# Education Sector Support Programme in Nigeria (ESSPIN) 

Gender analysis of key results<br>\section*{ESSPIN composite survey 1 (2012)}

April 2013

## Report Number 061



## Report Distribution and Revision Sheet

Project Name: Education Sector Support Programme in Nigeria
Code: 244333TA05
Report No.: ESSPIN 061
Report Title: Gender analysis of key results from ESSPIN composite survey 1 (2012)

| Rev <br> No | Date of <br> issue | Originator | Checker | Approver | Scope of checking |
| :---: | :--- | :--- | :---: | :---: | :--- |
| 1 | Apr <br> 2013 | ESSPIN M\&E, Output <br> 3 and Output 4 Teams | Jake <br> Ross | Kayode <br> Sanni | Accuracy, <br> completeness, <br> formatting |

## Scope of Checking

This report has been discussed with the originator and checked in the light of the requirements of the terms of reference. In addition the report has been checked to ensure editorial consistency, accuracy of data, completeness of scope and responsiveness to client's requirements.

## Distribution List

| Name | Position |
| :--- | :--- |
| DFID | Head, DFID Nigeria |
| Richard Montgomery | Human Development Team Leader, DFID |
| Sarah White | Senior Education Adviser, DFID |
| Barbara Payne | Education Adviser, DFID |
| Emily Oldmeadow | Results Adviser, DFID |
| Esther Forgan | Commercial Adviser, DFID |
| Tony Gardener | Deputy Programme Manager, DFID |
| Olatunji Ogunbanwo | Head of DFID Northern Nigeria Office (Kano) |
| Ben Le Roith | Head of DFID Lagos Office (South West) |
| Adeshina Fagbenro-Byron | Head of DFID Enugu Office (South East/South South) |
| Olachi Chuks-Ronnie | DFID State Representative, Jigawa \& Yobe |
| Zainab Lukat | DFID State Representative, Kano \& Zamfara |
| Ben Fisher | DFID State Representative, Kaduna \& Katsina |
| Siaka Alhassan | HD Programme Officer, DFID |
| Justice Ogoroh | Education Project Officer, DFID |
| Roseline Onyemachi | Interim Project Director, IMEP |
| IMEP | Finance \& Admin Manager, IMEP |
| Bruce Mead | Project Director |
| Yvonne Nwokedi | National Programme Manager |
| ESSPIN | Deputy Programme Manager |
| John Martin | Kayode Sanni |
| Jake Ross |  |


| Name | Position |
| :---: | :---: |
| Andy Campbell | Operations Manager |
| Nguyan Feese | Lead Specialist, Institutional Development |
| Gboyega Ilusanya | State Team Leader, Lagos |
| Emma Williams | State Team Leader, Kwara |
| Olalekan Saidi | State Team Leader, Kano |
| Christiana Omotayo Odekunle | State Team Leader, Kaduna |
| Pius Elumeze | State Team Leader, Enugu |
| Mustapha Ahmad | State Team Leader, Jigawa |
| John Kay | Lead Specialist, Education Quality |
| Lilian Breakell | Task Team Leader, School Improvement |
| Kabiru Abass | Task Specialist, Access, Gender \& Equity |
| Fatima Aboki | Lead Specialist, Community Engagement and Learner Participation |
| Sandra Graham | Task Team Leader, Civil Society |
| Bankole Ebisemiju | Communications \& Knowledge Management Coordinator |
| Consortium partners |  |
| David Theobald | Senior Education Adviser, British Council |
| Georgina Rawle | Education and Social Policy Economist, Oxford Policy Management |
| Susan Grant | Nigeria Country Director, Save the Children |
| Sue Phillips | Director, Social Development Direct |
| Federal partners |  |
| Prof. Ruqayyatu Ahmed Rufa'i, OON | Honourable Minister of Education |
| Dr. MacJohn Nwaobiala | Permanent Secretary, Federal Ministry of Education |
| State partners | Honourable Commissioners of Education and SUBEB Chairs |

## Disclaimer

This document is issued for the party which commissioned it and for specific purposes connected with the captioned project only. It should not be relied upon by any other party or used for any other purpose.
We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties

## Note on Documentary Series

A series of documents has been produced by Cambridge Education as leader of the ESSPIN consortium in support of their contract with the Department for International Development for the Education Sector Support Programme in Nigeria. All ESSPIN reports are accessible from the ESSPIN website. http://www.esspin.org/resources/reports

The documentary series is arranged as follows:
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)

ESSPIN 4-- Support for Communities (Reports and Documents for Output 4)
ESSPIN 5-- Information Management Reports and Documents

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 |
| EN | Enugu |

This report should be read in conjunction with ESSPIN 060 Overall findings and technical report of ESSPIN Composite Survey 1 (2012) and the six State Reports of ESSPIN Composite Survey 1 (2012):
EN201, JG201, KD201, KN201, KW205, LG202

## Acknowledgments

ESSPIN gratefully acknowledges the contributions of the following to the Composite Survey 2012 report data collection, processing, analysis, writing, editing and review (alphabetical order):

## Fatima Aboki

Lilian Breakell
Edgar Cooke
Domenec Devesa
Allan Findlay
Sani Gar
Sandra Graham
Abbe Katerega
John Kay
Manjola Kola
Juan Munoz
Henry Onimole
Barbara Payne
Gunilla Pettersson
Georgina Rawle
Jake Ross
Kayode Sanni
Sebastian Silvaleander
Simon Thomson
Zoe van der Hoven
Sue Williamson

Thanks are also due to all the children, teachers, head teachers, SBMC members, local and state government officers, SSIT members, NPC field workers, DFID personnel and others, without whose participation and dedication these findings could not have been reported.

## Contents

Report Distribution and Revision Sheet ..... ii
Disclaimer ..... iv
Note on Documentary Series ..... iv
Figures ..... vi
Tables. ..... vii
Acronyms and Abbreviations ..... viii
Abstract ..... 1
Executive Summary ..... 1
Introduction ..... 2
Teacher performance: gender differences ..... 4
Headteacher performance: gender differences. ..... 7
Learning achievement in English literacy and numeracy: gender differences ..... 10
English literacy and numeracy logframe indicators ..... 10
Primary 2 English literacy scores ..... 12
Primary 4 English literacy scores ..... 15
Primary 2 numeracy scores ..... 18
Primary 4 numeracy scores ..... 21
Conclusions and implications for ESSPIN programme ..... 24
Annex 1: Data ..... 26
References ..... 41

## Figures

Figure 1: Proportion of teachers that meet the ESSPIN logframe competence standard and underlying criteria by gender for all six states combined (\%) ..... 4
Figure 2: Proportion of teachers that meet the assessment and inclusive teaching criteria by gender for all six states combined (\%) ..... 6
Figure 3: Proportion of headteachers that meet the ESSPIN logframe effectiveness standard and underlying criteria by gender for all six states combined (\%) ..... 8
Figure 4: Proportion of pupils that meet the ESSPIN logframe English literacy and numeracy standards by gender, for six states combined (\%) ..... 11
Figure 5: Mean p2 English literacy test score by gender, for six states combined (\%) ..... 12
Figure 6: Distribution of p2 English literacy test scores by score band and grade level of questions, for six states combined (\%) ..... 13
Figure 6: Distribution of p2 English literacy test scores by score band and learning domain, for six states combined (\%) ..... 14
Figure 8: Mean p4 English literacy test score by gender, for six states combined (\%) ..... 15
Figure 9: Distribution of p4 English literacy test scores by score band and grade level of questions, for six states combined (\%) ..... 16
Figure 10: Distribution of p4 English literacy test scores by score band and learning domain,for six states combined (\%)17
Figure 11: Mean p2 numeracy test score by gender, for six states combined (\%) ..... 18
Figure 12: Distribution of p2 numeracy test scores by score band and grade level of questions, for six states combined (\%) ..... 19
Figure 13: Distribution of p2 numeracy test scores by score band and learning domain, for six states combined (\%) ..... 20
Figure 14: Mean p4 numeracy test score by gender, for six states combined (\%) ..... 21
Figure 15: Distribution of p4 numeracy test scores by score band and grade level of questions, for six states combined (\%) ..... 22
Figure 16: Distribution of p4 numeracy test scores by score band and learning domain, for six states combined (\%) ..... 23
Tables
Table 1: Gender differences in proportion of teachers meeting competence standard and underlying criteria by state ..... 5
Table 2: Gender differences in proportion of teachers meeting criteria underpinning the logframe school inclusiveness standard by state ..... 7
Table 3: Gender differences in criteria underpinning the ESSPIN logframe school inclusiveness standard by state ..... 9
Table 4: Gender differences in proportion of pupils meeting the literacy and numeracy logframe standards by state ..... 11
Annex Table 1 Teacher performance indicators by gender and state ..... 26
Annex Table 2 Headteacher performance indicators by gender and state ..... 27
Annex Table 3 Pupil learning achievement ESSPIN logframe indicators by gender and state 28 Annex Table 4 Primary 2 pupil English Literacy test scores by test score band, gender and state ..... 29
Annex Table 5 Primary 2 pupil English Literacy test scores by grade level of question, gender and state ..... 30
Annex Table 6 Primary 2 pupil English Literacy test scores by learning domain, gender and state ..... 31
Annex Table 7 Primary 4 pupil English Literacy test scores by test score band, gender and state ..... 32
Annex Table 8 Primary 4 pupil English Literacy test scores by grade level of question, gender and state ..... 33
Annex Table 9 Primary 4 pupil English Literacy test scores by learning domain, gender and state ..... 34
Annex Table 10 Primary 2 pupil numeracy test scores by test score band, gender and state 35 Annex Table 11 Primary 2 pupil numeracy test scores by grade level of question, gender and state ..... 36

Annex Table 12 Primary 2 pupil numeracy test scores by learning domain, gender and state

Annex Table 13 Primary 4 pupil numeracy test scores by test score band, gender and state 38 Annex Table 14 Primary 4 pupil numeracy test scores by grade level of question, gender and state 39

Annex Table 15 Primary 4 pupil numeracy test scores by learning domain, gender and state

## Acronyms and Abbreviations

| CI | Confidence Interval |
| :--- | :--- |
| CS | Composite Survey |
| CSO | Civil Society Organisation |
| DEFF | Design Effect (used in its statistical sense) |
| DFID | Department for International Development |
| DPRS | Director(ate) of Planning, Research and Statistics |
| EDORE | Education Operational Research and Evaluation (project of DFID Nigeria) |
| EMIS | Education Management Information System |
| ESSPIN | Education Sector Support Programme in Nigeria |
| HT | Head Teacher |
| JSS | Junior Secondary School |
| LGA/LGEA | Local Government (Education) Area |
| MLA | Measurement of Learning Achievement |
| N | Number (of cases observed, interviewed, assessed, etc) |
| NPC | National Population Commission |
| SBMC | School Based Management Committee |
| SE | Standard Error (used in its statistical sense) |
| SIP | School Improvement Programme (ESSPIN model) |
| SMO | Social Mobilisation Officer |
| SQS | State Quality Specialist (ESSPIN team member) |
| SSIT | State School Improvement Team |
| SSO | School Support Officer |
| SUBEB | State Universal Basic Education Board |
| TPD | Teacher Professional Development (fund of UBEC) |
| UBEC | Universal Basic Education Commission |


#### Abstract

This Gender Analysis is a supplement to ESSPIN 060 Overall Findings and Technical Report of ESSPIN composite survey 1 (2012), and should be read in conjunction with that volume. It includes gender disaggregated tables, graphs and charts of teacher, head teacher and pupil performance against the standards set in the ESSPIN logframe. Additional data provide gender-specific information on the criteria underlying the standards, and domains of learning and grade-specific items in the learning outcomes measures. At the programme level there is no statistically significant difference between male and female teaches in terms of competence; headteachers in terms of effectiveness; or pupils in p2 numeracy and p4 literacy. Female teachers perform significantly better than male teachers in classroom inclusive practices; and girls achieved higher average marks than boys in p2 literacy and p4 numeracy. The conclusions point to further investigation of the correlation found between gender-equal pupil performance and ESSPIN-supported schools' performance being higher than Control Schools'; building on best practice in inclusive classroom practices; and interpreting the results in local contexts, rather than relying on programme-level typologies.


