysis of baseline data; (c) introduction to overtime data analyses; (d) practice in report writing, linking text and data

Finalise report

A visit report will be produced within one week of departure

#### **Annex 4 Training Programme**

## **Pilot Training Programme**

## Agenda for the Training of Classroom Observers

Day 1	Activity	Method	Responsibility		Materials	Learning objectives
Time			Pilot	Main training		
9.00	Introduction	Plenary	Kalli		Nil	Icebreaking. Each participant and trainer introduces themselves
9.15	Objectives of the training	Plenary	Kalli		Hand out consultant manuals Page 5 of trainers manual	Consultants understand what they should have learned by the end of the course.
9.30	Current Classroom Practice : where we want to go	Group/plenary. Brainstorm discussion	Mustapha		Flipchart	Provide context for survey; current traditional practices versus more learner centred; child more active

10.15	Purpose of the survey and	Presentation/discussion	Bimbo	Trainers manual	Consultants understand why
	how it should be conducted			pages 6 and 7	we are doing survey, and can
					relate to previous discussion;
					and HOW the survey should
					be done ( ethics/code of
					practice)
10.45	Background theory to new	plenary	Tony	Computer and	Theory of systematic
	approaches to classroom			projector	observation. International
	observation Practice				experience. Main aim to
					understand method and its
					credibility
11.15	Break				
11.45	Introduction to the	plenary	Nuru Lawal	Flipchart and/ or	Consultants understand and
	Instrument: Structure			powerpoint	remember the main
					structure of the instrument
				Trainer manual	
				pages 28-29	
12.15	How it works	Interactive group work	Tony/Eunice	Flipchart	Consultants understand and
				Consultant manual	memorise categories;
				exercises	understand how the
					instrument works
				Trainer manual 29-	
				37	
1.00	lunch				

2.00	How it works continued				
3.00	Completing the	Group/plenary	Bimbo	Trainer manual 37-	Consultants understand how
	instrument			38	many boxes to shade every
					four minutes; and that they
				Computer and	are recording what is
				projector	happening at the moment
					the observation is made.
	Exercise on completing	plenary	Bimbo		NB; shade boxes; do not put
	observation sheets : on the				x or tick.
	screen				
4.00	Watch 2 classroom	Plenary; watch DVD and	Mustapha	DVD	Consultants begin to
	documentaries/practice	get feedback from			recognise events in
		consultants on what they		Flipchart	classroom and relate to
		have seen			categories
				Trainer manual	
				page 30	
4.45	Review of the day	plenary	Nuru Lawal	Flipchart	Aim; assess degree to which
	<ul> <li>Pair/group work on</li> </ul>				participants have
	what is not well				understood key issues;
	understood				record any problems for
					dealing with on day 2

Day 2					
9.00	Recap of Day 1	plenary	Nuru Lawal	Flipchart	Remind consultants of key points; dealing with problems raised on previous day
9.30	Assignment of schools  Selecting classes and teachers	Plenary	Eunice	Trainers manual pages 9-12	Consultants understand the rationale for our approach; can select classes to observe using right procedures; know what schools they will be visiting; same number of maths and English classes at primary school
10.0	Distribution and checking of materials	Group/plenary	Eunice	Trainer manual pages 13-14	All pairs have a complete set of materials. Checked.
10.30	Break				
11.0	Coding the observation sheets and learning resources sheets; addressing the envelopes	Group/pair and plenary	Tony or Mustapha	Trainer manual pages 15-20	All sheets correctly coded and checked
12.0	Preparing for the visit:: what to do before	plenary	Kalli	Trainer manual pages 21-22	Procedures understood

12.15	Activities at the school:	Group/pair /plenary	Kalli	Trainer manual	All consultants understand
	meeting the HT/Teacher			pages 23-27	what information has to be
					conveyed at these two
					discussions
1.00	Lunch break				
2.00	Role play :	Group/plenary	Nuru	Reference to the	All consultants understand
	<ul> <li>Teacher</li> </ul>			trainer manual	how to manage the two
	Head teacher			pages 23-27	interviews
2.45	Classroom Simulation	Plenary	Bimbo	DVD. Script for	Recapitulate learning of
				simulated lesson	previous day. Consultants
					practice recognising the
					categories; residual
					problems resolved.
3.45	Break				
4.00	Logistics	Plenary discussion	Bimbo	Nil	Survey programme for each
					pair of consultants agreed,
					based on their sample
					schools. Fees,
					accommodation, subsistence
					procedures and rules
					understood
4.30	Re-cap	Plenary	Mustapha		Any outstanding issues
					resolved. Arrangements for

	Day 3 Pilot and Main Survey				pilot school visits and training school visits at the main survey explained.
8 – 1 pm	At pilot; team School Visit to 3 selected schools At main survey; number of schools to be visited will depend on the number of consultants.	Group	All	Notebooks Instruments	Consultants practice observation under guidance
1 – 2 pm	Break				
2 -5 pm	Feedback Pair presentation of results, discussions and corrections	Group/pair/plenary	Eunice		At pilot, the aim will be to amend training and or documents. At main survey, feedback will be used to resolve any remaining problems or confusions
	Handling and Return of kits	plenary			

#### **Annex 5: Revised Action Plan**

## Timetable for Management of the Pilot and the Main Survey

The purpose of this section is to outline the key tasks of survey managers and the dates by which they should be completed.

No.	Activity	Start Date	Complete By	Responsible	Remarks
1.	Agree design of classroom observation instrument and prepare draft	11 March	26 March	Survey managers and	
	manuals for survey managers, trainer manual and consultant			international	
	manual;			consultant	
2	Drawing the sample and coding of SPSS in preparation for the pilot.	23 March	5April	ESSPIN consultant	
3	Send list of all schools in State and sample schools in State to all		5 April	ESSPIN consultant	A consultant from
	State survey managers				the NBS will collect
					the list for all the
					states and draw the
					sample after
					reformatting to
					SPSS
4	Conduct feasibility study to assess the most appropriate technology	23 March	5 April	ESSPIN consultant	Completed
	for data entry				

No.	Activity	Start Date	Complete By	Responsible	Remarks
5	Contract consultants to be employed in the pilot	1 April	18 April	Quality team	Completed
6	Assess results of feasibility study; set up appropriate technical	16 April	20 April	International	Completed
	option for data entry and analysis			consultant	
7	Advance planning: Plan the overall schedule and distribution of	17th April	19 <sup>th</sup> April	Quality team	Completed
	responsibilities for the different activities using this table. Review			International	
	instrument and manuals. Plan training			consultant	
8	Training of pilot consultants in Kaduna; pilot trainer and consultants	27th	28 <sup>th</sup> April	Quality team	Completed
	manuals			International	
				consultant	
9	Trial the instrument through classroom observation in schools	29 April	30th April	Quality team	Completed
				International	
				consultant	
10	Review experience of pilot; amend instrument or manuals	1 <sup>st</sup> may		Quality team	Completed
	accordingly			International	
				consultant	
11	Request approvals from the relevant authorities for main survey	4 <sup>th</sup> May	15 May	Quality team	
12	Printing of instruments and manuals: Prepare all instruments and	4th May	15 May	Quality team	
	materials for printing and take the necessary actions to have them				
	printed.				
13	Purchase of materials: Purchase envelopes, pencils and eraser.	4th May	15 May	Quality team	

No.	Activity	Start Date	Complete By	Responsible	Remarks
14	Organization of logistics of survey: Make all necessary preparations	4 <sup>th</sup> May	15 May	Quality team	
	for the actual survey, including:				
	<ul> <li>the appointment and assignment of consultants</li> </ul>				
	<ul> <li>organization of transport for the survey;</li> </ul>				
	<ul> <li>booking of venues for training and all other activities;</li> </ul>				
	<ul> <li>booking of accommodation if required;</li> </ul>				
	allocation of computers for data entry.				
13	Training of consultants in each state; 2 quality team leaders per	16 May	30 May		According to states
	state. Staggered training. 3 days in each State. One further morning				time table and
	may be required to deal with coding and logistics.	18 <sup>th</sup> May	20 <sup>th</sup> May		agreement between
					specialists. The
			Kaduna	Mustapha/Abimbola	earliest date is now
			Kadulla		subject to
			Kwara	Kalli/Eunice	amendment as a
			Kwara	·	result of delays in
		+h	+b		drawing the sample
		25 <sup>th</sup> May	27 <sup>th</sup> May,		
				Mustapha/Eunice	
			Kano	mastapha, zamec	
				Abimbola/Nura L	
			Lagos	7 to moota, rear a 2	
		1 <sup>st</sup> June	3 <sup>rd</sup> June		
			Jigawa	Nura/Kalli	

No.	Activity	Start Date	Complete By	Responsible	Remarks
14	Data collection: Conduct the actual survey. This involves fulfilling all	28 <sup>th</sup> May	To be	Consultants	To follow the survey
	the steps planned, organized and taught to the consultants.		determined by		immediately
	Managers must be available at all times during the data collection		the no of		
	period to resolve any problems that may come up.		schools and		
			consultants		
			(pairs ) work		
			schedule		
15	Return of instruments and materials: Ensure that all instruments and	June	June	Consultants	Immediately after
	materials are returned to the State managers. Follow up on any			Quality team to	Data collection
	outstanding observation or coding sheets			monitor	
16	Check completed observation and coding sheets.		7 <sup>th</sup> July	Quality managers	To go with data
					collection
	Sheets sent to Abuja for transmission to Nigerian Institute of		14th July		
	Statistics				
17	Data entry: method to be determined. Probably scanning using	14 <sup>th</sup> July	30th July	Probably contracted	Send the completed
	facilities of Nigerian Institute of Statistics. Date to be agreed with the			out	data to Abuja (
	Nigerian Institute of Statistics				Agbenu)
18	Data analysis workshop and preparation of baseline report.	10 <sup>th</sup> August	15 <sup>th</sup> August	Quality managers	
				International	
				consultant	