## Executive Summary

In July 2012, representative stratified samples of public primary schools, head teachers, teachers and pupils were surveyed in the six Nigerian states where the DFID/UKaid-funded Education Sector Support Programme in Nigeria works. This report presents the findings with respect to those ESSPIN output and impact measures for which gender-specific data are available. There is no evidence of a significance difference in levels of teacher or head teacher competence by gender, nor in the underlying criteria, across the six states combined, although some significant differences by gender do exist at the individual state level. On all three indicators of inclusive classroom practices, female teachers are more likely to meet the criteria than male ones. There is no significant gender difference in the proportions of pupils meeting the p4 literacy or the p2 numeracy standards across the six states combined. However, girls perform seven to eight percentage points higher on average than boys in p 2 literacy and p4 numeracy-which are the two learning outcomes measures which showed no significant differences between Phase 1 schools and Control Schools (see ESSPIN 060). One explanatory hypothesis to explore is that where their effect is felt, ESSPIN interventions assist all children to achieve closer to their potential, thereby reducing gender gaps in learning. The gender analysis ends with conclusions for the ESSPIN programme in view of the results and lessons learnt, which include reflecting on the significance of the detailed findings at the local level, since the overall typologies identified play out differently in each context.

## Introduction

1. ESSPIN's intended Impacts are 'More children achieve basic literacy and numeracy; and more children, especially girls, enter and complete basic education'. The programme aims for Nigeria's own resources to be used more efficiently and effectively to improve participation and learning achievement of pupils across six focus states, through better teaching in schools of improving quality: Enugu, Jigawa, Kaduna, Kano, Kwara and Lagos. The composite survey (CS) is central to ESSPIN's internal monitoring and evaluation strategy and accountability for results. It is designed to provide robust evidence about the effects ESSPIN is having at key milestones and the end of programme (currently scheduled for July 2014).
2. A first round of the CS, so called because it is comprised of the essential elements of several hitherto separate baseline studies conducted by ESSPIN in 2009/10, took place in mid-2012. The main findings from the CS1 2012 are documented in an overall technical report (ESSPIN report 060), and in six state reports (ESSPIN reports: EN201, JG201, KN201, KW205, LG202). This CS1 2012 thematic report on gender presents key indicators of teacher and pupil performance disaggregated by gender, and draws lessons for further strengthening ESSPIN's interventions to promote gender equality in learning. Equally, the results are relevant to a broader set of stakeholders seeking to redress gender inequality in the Nigerian education system, teaching practices and learning.
3. ESSPIN's Access and Equity Strategy prioritises girls' education in northern Nigeria, inclusive education and gender mainstreaming within education policies, quality benchmarking, and school-community management. This is to ensure access to basic education for all children to reduce the disparities experienced by girls in the north (Kano, Kaduna and Jigawa and Kwara to lesser extent) and boys in Enugu State. Material support, Conditional Cash Transfers and other forms of social protection and sporting activity strategies are deployed to assist girls and boys in vulnerable households in the poorest communities. Participation of girls and boys in school planning and management are promoted through the establishment of women and children's committees or 'safe spaces'. Their safety and security are enhanced through fostering a child-friendly school environment.
4. ESSPIN-developed teacher and community empowerment training materials are gender responsive and tailored to context. Teaching methods are participatory and reflect the needs of different groups of children, both boys and girls, to ensure both equity and quality of learning in classroom.
5. Research has been commissioned into women's participation in sociocultural context, as well as a female teacher deployment survey to strengthen the work around gender, women's SBMC sub-committees, and gender champions (both male and female) to promote diverse voices in school level decision making processes.
6. ESSPIN school infrastructure is intended to help address the needs of boys and girls irrespective of their background or disability. States are being supported to develop inclusive education policies that reduce or eliminate all forms of discrimination in the education system. Gender is been considered in all aspects of school community level work.
7. The CS1 2012 is based on a representative sample of public primary schools, teachers and primary 2(p2) and primary 4 (p4) pupils in each of the six states supported by ESSPIN. The overall technical report (ESSPIN 060) contains full details of the sampling strategy, sample, instruments, definitions of key indicators and the approach to analysis. These details are not repeated in this report, although a summary definition of each key indicator is presented for clarity. It is important to note that estimates are subject to sampling error, and sampling errors are notably large for some of the pupil learning indicators in particular. This means that some of the estimates are not very precise, and 95\% confidence intervals are wide. Annex 1 contains details of all of the key estimates (including sample size and standard errors) by gender and state.
8. The remainder of the report is structured in two parts. The first contains the gender disaggregated results. This section examines gender disparities in teacher and headteacher performance (output-level indicators), and then in p2 and p4 pupil performance in English literacy and numeracy tests (impact-level indicators). The second part draws conclusions and discusses implications for ESSPIN's gender-related interventions going forward. It is followed by Annex tables containing detailed breakdowns of performance by state, gender, and indicator, for teachers, headteachers and children's learning outcomes including by gender, subject, state, grade, domain and curriculum grade level of items.

## Teacher performance: gender differences

9. ESSPIN's teacher competence logframe indicator is based on four criteria. These are summarised below.

## Logframe standard for teacher competence

A teacher must meet three out of four of the following criteria to meet the competence standard if he/she teaches English and/or maths. Teachers of other subjects must meet two out of three criteria (excluding 1 below).

1) Knowledge of English or mathematics curriculum (based on interview)
2) Use of at least one teaching aid during lesson observation
3) Greater use of praise than reprimand during lesson observation
4) Class organisation: assigning individual or group tasks at least twice during lesson observation (or for two contiguous five-minute blocks)
10. Taking all six states together, there is no significant difference in the level of teacher competence by gender. Figure 1: Proportion of teachers that meet the ESSPIN logframe competence standard and underlying criteria by gender for all six states combined (\%) shows that $70 \%$ of male teachers meet the competence standard compared with $69 \%$ of female teachers. Similarly, there is no significant gender disparity in any of the four criteria underpinning the competence standard.

Figure 1: Proportion of teachers that meet the ESSPIN logframe competence standard and underlying criteria by gender for all six states combined (\%)


[^0]11. Some gender differences in teacher performance emerge when the individual state results are considered in Table 1: Gender differences in proportion of teachers meeting competence standard and underlying criteria by state. Male teachers significantly outperform female teachers in meeting the competence standard in Lagos and in Kano, while in Enugu female teachers perform significantly better. There are no significant gender differences in meeting the overall competence standard in Jigawa, Kaduna or Kwara.
12. Looking at the individual criteria which contribute to the competence standard, there are significant gender differences in results in some states. Female teachers in Jigawa have significantly better curriculum knowledge compared to their male counterparts (and this result is significant at 0.01 level). Female teachers in Kwara use group work and/or individual work during their lessons significantly more than male teachers. On the other hand, male teachers perform significantly better than female teachers on praising children in Kano, and on using group work and/or individual work during lessons in Lagos.

Table 1: Gender differences in proportion of teachers meeting competence standard and underlying criteria by state

| Standard or criteria | Is there a statistically significant difference between the average proportion of male and female teachers meeting the standard/criteria? ${ }^{12}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enugu | Jigawa | Kaduna | Kano | Kwara | Lagos | All |
| Competence standard | *F | - | - | *M | - | **M | - |
| Curriculum knowledge | - | ***F | - | - | - | - | - |
| Teaching aids | - | - | - | - | - | - | - |
| Praise/reprimand | - | - | - | **M | - | - | - |
| Class organisation | - | - | - | - | **F | **M | - |

Source: Composite Survey 2012. Notes: (1) Meaning of symbols in the table: Asterisks mean that there is a significant gender difference at 0.01 level $\left({ }^{* * *}\right), 0.05$ level $\left({ }^{* *}\right)$ or 0.1 level $\left({ }^{*}\right) ; M$ means that the male estimate is significantly larger than the female estimate; $F$ means that the female estimate is significantly larger than the female estimate; - means that there is no significant difference. (2) The individual state estimates are in Annex Table 1 Teacher performance indicators by gender and state
13. As well as capturing data on the various components of teacher competence, the composite survey also collected information on how teachers assess pupils, and how teachers interact with pupils during lessons. Frequent and varied pupil assessment, and inclusive teaching practice are two of the four criteria which contribute to the ESSPIN logframe indicator of school inclusiveness. The definition of the assessment practice and inclusive teaching criteria are set out in the box below.

## Criterion for assessment practices

A teacher must use more than one of the following assessment methods:

1) Class test (based on an example of a completed test paper from the past 2 weeks)
2) Marked class exercise book (based on an example of a marked pupil workbook from the past 2 weeks)
3) End of term examination (based on an example of a graded examination paper from the previous term)

## Criterion for spatial inclusion

1) A teacher must engage with at least one pupil from four different areas of the classroom (classroom is divided into six areas) during a lesson.

## Criterion for gender inclusion

1) A teacher must engage with boys and girls proportionally to their presence in the classroom within a 10\% margin (10\% above or below). For example, if the class contains $50 \%$ girls than teachers who engage with girls between $60 \%$ and $40 \%$ of total engagements will meet the criterion.
14. Female teachers are significantly more likely than males to meet each of the three inclusiveness criteria: assessment practices, spatial inclusion and gender inclusion, across all six states combined. Figure 2: Proportion of teachers that meet the assessment and inclusive teaching criteria by gender for all six states combined (\%) shows that female estimates are between 8 and 15 percentage points higher than the equivalent male estimates.

Figure 2: Proportion of teachers that meet the assessment and inclusive teaching criteria by gender for all six states combined (\%)


[^1]15. The significantly better performance of female teachers on the three aspects of teacher inclusiveness behaviour is evident in four of the six states, as Table 2: Gender differences in proportion of teachers meeting criteria underpinning the logframe school inclusiveness standard by state reveals. Kwara is the only state where female teachers significantly outperform male teachersin conducting regular and varied pupil assessment. In Kaduna and Lagos, female teachers are significantly more likely to include pupils from different areas in the classroom during lessons, than male teachers. Female teachers in Lagos are also more likely than males to meet the gender inclusiveness criterion, as are female teachers in Kano.

Table 2: Gender differences in proportion of teachers meeting criteria underpinning the logframe school inclusiveness standard by state

| Standard or criteria | Is there a statistically significant difference between the average proportion of male and female teachers meeting the criteria? ${ }^{12}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enugu | Jigawa | Kaduna | Kano | Kwara | Lagos | All |
| Assessment practices | - | - | - | - | ***F | - | ***F |
| Spatial inclusion | - | - | **F | - | - | **F | ***F |
| Gender inclusion | - | - | - | **F | - | ***F | **F |

Source: Composite Survey 2012. Notes: (1) Meaning of symbols in the table: Asterisks mean that there is a significant gender difference at 0.01 level $\left({ }^{* * *}\right), 0.05$ level $\left({ }^{* *}\right)$ or 0.1 level $\left({ }^{*}\right) ; \mathrm{M}$ means that the male estimate is significantly larger than the female estimate; F means that the female estimate is significantly larger than the female estimate; - means that there is no significant difference. (2) The individual state estimates are in Annex Table 1 Teacher performance indicators by gender and state

## Headteacher performance: gender differences

16. ESSPIN's headteacher effectiveness logframe indicator is based on seven criteria. These are summarised below.

## Logframe standard for headteacher effectiveness

A headteacher must ensure that five out of seven of the following criteria are met in order to meet the headteacher effectiveness standard

1) Carry out two or more lesson observations in the past two weeks
2) Hold four or more professional development meetings since the start of the 2011-12 school year (NB: survey took place more than 9 months into the school year)
3) School has a teacher attendance book and headteacher recalls at least two actions taken to promote teacher attendance
4) Clear school opening time: more than $50 \%$ of pupils sampled agree on the school opening time and more than $50 \%$ of teachers sampled agree on the school opening time
5) More than $50 \%$ of classes are in their classroom with their teacher within 30 minutes of school opening time
6) Length of morning break is 35 minutes or less, except in Enugu when it must be 15 minutes or less
7) More than $50 \%$ of lessons observed finished within 5 minutes of a standard 35 minute lesson duration (i.e. between 30 and 40 minutes long)
17. For all six states combined there is no significant gender difference in headteacher effectiveness based on the standard set out in the box above. There are, however, some gender differences in estimates for the underlying criteria. It is evident from Figure 3: Proportion of headteachers that meet the ESSPIN logframe effectiveness standard and underlying criteria by gender for all six states combined (\%) that there are large absolute gender differences in the proportion of headteachers meeting lesson observation, timing of first lesson, and the length of lesson criteria. These are all significant differences, which reveal that female headteachers are more likely to conduct regular lesson observation and to ensure that lessons start on time, than male headteachers. On the other hand, male headteachers are more likely than females to preside over a school where lessons are of the prescribed length.

Figure 3: Proportion of headteachers that meet the ESSPIN logframe effectiveness standard and underlying criteria by gender for all six states combined (\%)


Source: Composite Survey 2012. See Annex Table 2.
18. In three states, Enugu, Kaduna and Kwara, female headteachers are significantly more likely to be carrying out regular lesson observation than male headteachers (Table 3). In Kwara, this gender difference is very strongly significant ( 0.01 level). The other strongly significant gender difference found in Kwara is on the teacher attendance criteria, where female headteachers outperform male headteachers in actively promoting good attendance.
19. States where male headteachers perform better than females on some of the criteria are Kaduna and Enugu. Male headteachers in Kaduna are significantly more likely to ensure that there is a clear school opening time than schools led by female heads. In Enugu, male headteachers are significantly more likely than female to ensure that lessons are of the prescribed length.

Table 3: Gender differences in criteria underpinning the ESSPIN logframe school inclusiveness standard by state

| Standard or criteria | Is there a statistically significant difference between the average proportion <br> of male and female headteachers meeting the standard/criteria? |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enugu | Jigawa | Kaduna | Kano | Kwara | Lagos | All |
| Effectiveness standard | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - |
| Lesson observation | *F | $\mathrm{n} / \mathrm{a}$ | ${ }^{*} \mathrm{~F}$ | $\mathrm{n} / \mathrm{a}$ | ${ }^{* * *} \mathrm{~F}$ | $\mathrm{n} / \mathrm{a}$ | ${ }^{* * \mathrm{~F}}$ |
| Prof. dev. meetings | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - |
| Teacher attendance | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | ${ }^{* * *} \mathrm{~F}$ | $\mathrm{n} / \mathrm{a}$ | - |
| School opening time | - | $\mathrm{n} / \mathrm{a}$ | ${ }^{* *} \mathrm{M}$ | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - |
| Timing of first lesson | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | ${ }^{* * *} \mathrm{~F}$ |
| Length of break | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - |
| Length of lesson | ${ }^{* *} \mathrm{M}$ | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | - | $\mathrm{n} / \mathrm{a}$ | ${ }^{* * \mathrm{M}}$ |

Source: Composite Survey 2012. Notes: (1) Meaning of symbols in the table: Asterisks mean that there is a significant gender difference at $0.01\left({ }^{* * *}\right), 0.05$ level $\left({ }^{* *}\right)$ or 0.1 level $\left({ }^{*}\right)$; M means that the male estimate is significantly larger than the female estimate; F means that the female estimate is significantly larger than the female estimate; - means that there is no significant difference; $n / a$ means not available because of the number of observations is less than 30. (2) The individual state estimates are in Annex Table 2.

## Learning achievement in English literacy and numeracy: gender differences

## English literacy and numeracy logframe indicators

20. The ESSPIN English literacy and numeracy logframe indicators for primary 2 ( p 2 ) and primary 4 (p4) pupils are defined in the box below (full details in the CS12012 technical report).

P2 English literacy: Proportion of p2 children who correctly answer a p2 curriculum level question on listening comprehension and correctly read a sufficient number of words from a p2 curriculum level passage.

P4 English literacy: Proportion of p4 children who correctly read a sufficient number of familiar words at p4 curriculum level and correctly read a sufficient number of words from a p4 curriculum level passage and correctly answer at least four out of five reading comprehension questions.

P2 numeracy: Proportion of p2 children who correctly answer at least five out of six p2 curriculum level questions on addition and subtraction, and both multiplication questions.

P4 numeracy: Proportion of p4 children who correctly answer p4 curriculum level questions on addition and subtraction and multiplication and division.
21. There is no significant gender difference in the proportion of pupils meeting the p4 literacy or the p2 numeracy standard across six states combined. Figure 4 shows that the absolute gender gap in meeting the standards is 1 percentage point or less for p 4 literacy and p2 numeracy, but $7-8$ percentage points in favour of girls for p 2 literacy and p 4 numeracy. Girls outperform boys in meeting the p2 literacy and p4 numeracy logframe standards, but this effect is only weakly significant (at 0.1 level).

Figure 4: Proportion of pupils that meet the ESSPIN logframe English literacy and numeracy standards by gender, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 3.
22. Lagos is the only state where there are no significant differences in the performance of boys and girls in meeting any of the four literacy and numeracy standards, as Table 4 shows. Some significant gender differences in learning achievement are evident in the other five states. Girls are significantly more likely than boys to meet the p4 numeracy standard in Enugu and Kano, and the p2 literacy standard in Kaduna. On the other hand, boys significantly outperform girls in meeting the p2 numeracy standard in Enugu, the p4 literacy standard in Jigawa and the p2 literacy standard in Kwara.

Table 4: Gender differences in proportion of pupils meeting the literacy and numeracy logframe standards by state

| Standard or criteria | Is there a statistically significant difference between the average proportion of male and female pupils meeting the standards? ${ }^{12}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enugu | Jigawa | Kaduna | Kano | Kwara | Lagos | All |
| P2 literacy logframe standard | - | - | **F | - | *M | - | *F |
| P4 literacy logframe standard | - | *M | - | - | - | - | - |
| P2 numeracy logframe standard | **M | - | - | - | - | - | - |
| P4 numeracy logframe standard | *F | - | - | **F | - | - | *F |

Source: Composite Survey 2012. Notes: (1) Meaning of symbols in the table: Asterisks mean that there is a significant gender difference at 0.01 level $\left({ }^{* * *}\right), 0.05$ level $\left({ }^{* *}\right)$ or 0.1 level $\left({ }^{*}\right) ; \mathrm{M}$ means that the male estimate is significantly larger than the female estimate; F means that the female estimate is significantly larger than the female estimate; - means that there is no significant difference. (2) The individual state estimates are in Annex Table 3.
23. Moving beyond the logframe learning achievement indicators, a richer analysis of gender differences in learning achievement in English literacy and numeracy is presented below based on the scores obtained by children on all of the items in each test. The tests contain questions matched to the different grade levels in the Nigerian curriculum, and also cover a
variety of content or learning domains. It is useful to assess whether boys and girls perform significantly differently on questions of varying difficulty and content.

## Primary 2 English literacy scores

24. For pupils in the six states taken together, there is no significant gender difference in p2 English literacy test scores (Figure 5). The individual state results, also shown in Figure 5, find that girls in Enugu and Kaduna significantly outscored boys on the p2 literacy test. This effect was weakly significant in Enugu (at 0.1 level) and significant in Kaduna ( 0.05 level). No significant gender gap in scores was evident in the other four states.

Figure 5: Mean p2 English literacy test score by gender, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 4.
25. There is no significant gender difference in the distribution of pupil scores on the p2 literacy test for all six states combined. Figure 6 shows fairly similar patterns of coloured bars for boys and girls for all questions. When the test is split into grade level of questions, gender differences in the top end of the scoring distribution for p2 questions emerge. Some $18 \%$ of girls scored in the top band level for p2 questions compared with $8 \%$ of boys, and this is a significant difference ( 0.05 level). For the second highest band, the opposite gender gap is found whereby a significantly higher proportion of boys scored 50-74\% compared with girls (although this difference is only weakly significant, at 0.1 level).
26. The individual state results are in Annex Table 4 and Annex Table 5. In each of the six states there are some significant differences in the distribution of scores by gender for the difference grade levels of questions. Enugu and Kaduna stand out as the states where girls are significantly more likely to score in the top-score band than boys.

Figure 6: Distribution of p2 English literacy test scores by score band and grade level of questions, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 4 and Annex Table 5.
27. Looking at the distribution of test scores by learning domain in Figure 7, fairly similar patterns are evident for boys and girls for early reading skills, and skills for reading with comprehension. Indeed, there are no significant gender differences in the distribution of scores for either of these domains across all six states. But for writing skills, some $19 \%$ of girls scored in the top band compared with only $9 \%$ of boys. This is a significant difference (at 0.05 level).
28. Turning to the distribution of results by learning domain from individual states (see Annex Table 6), Enugu, Lagos and Kaduna are notable because of the comparatively better performance of their girls at the top end of the score distribution on selected domains. In Lagos and Kaduna, girls are significantly more likely than boys to score in the top band for writing skills. Girls in Kaduna are also more likely to be in the top score band than boys for early reading and skills for reading comprehension; this is also the case in Enugu.

Figure 7: Distribution of p2 English literacy test scores by score band and learning domain, for six states combined (\%)

$\begin{array}{ll}\square \text { Test score } 0-24 \% & \square \text { Test score } 25-49 \% \\ \square \text { Test score } 50-74 \% & \text { Test score } 75-100 \%\end{array}$

Source: Composite Survey 2012. See Annex Table 6.

## Primary 4 English literacy scores

29. For pupils in the six states taken together, there is no significant gender difference in p4 literacy test scores (Figure 8). Consistent with this overall finding, there is no evidence of significant gender differences in p4 literacy test scores in four of the six states (Enugu, Jigawa, Kwara and Lagos). But in Kaduna, girls scored 48\% on average compared with 29\% for boys. This is a strongly significant result (at 0.01 level). The reverse gender gap is apparent in Kano where boys scored an average of $46 \%$ compared with $29 \%$ for girls; again a significant difference (at 0.05 level).

Figure 8: Mean p4 English literacy test score by gender, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 7.
30. The distribution of pupil scores on the p4 literacy test for all six states combined is fairly similar for boys and girls, as Figure 9 shows. On the overall test, girls are more likely to score in the second score band (25-49\%) than boys but the difference is only weakly significant (at 0.1 level). On the p1/p2 questions, boys are significantly more likely to be in the $25-49 \%$ band than girls, while girls are significantly more likely to be in the next band up (although the difference is only weakly significant at 0.1 level). On p3 and p4 questions, girls are more likely than boys to be in the second band and top band respectively, but these gender gaps are only weakly significant (at 0.1 level).
31. The individual state results are in Annex Table 7 and Annex Table 8. In each of the six states there are some significant differences in the distribution of scores by gender for the difference grade levels of questions. Kaduna stands out as the state where girls are significantly more likely to score in the top-score band than boys overall, and for $p 1 / p 2, p 3$ and p4 questions separately. Boys in Kano are significantly more likely to be in the top band than girls when all questions are taken into account, but this gap in favour of boys is only weakly significant on the individual grade level questions.

Figure 9: Distribution of p4 English literacy test scores by score band and grade level of questions, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 7 and Annex Table 8.
32. Looking at the distribution of test scores by learning domain in Figure 10, fairly similar patterns are evident for boys and girls for skills for reading with comprehension, and for writing skills. There is only one weakly significant result (at 0.1 level), which is that girls are more likely to score in the second band than boys on the questions which tested skills for reading comprehension.
33. At the individual state level, there is more evidence of significant gender gaps in the distribution of scores for the two learning domains (see Annex Table 9). On skills for reading comprehension, boys in Enugu and Jigawa are significantly more likely to score in the second highest score band than girls. In Kaduna, $80 \%$ of boys scored in the bottom band compared with only $55 \%$ of girls, a difference which is significant at 0.05 level. The gender gap is in the opposite direction in Kano where $67 \%$ of girls scored in the lowest band compared with $47 \%$ of boys (again this gap is significant at 0.05 level).
34. On writing skills, again boys in Enugu and Jigawa are significantly more likely to score in the second highest score band than girls, although this difference is only weakly significant in Enugu. Boys in Kaduna and Lagos, and girls in Kano, are significantly more likely to feature in the lowest score band than their opposite sex peers. These gaps are mirrored at the top end of the score distribution, with girls in Kaduna and Lagos, and boys in Kano, significantly more likely to score in the top band.

Figure 10: Distribution of p4 English literacy test scores by score band and learning domain, for six states combined (\%)

$\square$ Test score 0-24\% ■ Test score 25-49\%
$\square$ Test score 50-74\% $\quad$ Test score 75-100\%

[^2]
## Primary 2 numeracy scores

35. For pupils in the six states taken together, there is no significant gender difference in p2 numeracy test scores (Figure 11). Consistent with this overall finding, there is no evidence of significant gender differences in p 2 numeracy test scores in any of the six states.