## **Important Notes**

- 1. Selection of consultants; specialist to select and recruit local
- a) Pilot survey: HR to contract, states to send 2 CVs of experienced Educationist who
  are conversant with the pedagogic and SCT approaches and are in practice .They
  should be from the colleges/University
- **2. TORs** for consultants : to be developed and finalised by the HR for all the consultants for the main survey
- 3. Letter to SUBEB and SM0E/LGEAs

Seeking permission and approval stating

- Purpose ie part of teacher assessment/wsdp issues
- Random sample technique used
- Period of survay

#### Sample letter Appendix 1 Model Letter to SUBEP

This letter is to inform you that your school has been selected as one of 233 schools to participate in a national survey to track the progress of the education reform programme being implemented by the Ministry of Education. The purpose of the study is to gather information that can be used to assist the Ministry of Education with decisions aimed at improving: (a) teaching and learning (b) the management of education. It is extremely important that your school participates in this data collection because missing data for even a single school in our country could damage the validity of the study. I should stress that all results are confidential and will not be used by the Ministry of Education in judging your school.

I will be visiting your school on (fill in the date) to conduct the survey and will arrive at about (fill in the time). During the day of the survey, I will observe two classes and will let you know on the day which these are to be. I will also give you, two teachers, six students and three parents questionnaires to complete.

In preparation for the survey, I would be grateful if you could do the following;

- (a) Make sure that you <u>have available the total enrolment</u> in your school and the total number of girls in your school. You will need these figures to complete your questionnaire
- (b) <u>Invite three parents to come to the school on the day of the survey</u>. They should be asked to arrive at the same time as my planned arrival time. One or two of the parents should be mothers. At least one should not be able to read or write. None should be PTA members
- (c) <u>Arrange for a quiet place to be made available</u> for parents, teachers and students to complete their questionnaires.

I am very grateful for your co-operation in these matters

Yours sincerely

#### Logistics

#### 4. Printing Issues

Consultants Manual 100 copies
 Trainers Manual 5 copies (spiral)

Teacher Observation sheets: 840
 Learner Observation sheets: 840
 Learner resources checklist sheet; 840

#### 5. Purchase of materials

1. Envelopes

Main survey - 1 per school

- 2. Black HB Pencils 2 per consultant
- 3. Eraser -1 per consultants
- 4. Sharpners -1 per consultants
- 5. Memo pads (pilot training/training) 1 per consultant
- 6. Biros (training only) 1 per consultant

#### 6. Survey procedures

Refer to all the Manuals

#### 7. Return of the materials

• Consultants to Submit completed Observation Sheets weekly to the state specialist (Consultants to draw their T/tables and submit at the training session before they commence the actual suevey)

#### 8. Payments

- Transport money: To be paid before they the actual survey commences
- Subsistence: To be paid
- Consultancy fees: to be paid after the survey
- Accommodation: to be made for distant LGAs

#### 9. Checking procedure

- 1. All codes
- 2. Observation sheets (are there 30 ticks on the sheet?)
- 3. Errors to be tolerated (+ or 3)
- **10. Penalties:** if there are a lot of discrepancies, the consultant must revisit the school but not the same teacher
- 11. Data Analysis and report writing: to be done a workshop in August

#### **Context**

The main teaching and learning survey has been conducted in June and the first week of July. Data was dispatched to the National Bureau of Statistics for entry using scanning procedures into SPSS. The data now needs to be analysed and a baseline report prepared.

#### **Purpose of Visit**

The main purpose of the visit is to prepare a baseline report of teaching and learning practice in the five states covered by ESSPIN. A subsidiary purpose is to build the capacity of State quality team leaders in data analysis and report writing.

#### **Outputs of the Consultancy**

The outputs will be;

- A baseline report which meets the needs of ESSPIN
- Enhanced analytic and writing skills amongst State quality team leaders

#### **Activities**

The activities will include;

- A data analysis workshop in which the data will be explored. Stress will be placed on formulating the most appropriate questions with which to interrogate the data.
- A writing workshop in which participants practice writing text and presenting data for external audiences. Stress will be placed on the clarity of presentation, and the matching of generalisation and evidence.
- Preparation of the baseline report which will describe the main teaching and learning behaviours in schools in the five states covered by ESSPIN