Figure 11: Mean p2 numeracy test score by gender, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 10.
36. Looking at the distribution of test scores for all questions in Figure 12, patterns are similar for girls and boys for the top two bands, but girls are significantly more likely to score in the bottom band than boys. This gap appears to be driven by performance on the foundational p1 questions not the grade appropriate p2 questions. On p1 questions, $16 \%$ of girls score in the bottom band compared with $7 \%$ of boys, a difference which is significant at 0.05 level. On p2 questions there is no significant gender gap in the share of pupils in the lowest band.
37. The individual state results are in Annex Table 10 and Annex Table 11. In three of the six states, Jigawa, Kano and Lagos, girls are significantly more likely to score in the bottom band than boys. This gap is particularly marked in Jigawa where $44 \%$ of girls are in the bottom band compared with $22 \%$ of boys.

Figure 12: Distribution of p2 numeracy test scores by score band and grade level of questions, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 10 and Annex Table 11.
38. Looking at the distribution of test scores by learning domain in Figure 13, the pattern at the bottom end of the distribution is different for boys and girls. On number concepts, $20 \%$ of girls scored in the bottom band compared with $10 \%$ of boys, while for the next band up the direction of the gender gap is reversed. Both of these gender gaps are significant at 0.05 level. For addition/subtraction questions, the gender gaps in the bottom two score bands are in the same direction as for number concepts, but only the comparatively higher proportion of boys than girls in the second lowest score band is a significant difference (at 0.05 level).
39. At the individual state level, there is not much strong evidence of significant gender gaps in the distribution of scores for the two learning domains, apart from in Kaduna, and to a lesser extent Kano (see Annex Table 12). On number concepts, $40 \%$ of girls in Kaduna fell in the lowest band compared with $15 \%$ of boys, a strongly significant difference ( 0.01 level). This pattern is reversed for the second lowest score band where boys in Kaduna are significantly more likely to feature than girls. On addition/subtraction questions, boys in Kaduna and Kano are significantly more likely to fall into the second lowest score band than girls.

Figure 13: Distribution of $\mathbf{p} 2$ numeracy test scores by score band and learning domain, for six states combined (\%)


| $\square$ Test score $0-24 \%$ | $\quad$ Test score $25-49 \%$ |
| :--- | :--- |
| $\square$ Test score $50-74 \%$ | $\quad$ Test score $75-100 \%$ |

Source: Composite Survey 2012. See Annex Table 12.

## Primary 4 numeracy scores

40. For pupils in the six states taken together, there is a gender difference in performance on the p4 numeracy test. Girls scored $42 \%$ on average compared with $38 \%$ for boys (Figure 14). This is a significant difference at 0.05 level. Looking at the six individual state results, average scores are fairly similar for boys and girls, except in Kano where there is a 9 percentage point difference in favour of girls (significant at 0.05 level).

Figure 14: Mean p4 numeracy test score by gender, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 13.
41. Looking at the distribution of test scores for all questions in Figure 15, patterns are fairly similar for girls and boys for the first three score bands, but for the top score band, girls are much more likely to feature than boys. Some $12 \%$ of girls fall into the top score band compared with $2 \%$ of boys, which is a significant difference at 0.05 level. The gender gap in the share of pupils falling into the top band is most prominent for $\mathrm{p} 1 / \mathrm{p} 2$ questions, where the proportion of girls in the top band is 12 percentage points higher than boys (significant at 0.05 level). For p3 questions the absolute gender gap seen for the top score band narrows, and is only weakly significant (at 0.1 level), while for $p 4$ questions there is no significant gender difference for the top score band.
42. The individual state results are in Annex Table 13 and Annex Table 14. Kano is notable for recording a large and significant difference in the share of pupils falling into the top band. None of the other states demonstrate the same pattern. Some $21 \%$ of girls in Kano scored $75 \%$ or above, compared with only $1 \%$ of boys. This gap is strongly significant (at 0.01 level). This significant gender gap in favour of girls featuring in the top score band in Kano holds for $\mathrm{p} 1 / \mathrm{p} 2$ questions and for p 3 questions. There is no significant gender gap in the share of pupils falling in the top score band for p4 questions in Kano, but there is a significant 14 percentage point gap in favour of girls scoring in the second highest band. There are a few significant gender differences in the distribution of scores in each of the
other states. For example, on p3 questions boys in Enugu are significantly more likely than girls to fall into the lowest score band. In Kwara, on p1/p2 questions boys are significantly more likely than girls to feature in the highest score band.

Figure 15: Distribution of p4 numeracy test scores by score band and grade level of questions, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 13 and Annex Table 14.
43. Looking at the distribution of test scores by learning domain in Figure 16, the pattern for boys and girls is fairly similar for each of the three learning domains. The only significant gender difference is found in the share of pupils meeting the second highest score band for multiplication and division questions. On this topic, $14 \%$ of girls scored between 50-74\% compared with $7 \%$ of boys. This is a significant difference at 0.05 level.
44. At the individual state level, there is not much strong evidence of significant gender gaps in the distribution of scores for the three learning domains. The overall finding described above appears to be driven by a similar result in Kano. In Kano, $17 \%$ of girls fell into the second highest score band on multiplication and division questions compared with $4 \%$ of boys (a significant difference at 0.05 level).

Figure 16: Distribution of p4 numeracy test scores by score band and learning domain, for six states combined (\%)


Source: Composite Survey 2012. See Annex Table 15.

## Conclusions and implications for ESSPIN programme

45. Gendered phenomena in education (as in all walks of life) arise from a complex interplay of personal, familial, social, cultural, linguistic, ethnic, historical, economic, class, political and ideological factors which ascribe value, and enhance or constrain people's opportunities, according to biological markers of sex. It is incumbent on a large scale, wide-ranging study such as the Composite Survey to record, analyse and report on gender-specific results, and to monitor how such results change over time. This is particularly so because certain ESSPIN targets are expressed in gender-specific terms in order to monitor and address inequalities. Some ESSPIN interventions such as the creation of safe spaces for women and children to participate in school governance have explicit gendered dimensions, objectives and intended outcomes-in this example, to enable women and girls' voices to be heard, thereby enhancing schools as sites for safe and effective learning for all. Although the Composite Survey does not cover all aspects of gendered practice within ESSPIN schools, it complements other data gathering, monitoring and research exercises such as Civil Society and Government Partners reports, and State Self Assessment on Inclusion. It helps build up a rich picture across the programme of gender-based practice, outputs and now for the first time impacts too.
46. ESSPIN Composite Survey 1 (2012) has revealed no significant differences between male and female teachers and head teachers in terms of their likelihood to satisfy the relevant competence and effectiveness standards respectively, when considered across all six Nigerian states where ESSPIN works. However, teachers' inclusive classroom practice criteria were found to be significantly more likely to be met by female teachers than male ones. The overall conclusion to be drawn from the absolute levels of teacher competence and head teacher effectiveness is that both genders of educators require further support and guidance on the job in order to reach their potential and improve learning contexts for children. Within school, cluster, CGP and state school improvement teams, the finding that female teachers are typically stronger on classroom inclusion may act as a signal to recognise, celebrate and utilise the strengths of those women who excel in this area-as well as to promote positive male role models who can help to improve all teachers' understanding of the ways they can and should do better on inclusive gender, spatial and assessment practices. This is not a call to rely on narrow typologies: there is good and poor practice among both men and women, and the patterns vary state by state, school by school, and from person to person.
47. In terms of learning outcomes, girls are performing on average $7 \%-8 \%$ better than boys on measures of p2 literacy and p4 numeracy. By contrast, there is no significant gender difference in pupils' performance on p2 numeracy or p4 literacy-the two impact indicators for which pupils in ESSPIN Phase 1 supported schools were found to perform statistically significantly better than those in Control Schools. It is too early in the CS M\&E cycle to ascribe causality to an 'ESSPIN effect': that will be possible after CS2 in 2014 at the earliest.

That said, it will be worth investigating the hypothesis that the ESSPIN model of supportfor teaching skills, subject knowledge, school leadership, inclusive practices and ensuring women and children's voices are heard in school governance-results in a learning environment that enables all children to reach their potential.
48. Whilst these high level results are intriguing and original in the Nigerian context, and provide some insights into structural dimensions of gender in education, it is wise to be wary of over-generalisation. As mentioned above, the experience of a particular child, teacher, head teacher or SBMC member is mediated by their specific discursive context: the 'doings' and 'beings' that are available to or withheld from them, in their own school and community environment. Therefore it is expected that the major benefits from the Composite Survey Gender Analysis will come from exploration of the detailed annex tables of results by gender, state, subject, learning domain and/or curriculum level, and considering those in context. This will come as State School Improvement Teams, School Support Officers, Social Mobilisation Officers, CSOs, head teachers and teachers engage with the findings for their own areas, reflect on the issues arising, and consider what it would take to guarantee equitable access to and participation in a good quality, safe and secure educational environment for all children.

Annex 1: Data
Annex Table 1 Teacher performance indicators by gender and state

| Output-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Overall teacher standards |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of competent teachers (\%) [ESSPIN Logframe indicator] | mean | 41 | 55 * | 63 | 60 | 75 | 78 | 69 * | 55 | 85 | 84 | 81 ** | 69 | 70 | 69 |
|  | SE | 5.8 | 2.6 | 2.0 | 4.9 | 2.9 | 2.0 | 2.0 | 3.7 | 2.3 | 1.7 | 3.7 | 1.9 | 1.1 | 1.0 |
|  | N | 72 | 357 | 574 | 100 | 224 | 439 | 524 | 185 | 247 | 470 | 114 | 569 | 1,755 | 2,121 |
| Proportion of proficient teachers (\%) | mean | 18 | 19 | 29 | 32 | 41 | 36 | 28 | 22 | 32 | 50 ** | 30 | 22 | 30 | 30 |
|  | SE | 4.6 | 2.1 | 1.9 | 4.7 | 3.3 | 2.3 | 2.0 | 3.1 | 3.0 | 2.3 | 4.3 | 1.8 | 1.1 | 1.0 |
|  | N | 72 | 357 | 574 | 100 | 224 | 439 | 524 | 185 | 247 | 470 | 114 | 569 | 1,755 | 2,121 |
| Indicators underpinning the teacher competence stand |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of teachers with curriculum knowledge (\%) | mean | 46 | 59 | 54 | 80 *** | 66 | 62 | 42 | 53 | 82 | 76 | 59 | 53 | 55 | 61 |
|  | SE | 6.4 | 2.5 | 3.1 | 6.5 | 3.8 | 2.6 | 3.5 | 6.1 | 3.3 | 2.2 | 5.1 | 2.3 | 1.6 | 1.2 |
|  | N | 62 | 382 | 258 | 39 | 159 | 341 | 202 | 68 | 139 | 376 | 95 | 484 | 915 | 1,691 |
| Proportion of teachers using teaching aids(\%) | mean | 78 | 86 | 91 | 79 | 97 | 93 | 86 | 78 | 86 | 92 | 89 | 82 | 88 | 87 |
|  | SE | 5.3 | 1.9 | 1.2 | 4.1 | 1.1 | 1.2 | 1.5 | 3.1 | 2.2 | 1.3 | 3.0 | 1.6 | 0.8 | 0.8 |
|  | N | 62 | 325 | 556 | 98 | 218 | 437 | 515 | 183 | 246 | 469 | 111 | 561 | 1,708 | 2,074 |
| Proportion of teachers using praise more than reprimand (\%) | mean | 59 | 65 | 64 | 58 | 75 | 78 | 65 ** | 49 | 79 | 88 | 81 | 80 | 68 | 72 |
|  | SE | 5.8 | 2.5 | 2.0 | 4.8 | 2.9 | 2.0 | 2.0 | 3.6 | 2.6 | 1.5 | 3.6 | 1.7 | 1.1 | 1.0 |
|  | N | 73 | 360 | 605 | 108 | 224 | 439 | 568 | 190 | 248 | 472 | 116 | 582 | 1,834 | 2,152 |
| Proportion of teachers using individual and/or group methods (\%) | mean | 47 | 43 | 47 | 47 | 65 | 57 | 61 | 52 | 54 | 69 ** | 65 ** | 48 | 57 | 54 |
|  | SE | 5.9 | 2.6 | 2.0 | 4.8 | 3.2 | 2.4 | 2.1 | 3.6 | 3.2 | 2.1 | 4.4 | 2.1 | 1.2 | 1.1 |
|  | N | 73 | 360 | 605 | 108 | 224 | 439 | 568 | 190 | 248 | 472 | 116 | 582 | 1,834 | 2,152 |
| Indicators underpinning the school inclusiveness standa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of teachers using more than one assessment method (\%) | mean | 89 | 91 | 65 | 66 | 71 | 81 | 69 | 78 | 71 | $97^{* * *}$ | 90 | 92 | 71 | 86 *** |
|  | SE | 3.6 | 1.4 | 1.9 | 4.5 | 2.9 | 1.8 | 1.9 | 2.9 | 2.9 | 0.8 | 2.7 | 1.1 | 1.0 | 0.7 |
|  | N | 75 | 409 | 616 | 110 | 241 | 476 | 607 | 204 | 248 | 478 | 125 | 632 | 1,912 | 2,310 |
| Proportion of teachers engaging pupils from different parts of the classroom (\%) | mean | 69 | 75 | 68 | 69 | 61 | 85 ** | 69 | 59 | 89 | 86 | 86 | $94^{* *}$ | 70 | 80 *** |
|  | SE | 5.5 | 2.3 | 1.9 | 4.5 | 3.2 | 1.7 | 1.9 | 3.6 | 2.0 | 1.6 | 3.2 | 1.0 | 1.1 | 0.9 |
|  | N | 73 | 359 | 610 | 107 | 227 | 447 | 574 | 192 | 245 | 474 | 121 | 612 | 1,850 | 2,192 |
| Proportion of teachers engaging boys and girls fairly during lessons (\%) | mean | 36 | 36 | 52 | 53 | 60 | 55 | 37 | 53 ** | 51 | 58 | 34 | 54 *** | 44 | 52 ** |
|  | SE | 5.7 | 2.5 | 2.0 | $\begin{array}{r}4.8 \\ \hline 107\end{array}$ | 3.3 | 2.4 | 2.0 | 3.6 | 3.2 | 2.3 | 4.3 | 2.0 | 1.2 | 1.1 |
|  | N | 73 | 359 | 610 | 107 | 227 | 447 | 574 | 192 | 245 | 474 | 121 | 612 | 1,850 | 2,192 |

Source: Composite Survey 1 2012. Note: Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *), ~} 0.05$ level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ )

## Annex Table 2 Headteacher performance indicators by gender and state

| Output-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Logframe indicator |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of headteachers who are operating effectively (according to logframe standard) (\%) | mean |  |  |  |  |  |  |  |  | 11 | 27 |  |  | 11 | 19 |
|  | SE |  |  |  |  |  |  |  |  | 4.7 | 7.2 |  |  | 1.8 | 3 |
|  | N |  |  |  |  |  |  |  |  | 46 | 39 |  |  | 299 | 172 |
| Indicators underpinning the headteacher effectiveness standard |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of headteachers that meet the lesson observation criterion (\%) | mean | 4 | 11* |  |  | 1 | 20 * |  |  | 12 | 62 *** |  |  | 6 | 18 ** |
|  | SE | 3.4 | 5.3 |  |  | 1.2 | 7.0 |  |  | 4.4 | 7.5 |  |  | 1.3 | 2.7 |
|  | N | 33 | 35 |  |  | 69 | 33 |  |  | 55 | 43 |  |  | 369 | 202 |
| Proportion of headteachers that meet the professional development meetings criterion (\%) | mean | 9 | 6 |  |  | 14 | 10 |  |  | 23 | 19 |  |  | 12 | 15 |
|  | SE | 5.2 | 4.0 |  |  | 4.2 | 5.4 |  |  | 5.7 | 6.0 |  |  | 1.7 | 2.5 |
|  | N | 32 | 35 |  |  | 68 | 32 |  |  | 56 | 44 |  |  | 369 | 201 |
| Proportion of headteachers that meet the teacher attendance criterion (\%) | mean |  |  |  |  |  |  |  |  | 44 | 99 *** |  |  | 76 | 74 |
|  | SE |  |  |  |  |  |  |  |  | 7.3 | 1.6 |  |  | 2.4 | 3.3 |
|  | N |  |  |  |  |  |  |  |  | 47 | 42 |  |  | 324 | 181 |
| Proportion of headteachers that meet the school opening time criterion (\%) | mean | 73 | 57 |  |  | 62 ** | 19 |  |  | 45 | 36 |  |  | 51 | 52 |
|  | SE | 7.8 | 8.5 |  |  | 5.9 | 6.9 |  |  | 6.7 | 7.3 |  |  | 2.6 | 3.5 |
|  | N | 33 | 35 |  |  | 69 | 33 |  |  | 56 | 45 |  |  | 374 | 204 |
| Proportion of headteachers that meet the timing of first lesson criterion (\%) | mean | 79 | 92 |  |  | 81 | 92 |  |  | 82 | 96 |  |  | 67 | 90 *** |
|  | SE | 7.2 | 4.6 |  |  | 4.8 | 4.9 |  |  | 5.2 | 2.8 |  |  | 2.4 | 2.1 |
|  | N | 33 | 34 |  |  | 67 | 32 |  |  | 56 | 45 |  |  | 369 | 201 |
| Proportion of headteachers that meet the length of morning break criterion (\%) | mean | 8 | 3 |  |  | 93 | 93 |  |  | 83 | 98 |  |  | 79 | 80 |
|  | SE | 4.7 | 2.8 |  |  | 3.2 | 4.5 |  |  | 5.0 | 2.0 |  |  | 2.1 | 2.8 |
|  | N | 33 | 34 |  |  | 68 | 33 |  |  | 56 | 45 |  |  | 366 | 203 |
| Proportion of headteachers that meet the length lesson criterion (\%) | mean | 40 *** | 4.5 |  |  | 24 | 34 |  |  | 2.9 | 13 |  |  | 29 ** | 14 |
|  | SE | 8.7 | 3.5 |  |  | 5.2 | 8.3 |  |  | 2.3 | 5 |  |  | 2.4 | 2.4 |
|  | N | 33 | 35 |  |  | 69 | 33 |  |  | 56 | 45 |  |  | 369 | 204 |

## Annex Table 3 Pupil learning achievement ESSPIN logframe indicators by gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Logframe indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of p 2 pupils with skills for reading comprehension (\%) | mean | 5 | 13 | 0.64 | 0.2 | 0 | 8.1 ** | 5.8 | 17 | 5.4 * | 0.63 | 19 | 23 | 4.9 | 13 * |
|  | SE | 1.8 | 3 | 0.54 | 0.35 | 0 | 1.9 | 1.5 | 2.8 | 1.6 | 0.58 | 2.8 | 2.9 | 0.62 | 1 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of p4 pupils able to read with comprehension (\%) | mean | 8 | 14 | 1.8 * | 0.3 | 1.7 | 0.77 | 4.2 | 4.4 | 0.47 | 1.2 | 10 | 6.1 | 4 | 3.8 |
|  | SE | 2.2 | 3.4 | 0.88 | 0.45 | 0.84 | 0.69 | 1.3 | 1.6 | 0.5 | 0.78 | 2.2 | 1.6 | 0.56 | 0.61 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of p2 pupils able to perform basic arithmetic calculations at p2 level (\%) | mean | 21 ** | - 7.4 | 4.4 | 4.5 | 15 | 7.4 | 19 | 20 | 22 | 22 | 16 | 18 | 16 | 15 |
|  | SE | 3.3 | 2.5 | 1.4 | 1.6 | 2.5 | 1.9 | 2.6 | 3 | 3 | 3 | 2.6 | 2.7 | 1.1 | 1.1 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of p4 pupils able to perform basic arithmetic calculations at p4 level (\%) | mean | 0.87 | 3.7 * | 1.5 | 0.6 | 14 | 8.7 | 1.3 | 18 ** | 4.5 | 8.4 | 11 | 9.8 | 5.6 | 13 * |
|  | SE | 0.78 | 1.8 | 0.82 | 0.64 | 2.3 | 2.2 | 0.81 | 2.8 | 1.5 | 2.1 | 2.2 | 2.1 | 0.67 | 1.1 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |

Annex Table 4 Primary 2 pupil English Literacy test scores by test score band, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Other indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | mean | 50.0 | 59.0 * | 27.0 | 27.0 | 29.0 | 41.0 ** | 31.0 | 32.0 | 43.0 | 43.0 | 60.0 | 65.0 | 34 | 38 |
| Average p2 literacy test score (\%) | SE | 1.9 | 2.5 | 1.6 | 1.6 | 1.4 | 2.0 | 2.1 | 2.4 | 1.6 | 1.7 | 2.0 | 1.7 | 0.84 | 0.95 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Results by test band |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring $0-24 \%$ on p2 literacy test (\%) | mean | 14.0 | 13.0 | 56.0 | 46.0 | 50.0 | 36.0 | 57.0 | 59.0 | 24.0 | 29.0 | 19.0 *** | 5.0 | 49 | 46 |
|  | SE | 2.9 | 3.0 | 3.4 | 3.9 | 3.5 | 3.4 | 3.3 | 3.7 | 3.1 | 3.3 | 2.8 | 1.5 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 25-49\% on p2 <br> literacy test (\%) | mean | 30.0 | 23.0 | 22.0 | 38.0 ** | 27.0 | 28.0 | 12.0 | 15.0 | 40.0 * | 27.0 | 21.0 | 24.0 | 19 | 22 |
|  | SE | 3.9 | 3.8 | 2.8 | 3.8 | 3.1 | 3.2 | 2.2 | 2.7 | 3.6 | 3.3 | 2.9 | 3.0 | 1.1 | 1.3 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 50-74\% on p2 <br> literacy test (\%) | mean | 45.0 ** | 27.0 | 20.0 | 15.0 | 22.0 | 20.0 | 16.0 | 6.2 | 27.0 | 39.0 | 24.0 | 36.0 * | 20 | 14 |
|  | SE | 4.2 | 4.0 | 2.7 | 2.7 | 2.9 | 2.9 | 2.4 | 1.8 | 3.2 | 3.6 | 3.0 | 3.4 | 1.2 | 1.1 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 75-100\% on p2 literacy test (\%) | mean | 10.0 | 37.0 ** | 2.4 | 1.9 | 0.4 | 16.0 *** | 15.0 | 19.0 | 8.3 | 4.9 | 37.0 | 36.0 | 12 | 18 |
|  | SE | 2.6 | 4.4 | 1.0 | 1.1 | 0.4 | 2.6 | 2.4 | 3.0 | 2.0 | 1.6 | 3.4 | 3.4 | 0.93 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *)}$, 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 5 Primary 2 pupil English Literacy test scores by grade level of question, gender and state

| Impact-level indicators | Stat | Enugu |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by grade-level of question |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p1 qns (\%) | mean | 9.5 | 9.7 | 36.0 | 37.0 | 37.0 ** | 18.0 | 46.0 | 48.0 | 11.0 | 14.0 | 6.3 | 2.7 | 36 | 34 |
|  | SE | 2.5 | 2.7 | 3.2 | 3.7 | 3.3 | 2.8 | 3.3 | 3.8 | 2.3 | 2.5 | 1.7 | 1.1 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 25-49\% on p1 qns (\%) | mean | 22.0 | 18.0 | 36.0 | 32.0 | 32.0 | 32.0 | 17.0 | 17.0 | 38.0 | 30.0 | 23.0 ** | 12.0 | 24 | 21 |
|  | SE | 3.5 | 3.5 | 3.2 | 3.6 | 3.2 | 3.3 | 2.5 | 2.8 | 3.5 | 3.4 | 3.0 | 2.3 | 1.2 | 1.3 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 50-74\% on p1 qns (\%) | mean | 50.0 ** | 28.0 | 14.0 | 24.0 * | 26.0 | 34.0 | 14.0 | 22.0 | 34.0 | 40.0 | 23.0 | 37.0 ** | 19 | 26 |
|  | SE | 4.2 | 4.1 | 2.4 | 3.3 | 3.1 | 3.4 | 2.3 | 3.1 | 3.4 | 3.6 | 3.0 | 3.4 | 1.1 | 1.4 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 75-100\% on p1 qns (\%) | mean | 19.0 | 44.0 ** | 14.0 * | 6.6 | 5.1 | 16.0 ** | 23.0 | 14.0 | 17.0 | 16.0 | 48.0 | 48.0 | 20 | 18 |
|  | SE | 3.3 | 4.5 | 2.3 | 1.9 | 1.5 | 2.6 | 2.8 | 2.6 | 2.7 | 2.7 | 3.6 | 3.5 | 1.2 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring $0-24 \%$ on p 2 qns (\%) | mean | 26.0 | 21.0 | 64.0 | 55.0 | 57.0 | 44.0 | 60.0 | 62.0 | 30.0 | 37.0 | 20.0 * | 13.0 | 54 | 51 |
|  | SE | 3.7 | 3.7 | 3.2 | 3.9 | 3.4 | 3.5 | 3.2 | 3.6 | 3.3 | 3.5 | 2.9 | 2.3 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 25-49\% on p2 qns (\%) | mean | 22.0 | 21.0 | 19.0 | 34.0 ** | 25.0 | 29.0 | 13.0 | 13.0 | 39.0 ** | 23.0 | 19.0 | 18.0 | 18 | 20 |
|  | SE | 3.5 | 3.7 | 2.7 | 3.7 | 3.0 | 3.2 | 2.2 | 2.6 | 3.5 | 3.1 | 2.8 | 2.7 | 1.1 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring $50-74 \%$ on p2 qns (\%) | mean | 42.0 ** | 24.0 | 15.0 | 8.8 | 14.0 | 12.0 | 19.0 * | 6.6 | 23.0 | 36.0 * | 28.0 | 29.0 | 20 * | 12 |
|  | SE | 4.2 | 3.8 | 2.4 | 2.2 | 2.4 | 2.3 | 2.6 | 1.9 | 3.0 | 3.5 | 3.2 | 3.2 | 1.2 | 0.99 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 75-100\% on p2 qns (\%) | mean | 9.7 | 34.0 ** | 2.1 | 2.0 | 3.5 | 15.0 ** | 7.6 | 17.0 | 8.2 | 4.2 | 33.0 | 40.0 | 8 | 18 ** |
|  | SE | 2.5 | 4.3 | 1.0 | 1.1 | 1.3 | 2.6 | 1.7 | 2.9 | 2.0 | 1.5 | 3.4 | 3.4 | 0.79 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |

[^3]Annex Table 6 Primary 2 pupil English Literacy test scores by learning domain, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by learning domain |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on early reading (\%) | mean | 12.0 | 20.0 | 66.0 | 64.0 | 54.0 | 42.0 | 51.0 | 54.0 | 25.0 | 25.0 | 18.0 * | 9.2 | 48 | 47 |
|  | SE | 2.7 | 3.6 | 3.2 | 3.7 | 3.5 | 3.5 | 3.3 | 3.8 | 3.1 | 3.2 | 2.7 | 2.0 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 25-49\% on early reading (\%) | mean | 32.0 *** | 4.9 | 19.0 | 31.0 * | 21.0 | 12.0 | 14.0 | 10.0 | 20.0 | 27.0 | 12.0 | 8.8 | 17 | 13 |
|  | SE | 3.9 | 1.9 | 2.6 | 3.6 | 2.8 | 2.3 | 2.3 | 2.3 | 2.9 | 3.2 | 2.3 | 2.0 | 1.1 | 1 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 50-74\% on early reading (\%) | mean | 41.0 | 37.0 | 11.0 *** | 2.5 | 24.0 | 34.0 | 7.1 | 11.0 | 41.0 | 33.0 | 36.0 | 39.0 | 16 | 18 |
|  | SE | 4.1 | 4.3 | 2.1 | 1.2 | 3.0 | 3.4 | 1.7 | 2.4 | 3.6 | 3.4 | 3.4 | 3.4 | 1.1 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring $75-100 \%$ on early reading (\%) | mean | 16.0 | 38.0 ** | 4.2 | 2.4 | 1.0 | 13.0 *** | 28.0 | 24.0 | 14.0 | 15.0 | 35.0 | 43.0 | 19 | 22 |
|  | SE | 3.1 | 4.4 | 1.3 | 1.2 | 0.7 | 2.4 | 3.0 | 3.2 | 2.5 | 2.6 | 3.4 | 3.5 | 1.1 | 1.3 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 0-24\% on skills for reading comprehension (\%) | mean | 35.0 | 28.0 | 61.0 | 55.0 | 62.0 | 57.0 | 64.0 | 63.0 | 47.0 | 50.0 | 13.0 | 8.1 | 57 | 54 |
|  | SE | 4.0 | 4.0 | 3.3 | 3.9 | 3.4 | 3.5 | 3.2 | 3.6 | 3.6 | 3.7 | 2.4 | 1.9 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 25-49\% on skills for reading comprehension (\%) | mean | 31.0 | 22.0 | 16.0 | 19.0 | 27.0 | 21.0 | 7.2 | 14.0 | 32.0 | 36.0 | 32.0 *** | 15.0 | 16 | 17 |
|  | SE | 3.9 | 3.7 | 2.5 | 3.0 | 3.1 | 2.9 | 1.7 | 2.6 | 3.4 | 3.5 | 3.3 | 2.5 | 1.1 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 50-74\% on skills for reading comprehension (\%) | mean | 18.0 | 16.0 | 21.0 | 25.0 | 10.0 | 7.4 | 15.0 * | 3.9 | 14.0 | 9.6 | 29.0 | 44.0 ** | 16 | 11 |
|  | SE | 3.2 | 3.3 | 2.7 | 3.3 | 2.1 | 1.9 | 2.4 | 1.5 | 2.5 | 2.2 | 3.3 | 3.5 | 1.1 | 0.98 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 75-100\% on skills for reading comprehension (\%) | mean | 17.0 | 34.0 * | 2.0 | 1.9 | 0.2 | 15.0 ** | 14.0 | 20.0 | 6.7 | 3.9 | 26.0 | 34.0 | 10 | 18 |
|  | SE | 3.1 | 4.3 | 0.9 | 1.0 | 0.3 | 2.5 | 2.3 | 3.0 | 1.8 | 1.4 | 3.1 | 3.3 | 0.88 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 0-24\% on writing (\%) | mean | 34.0 | 26.0 | 76.0 | 80.0 | 61.0 | 50.0 | 66.0 | 63.0 | 50.0 | 44.0 | 39.0 | 30.0 | 62 | 58 |
|  | SE | 4.0 | 3.9 | 2.9 | 3.1 | 3.4 | 3.6 | 3.1 | 3.6 | 3.6 | 3.6 | 3.5 | 3.2 | 1.4 | 1.5 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring $25-49 \%$ on writing (\%) | mean | 24.0 | 21.0 | 12.0 | 12.0 | 20.0 | 23.0 | 4.0 | 4.0 | 21.0 | 28.0 | 14.0 | 13.0 | 11 | 11 |
|  | SE | 3.6 | 3.6 | 2.2 | 2.5 | 2.8 | 3.0 | 1.3 | 1.5 | 3.0 | 3.3 | 2.5 | 2.4 | 0.89 | 0.95 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring $50-74 \%$ on writing (\%) | mean | 20.0 | 18.0 | 8.6 | 4.8 | 16.0 | 11.0 | 22.0 | 14.0 | 19.0 | 19.0 | 21.0 | 16.0 | 19 | 13 |
|  | SE | 3.4 | 3.4 | 1.9 | 1.7 | 2.5 | 2.2 | 2.7 | 2.6 | 2.8 | 2.9 | 2.9 | 2.6 | 1.1 | 1 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |
| Proportion of pupils scoring 75-100\% on writing (\%) | mean | 22.0 | 36.0 | 3.0 | 3.4 | 3.6 | 16.0 ** | 8.0 | 19.0 | 11.0 | 8.8 | 26.0 | 41.0 ** | 8.6 | 19 ** |
|  | SE | 3.5 | 4.3 | 1.2 | 1.4 | 1.3 | 2.6 | 1.8 | 3.0 | 2.3 | 2.1 | 3.1 | 3.4 | 0.81 | 1.2 |
|  | N | 142 | 124 | 220 | 167 | 209 | 197 | 231 | 177 | 191 | 188 | 197 | 204 | 1190 | 1058 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *)}$, 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 7 Primary 4 pupil English Literacy test scores by test score band, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Other indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average p4 literacy test score (\%) | mean | 56.0 | 56.0 | 24.0 | 21.0 | 29.0 | 48.0 *** | 46.0 ** | 29.0 | 43.0 | 46.0 | 64.0 | 69.0 | 41 | 38 |
|  | SE | 2.1 | 2.7 | 1.6 | 1.6 | 1.6 | 2.4 | 2.2 | 2.3 | 1.6 | 1.7 | 1.8 | 1.7 | 0.89 | 1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Results by test band |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p4 literacy test (\%) | mean | 11.0 | 11.0 | 63.0 | 69.0 | 61.0 *** | 28.0 | 40.0 | 54.0 | 19.0 | 17.0 | 3.9 | 5.6 | 42 | 42 |
|  | SE | 2.5 | 3.0 | 3.2 | 3.8 | 3.1 | 3.6 | 3.3 | 3.8 | 2.9 | 2.7 | 1.4 | 1.6 | 1.4 | 1.6 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $25-49 \%$ on p 4 literacy test (\%) | mean | 33.0 | 42.0 | 22.0 | 24.0 | 21.0 | 28.0 | 8.5 | 21.0 ** | 50.0 | 49.0 | 29.0 * | 18.0 | 19 | 25 * |
|  | SE | 3.9 | 4.7 | 2.7 | 3.5 | 2.6 | 3.6 | 1.9 | 3.1 | 3.7 | 3.6 | 3.3 | 2.6 | 1.1 | 1.4 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 50-74\% on p4 literacy test (\%) | mean | 33.0 ** | 14.0 | 7.3 * | 3.1 | 9.1 | 16.0 | 24.0 | 17.0 | 17.0 | 20.0 | 23.0 | 23.0 | 18 | 16 |
|  | SE | 3.9 | 3.3 | 1.7 | 1.4 | 1.9 | 3.0 | 2.8 | 2.9 | 2.8 | 2.9 | 3.1 | 2.9 | 1.1 | 1.2 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $75-100 \%$ on p 4 literacy test (\%) | mean | 24.0 | 34.0 | 7.4 | 4.0 | 9.7 | 28.0 ** | 27.0 ** | 8.1 | 13.0 | 14.0 | 44.0 | 54.0 | 21 | 18 |
|  | SE | 3.5 | 4.5 | 1.7 | 1.6 | 1.9 | 3.6 | 3.0 | 2.1 | 2.5 | 2.5 | 3.6 | 3.4 | 1.2 | 1.2 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *}$ ), 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 8 Primary 4 pupil English Literacy test scores by grade level of question, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by grade-level of question |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p1/p2 qns (\%) | mean | 2.8 | 3.6 | 45.0 | 43.0 | 27.0 ** | 9.2 | 21.0 | 44.0 *** | 3.4 | 2.3 | 0.0 | 0.8 | 22 | 28 |
|  | SE | 1.4 | 1.8 | 3.3 | 4.1 | 2.9 | 2.3 | 2.7 | 3.8 | 1.3 | 1.1 | 0.0 | 0.6 | 1.2 | 1.4 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 25-49\% on p1/p2 qns (\%) | mean | 12.0 | 7.5 | 19.0 | 16.0 | 32.0 * | 19.0 | 22.0 * | 11.0 | 23.0 | 23.0 | 4.7 | 8.6 | 21 ** | 13 |
|  | SE | 2.7 | 2.5 | 2.6 | 3.0 | 3.0 | 3.1 | 2.8 | 2.4 | 3.1 | 3.0 | 1.6 | 1.9 | 1.2 | 1.1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $50-74 \%$ on $\mathrm{p} 1 / \mathrm{p} 2$ qns (\%) | mean | 31.0 | 36.0 | 16.0 | 30.0 * | 20.0 | 33.0 | 13.0 | 21.0 | 35.0 | 36.0 | 26.0 ** | 14.0 | 19 | 25 * |
|  | SE | 3.8 | 4.6 | 2.4 | 3.8 | 2.6 | 3.7 | 2.3 | 3.1 | 3.5 | 3.4 | 3.2 | 2.4 | 1.1 | 1.4 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 75-100\% on p1/p2 qns (\%) | mean | 54.0 | 53.0 | 19.0 * | 11.0 | 20.0 | 39.0 ** | 44.0 * | 25.0 | 39.0 | 39.0 | 69.0 | 77.0 | 38 | 34 |
|  | SE | 4.1 | 4.8 | 2.6 | 2.6 | 2.6 | 3.9 | 3.3 | 3.3 | 3.6 | 3.5 | 3.4 | 2.9 | 1.4 | 1.5 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $0-24 \%$ on p 3 qns (\%) | mean | 28.0 | 30.0 | 72.0 | 83.0 * | 75.0 *** | 43.0 | 46.0 | 65.0 ** | 41.0 | 39.0 | 19.0 | 14.0 | 52 | 55 |
|  | SE | 3.7 | 4.4 | 3.0 | 3.1 | 2.8 | 3.9 | 3.3 | 3.6 | 3.6 | 3.5 | 2.9 | 2.4 | 1.4 | 1.6 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $25-49 \%$ on p 3 qns (\%) | mean | 30.0 | 30.0 | 13.0 | 10.0 | 6.8 | 19.0 ** | 3.1 | 10.0 * | 35.0 | 32.0 | 22.0 | 18.0 | 10 | 15 * |
|  | SE | 3.8 | 4.4 | 2.2 | 2.5 | 1.6 | 3.1 | 1.2 | 2.3 | 3.5 | 3.3 | 3.0 | 2.7 | 0.88 | 1.1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 50-74\% on p3 qns (\%) | mean | 18.0 * | 6.0 | 8.0 ** | 3.2 | 11.0 | 11.0 | 23.0 | 12.0 | 10.0 | 16.0 | 24.0 | 21.0 | 18 | 12 |
|  | SE | 3.2 | 2.3 | 1.8 | 1.4 | 2.0 | 2.5 | 2.8 | 2.5 | 2.2 | 2.7 | 3.1 | 2.8 | 1.1 | 1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 75-100\% on p3 qns (\%) | mean | 25.0 | 34.0 | 6.9 | 3.4 | 6.8 | 27.0 *** | 28.0 * | 12.0 | 13.0 | 13.0 | 35.0 | 47.0 * | 20 | 19 |
|  | SE | 3.6 | 4.5 | 1.7 | 1.5 | 1.6 | 3.5 | 3.0 | 2.5 | 2.5 | 2.4 | 3.5 | 3.4 | 1.1 | 1.2 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $0-24 \%$ on p 4 qns (\%) | mean | 35.0 | 27.0 | 83.0 | 90.0 ** | 78.0 *** | 47.0 | 47.0 | 67.0 ** | 52.0 | 52.0 | 32.0 | 26.0 | 58 | 59 |
|  | SE | 3.9 | 4.3 | 2.5 | 2.4 | 2.7 | 4.0 | 3.3 | 3.6 | 3.7 | 3.6 | 3.4 | 3.0 | 1.4 | 1.6 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 25-49\% on p4 qns (\%) | mean | 24.0 | 39.0 | 8.0 | 5.7 | 7.1 | 11.0 | 29.0 * | 13.0 | 40.0 | 33.0 | 18.0 | 23.0 | 20 | 15 |
|  | SE | 3.6 | 4.7 | 1.8 | 1.9 | 1.7 | 2.5 | 3.0 | 2.6 | 3.6 | 3.4 | 2.8 | 2.9 | 1.1 | 1.1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $50-74 \%$ on p 4 qns (\%) | mean | 17.0 | 12.0 | 7.0 ** | 1.2 | 13.0 | 19.0 | 18.0 | 16.0 | 3.7 | 8.9 | 26.0 | 22.0 | 15 | 14 |
|  | SE | 3.1 | 3.2 | 1.7 | 0.9 | 2.2 | 3.1 | 2.5 | 2.8 | 1.4 | 2.0 | 3.2 | 2.8 | 1 | 1.1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $75-100 \%$ on p 4 qns (\%) | mean | 24.0 | 22.0 | 2.0 | 2.7 | 2.0 | 22.0 *** | 5.9 | 3.8 | 3.8 | 6.0 | 25.0 | 30.0 | 7.5 | 11 * |
|  | SE | 3.5 | 3.9 | 0.9 | 1.3 | 0.9 | 3.3 | 1.6 | 1.5 | 1.4 | 1.7 | 3.2 | 3.1 | 0.76 | 0.98 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *}$ ), 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( $*$ ).

Annex Table 9 Primary 4 pupil English Literacy test scores by learning domain, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by learning domain |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on skills for reading comprehension (\%) | mean | 38.0 | 54.0 | 83.0 | 85.0 | 80.0 ** | 55.0 | 47.0 | 67.0 ** | 68.0 | 65.0 | 37.0 * | 26.0 | 59 | 62 |
|  | SE | 4.0 | 4.8 | 2.5 | 2.9 | 2.6 | 4.0 | 3.3 | 3.6 | 3.4 | 3.4 | 3.5 | 3.0 | 1.4 | 1.5 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring $25-49 \%$ on skills for reading comprehension (\%) | mean | 18.0 | 12.0 | 3.4 | 10.0 | 1.6 | 7.7 | 3.2 | 5.6 | 12.0 | 15.0 | 9.4 | 14.0 | 4.9 | 8.5 * |
|  | SE | 3.2 | 3.1 | 1.2 | 2.5 | 0.8 | 2.1 | 1.2 | 1.7 | 2.4 | 2.6 | 2.1 | 2.4 | 0.62 | 0.88 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 50-74\% on skills for reading comprehension (\%) | mean | 20.0 *** | 3.8 | 7.6 *** | 1.0 | 6.4 | 11.0 | 11.0 | 11.0 | 12.0 | 7.3 | 15.0 | 16.0 | 10 | 9.5 |
|  | SE | 3.3 | 1.8 | 1.8 | 0.8 | 1.6 | 2.5 | 2.1 | 2.4 | 2.4 | 1.9 | 2.6 | 2.5 | 0.87 | 0.93 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 75-100\% on skills for reading comprehension (\%) | mean | 24.0 | 31.0 | 5.7 | 3.9 | 12.0 | 26.0 * | 39.0 ** | 17.0 | 7.5 | 13.0 | 39.0 | 44.0 | 26 | 20 |
|  | SE | 3.5 | 4.4 | 1.5 | 1.6 | 2.1 | 3.5 | 3.3 | 2.8 | 1.9 | 2.4 | 3.6 | 3.4 | 1.3 | 1.3 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 0-24\% on writing (\%) | mean | 34.0 | 39.0 | 80.0 | 84.0 | 78.0 *** | 47.0 | 47.0 | 67.0 ** | 57.0 | 53.0 | 29.0 ** | 17.0 | 57 | 58 |
|  | SE | 3.9 | 4.7 | 2.7 | 3.0 | 2.7 | 4.0 | 3.3 | 3.6 | 3.6 | 3.6 | 3.3 | 2.6 | 1.4 | 1.6 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 25-49\% on writing (\%) | mean | 29.0 | 21.0 | 4.1 | 11.0 | 14.0 | 10.0 | 7.3 | 15.0 | 24.0 | 20.0 | 16.0 | 21.0 | 11 | 15 |
|  | SE | 3.7 | 3.9 | 1.3 | 2.5 | 2.3 | 2.4 | 1.7 | 2.7 | 3.1 | 2.9 | 2.7 | 2.8 | 0.91 | 1.1 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 50-74\% on writing (\%) | mean | 18.0 * | 6.5 | 9.7 *** | 1.6 | 3.0 | 12.0 * | 18.0 | 11.0 | 5.9 | 11.0 | 25.0 * | 15.0 | 14 | 9.8 |
|  | SE | 3.2 | 2.4 | 1.9 | 1.0 | 1.1 | 2.6 | 2.6 | 2.3 | 1.7 | 2.2 | 3.2 | 2.4 | 0.99 | 0.94 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |
| Proportion of pupils scoring 75-100\% on writing (\%) | mean | 19.0 | 33.0 | 6.7 | 4.0 | 4.7 | 31.0 *** | 27.0 ** | 7.4 | 13.0 | 16.0 | 30.0 | 47.0 ** | 18 | 17 |
|  | SE | 3.3 | 4.5 | 1.6 | 1.6 | 1.4 | 3.7 | 3.0 | 2.0 | 2.5 | 2.6 | 3.4 | 3.4 | 1.1 | 1.2 |
|  | N | 147 | 110 | 231 | 150 | 242 | 159 | 224 | 174 | 186 | 195 | 187 | 212 | 1217 | 1000 |

Annex Table 10 Primary 2 pupil numeracy test scores by test score band, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Other indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average p2 numeracy test score (\%) | mean | 65.0 | 63.0 | 42.0 | 38.0 | 55.0 | 55.0 | 52.0 | 48.0 | 66.0 | 65.0 | 64.0 | 62.0 | 53 | 50 |
|  | SE | 1.4 | 1.5 | 1.5 | 2.2 | 1.5 | 1.7 | 1.7 | 2.3 | 1.0 | 1.1 | 1.1 | 1.2 | 0.69 | 0.87 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Results by test band |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p2 numeracy test (\%) | mean | 0.1 | 0.1 | 22.0 | 44.0 ** | 9.7 | 12.0 | 13.0 | 27.0 * | 0.8 | 0.3 | 0.4 | 1.7 * | 12 | 22 ** |
|  | SE | 0.3 | 0.3 | 2.8 | 3.9 | 2.0 | 2.4 | 2.3 | 3.3 | 0.7 | 0.4 | 0.4 | 0.9 | 0.93 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring $25-49 \%$ on p2 numeracy test (\%) | mean | 18.0 | 25.0 | 45.0 ** | 22.0 | 30.0 | 24.0 | 32.0 | 25.0 | 14.0 | 16.0 | 19.0 | 24.0 | 31 * | 24 |
|  | SE | 3.1 | 4.1 | 3.4 | 3.2 | 3.1 | 3.1 | 3.2 | 3.3 | 2.5 | 2.6 | 2.8 | 3.0 | 1.3 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 50-74\% on p2 numeracy test (\%) | mean | 53.0 | 46.0 | 23.0 | 20.0 | 34.0 | 45.0 | 32.0 | 25.0 | 48.0 | 58.0 | 54.0 | 52.0 | 35 | 32 |
|  | SE | 4.0 | 4.7 | 2.9 | 3.1 | 3.2 | 3.6 | 3.2 | 3.3 | 3.6 | 3.6 | 3.6 | 3.5 | 1.4 | 1.5 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 75-100\% on p2 numeracy test (\%) | mean | 29.0 | 29.0 | 9.8 | 14.0 | 26.0 | 19.0 | 22.0 | 23.0 | 38.0 * | 26.0 | 27.0 | 22.0 | 22 | 22 |
|  | SE | 3.6 | 4.3 | 2.0 | 2.7 | 3.0 | 2.9 | 2.8 | 3.2 | 3.5 | 3.2 | 3.2 | 2.9 | 1.2 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level (***), 0.05 level (**) or 0.1 level (*).

Annex Table 11 Primary 2 pupil numeracy test scores by grade level of question, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by grade-level of question |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p1 qns (\%) | mean | 0.0 | 0.0 | 15.0 | 21.0 | 1.7 | 5.8 | 8.0 | 23.0 ** | 0.0 | 0.0 | 0.0 | 1.1 * | 6.6 | 16 ** |
|  | SE | 0.0 | 0.0 | 2.5 | 3.2 | 0.9 | 1.7 | 1.8 | 3.2 | 0.1 | 0.1 | 0.1 | 0.7 | 0.72 | 1.2 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring $25-49 \%$ on p 1 qns (\%) | mean | 10.0 | 9.3 | 22.0 | 37.0 * | 25.0 | 20.0 | 22.0 | 20.0 | 2.4 | 7.7 ** | 4.5 | 7.4 | 19 | 20 |
|  | SE | 2.4 | 2.7 | 2.9 | 3.8 | 3.0 | 2.9 | 2.8 | 3.0 | 1.1 | 1.9 | 1.5 | 1.9 | 1.1 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 50-74\% on p1 qns (\%) | mean | 21.0 | 23.0 | 41.0 *** | 16.0 | 33.0 | 38.0 | 30.0 | 19.0 | 30.0 | 29.0 | 26.0 | 32.0 | 32 * | 24 |
|  | SE | 3.3 | 4.0 | 3.4 | 2.9 | 3.2 | 3.5 | 3.1 | 3.0 | 3.3 | 3.3 | 3.1 | 3.3 | 1.3 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 75-100\% on p1 qns (\%) | mean | 69.0 | 68.0 | 21.0 | 26.0 | 40.0 | 36.0 | 40.0 | 37.0 | 68.0 | 63.0 | 70.0 * | 59.0 | 43 | 40 |
|  | SE | 3.7 | 4.4 | 2.8 | 3.4 | 3.4 | 3.5 | 3.3 | 3.6 | 3.4 | 3.5 | 3.3 | 3.5 | 1.4 | 1.5 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 0-24\% on p2 qns (\%) | mean | 1.5 | 9.6 ** | 37.0 | 48.0 | 25.0 | 18.0 | 29.0 | 31.0 | 2.5 | 5.2 | 2.8 | 9.8 ** | 25 | 27 |
|  | SE | 1.0 | 2.8 | 3.3 | 3.9 | 3.0 | 2.8 | 3.1 | 3.5 | 1.1 | 1.6 | 1.2 | 2.1 | 1.3 | 1.4 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring $25-49 \%$ on p2 qns (\%) | mean | 40.0 | 36.0 | 39.0 | 30.0 | 24.0 | 27.0 | 38.0 * | 25.0 | 30.0 | 33.0 | 44.0 | 39.0 | 36 * | 28 |
|  | SE | 3.9 | 4.5 | 3.3 | 3.6 | 2.9 | 3.2 | 3.3 | 3.3 | 3.3 | 3.4 | 3.6 | 3.5 | 1.4 | 1.4 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 50-74\% on p2 qns (\%) | mean | 46.0 | 44.0 | 18.0 * | 9.5 | 35.0 | 33.0 | 13.0 | 24.0 * | 50.0 | 47.0 | 40.0 | 37.0 | 24 | 27 |
|  | SE | 4.0 | 4.7 | 2.6 | 2.3 | 3.3 | 3.4 | 2.3 | 3.2 | 3.6 | 3.6 | 3.5 | 3.4 | 1.2 | 1.4 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring $75-100 \%$ on p2 qns (\%) | mean | 12.0 | 9.6 | 5.6 | 12.0 | 15.0 | 21.0 | 20.0 | 20.0 | 18.0 | 15.0 | 13.0 | 14.0 | 15 | 18 |
|  | SE | 2.7 | 2.8 | 1.6 | 2.5 | 2.5 | 3.0 | 2.7 | 3.0 | 2.8 | 2.6 | 2.4 | 2.5 | 1 | 1.2 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *)}$ ), 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 12 Primary 2 pupil numeracy test scores by learning domain, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by learning domain |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on number concepts (\%) | mean | 0.1 | 0.1 | 15.0 | 40.0 *** | 10.0 | 12.0 | 11.0 | 23.0 * | 0.0 | 2.1 | 1.1 | 0.8 | 9.5 | 20 ** |
|  | SE | 0.2 | 0.3 | 2.4 | 3.8 | 2.1 | 2.4 | 2.1 | 3.2 | 0.0 | 1.0 | 0.7 | 0.6 | 0.85 | 1.2 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 25-49\% on number concepts (\%) | mean | 3.4 | 2.1 | 29.0 ** | 11.0 | 18.0 * | 6.8 | 14.0 | 8.7 | 4.2 | 5.7 | 1.6 | 4.6 * | 15 ** | 8 |
|  | SE | 1.5 | 1.4 | 3.1 | 2.5 | 2.6 | 1.8 | 2.4 | 2.1 | 1.4 | 1.7 | 0.9 | 1.5 | 1 | 0.84 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 50-74\% on number concepts <br> (\%) | mean | 21.0 | 29.0 | 27.0 | 20.0 | 25.0 | 27.0 | 28.0 * | 17.0 | 25.0 | 26.0 | 33.0 | 28.0 | 27 * | 21 |
|  | SE | 3.3 | 4.3 | 3.0 | 3.1 | 3.0 | 3.2 | 3.0 | 2.8 | 3.1 | 3.2 | 3.4 | 3.2 | 1.3 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 75-100\% on number concepts <br> (\%) | mean | 76.0 | 69.0 | 30.0 | 29.0 | 47.0 | 54.0 | 47.0 | 51.0 | 71.0 | 66.0 | 64.0 | 67.0 | 49 | 51 |
|  | SE | 3.4 | 4.4 | 3.1 | 3.5 | 3.4 | 3.6 | 3.4 | 3.8 | 3.3 | 3.4 | 3.5 | 3.3 | 1.5 | 1.6 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 0-24\% on addition and subtraction (\%) | mean | 23.0 | 18.0 | 52.0 | 64.0 | 34.0 | 33.0 | 35.0 | 45.0 | 12.0 | 12.0 | 11.0 | 16.0 | 34 | 41 |
|  | SE | 3.4 | 3.6 | 3.4 | 3.7 | 3.2 | 3.4 | 3.3 | 3.8 | 2.3 | 2.4 | 2.3 | 2.6 | 1.4 | 1.5 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 25-49\% on addition and subtraction (\%) | mean | 17.0 | 17.0 | 28.0 ** | 12.0 | 22.0 | 25.0 | 27.0 ** | 12.0 | 18.0 | 26.0 | 12.0 | 20.0 * | 24 ** | 15 |
|  | SE | 3.0 | 3.5 | 3.1 | 2.5 | 2.8 | 3.2 | 3.0 | 2.4 | 2.7 | 3.2 | 2.3 | 2.8 | 1.2 | 1.1 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 50-74\% on addition and subtraction (\%) | mean | 35.0 | 37.0 | 11.0 | 16.0 | 27.0 | 24.0 | 13.0 | 20.0 | 33.0 * | 21.0 | 36.0 | 28.0 | 19 | 21 |
|  | SE | 3.8 | 4.6 | 2.2 | 2.8 | 3.0 | 3.1 | 2.3 | 3.0 | 3.4 | 3.0 | 3.4 | 3.2 | 1.1 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |
| Proportion of pupils scoring 75-100\% on addition and subtraction (\%) | mean | 25.0 | 29.0 | 8.6 | 8.5 | 18.0 | 18.0 | 25.0 | 23.0 | 38.0 | 41.0 | 41.0 | 35.0 | 23 | 22 |
|  | SE | 3.5 | 4.3 | 1.9 | 2.2 | 2.6 | 2.8 | 2.9 | 3.2 | 3.5 | 3.6 | 3.5 | 3.4 | 1.2 | 1.3 |
|  | N | 155 | 113 | 214 | 166 | 214 | 189 | 217 | 177 | 193 | 190 | 194 | 201 | 1187 | 1036 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level (***), 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 13 Primary 4 pupil numeracy test scores by test score band, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Other indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Average p4 numeracy test score (\%) | mean | 40.0 | 41.0 | 26.0 | 30.0 | 43.0 | 41.0 | 34.0 | 43.0 ** | 47.0 | 48.0 | 50.0 | 50.0 | 38 | 42 ** |
|  | SE | 1.2 | 1.2 | 1.4 | 1.5 | 1.3 | 1.3 | 1.2 | 1.6 | 0.9 | 1.1 | 1.0 | 1.1 | 0.55 | 0.65 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Results by test band |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p4 numeracy test (\%) | mean | 15.0 | 9.7 | 50.0 | 36.0 | 20.0 | 12.0 | 28.0 | 26.0 | 3.6 | 5.7 | 2.9 | 4.3 | 24 | 21 |
|  | SE | 3.0 | 2.8 | 3.4 | 4.0 | 2.7 | 2.5 | 3.2 | 3.2 | 1.3 | 1.8 | 1.2 | 1.4 | 1.2 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on p4 numeracy test (\%) | mean | 56.0 | 66.0 | 33.0 | 52.0 ** | 44.0 | 57.0 | 55.0 * | 39.0 | 60.0 | 49.0 | 46.0 | 43.0 | 48 | 45 |
|  | SE | 4.2 | 4.5 | 3.2 | 4.1 | 3.3 | 3.8 | 3.6 | 3.5 | 3.4 | 3.8 | 3.6 | 3.5 | 1.5 | 1.6 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on p4 numeracy test (\%) | mean | 28.0 | 23.0 | 16.0 | 11.0 | 31.0 | 29.0 | 16.0 | 14.0 | 36.0 | 41.0 | 47.0 | 49.0 | 25 | 21 |
|  | SE | 3.8 | 4.0 | 2.5 | 2.6 | 3.1 | 3.5 | 2.6 | 2.5 | 3.4 | 3.7 | 3.6 | 3.5 | 1.3 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on p4 numeracy test (\%) | mean | 0.7 | 0.6 | 0.6 | 0.8 | 4.2 | 2.1 | 1.3 | 21.0 *** | 0.7 | 4.5 | 4.1 | 4.0 | 2.1 | 12 ** |
|  | SE | 0.7 | 0.7 | 0.5 | 0.7 | 1.3 | 1.1 | 0.8 | 2.9 | 0.6 | 1.6 | 1.4 | 1.4 | 0.42 | 1 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |

Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level ( ${ }^{* * *)}$, 0.05 level ( ${ }^{* *}$ ) or 0.1 level ( ${ }^{*}$ ).

Annex Table 14 Primary 4 pupil numeracy test scores by grade level of question, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by grade-level of question |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on p1/p2 qns (\%) | mean | 2.1 | 7.2 | 36.0 | 22.0 | 1.2 | 6.2 | 12.0 | 6.5 | 0.9 * | 0.3 | 0.1 | 1.9 * | 11 | 7.4 |
|  | SE | 1.2 | 2.5 | 3.3 | 3.4 | 0.7 | 1.9 | 2.4 | 1.8 | 0.7 | 0.4 | 0.2 | 1.0 | 0.9 | 0.83 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on p1/p2 qns (\%) | mean | 21.0 | 25.0 | 26.0 | 31.0 | 33.0 | 27.0 | 33.0 | 31.0 | 14.0 | 18.0 | 13.0 | 12.0 | 27 | 27 |
|  | SE | 3.4 | 4.1 | 3.0 | 3.8 | 3.1 | 3.4 | 3.4 | 3.3 | 2.4 | 2.9 | 2.4 | 2.3 | 1.3 | 1.4 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on p1/p2 qns (\%) | mean | 65.0 | 59.0 | 33.0 | 37.0 | 53.0 | 45.0 | 46.0 | 38.0 | 72.0 | 76.0 | 69.0 | 72.0 | 51 | 45 |
|  | SE | 4.0 | 4.7 | 3.2 | 4.0 | 3.3 | 3.8 | 3.6 | 3.5 | 3.2 | 3.3 | 3.3 | 3.2 | 1.5 | 1.6 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on $\mathrm{p} 1 / \mathrm{p} 2$ qns (\%) | mean | 12.0 | 9.3 | 5.1 | 10.0 * | 14.0 | 21.0 | 8.1 | 25.0 ** | 13.0 ** | 5.8 | 18.0 | 14.0 | 11 | 20 ** |
|  | SE | 2.7 | 2.8 | 1.5 | 2.5 | 2.3 | 3.2 | 2.0 | 3.1 | 2.4 | 1.8 | 2.8 | 2.5 | 0.9 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 0-24\% on p3 qns (\%) | mean | 21.0 ** | 7.5 | 53.0 | 41.0 | 16.0 | 17.0 | 28.0 | 21.0 | 3.3 | 4.6 | 5.3 | 7.5 | 25 | 20 |
|  | SE | 3.5 | 2.5 | 3.4 | 4.1 | 2.5 | 2.9 | 3.2 | 2.9 | 1.2 | 1.6 | 1.6 | 1.9 | 1.3 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on p3 qns (\%) | mean | 50.0 | 65.0 | 25.0 | 33.0 | 47.0 | 45.0 | 47.0 | 34.0 | 50.0 | 46.0 | 37.0 | 32.0 | 43 | 37 |
|  | SE | 4.2 | 4.6 | 3.0 | 3.9 | 3.3 | 3.8 | 3.6 | 3.4 | 3.5 | 3.8 | 3.5 | 3.3 | 1.4 | 1.5 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on p3 qns (\%) | mean | 25.0 | 22.0 | 18.0 | 20.0 | 23.0 | 27.0 | 20.0 | 24.0 | 39.0 | 40.0 | 39.0 | 46.0 | 24 | 27 |
|  | SE | 3.6 | 4.0 | 2.6 | 3.3 | 2.8 | 3.4 | 2.9 | 3.1 | 3.4 | 3.7 | 3.5 | 3.5 | 1.2 | 1.4 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on p3 qns (\%) | mean | 3.5 | 5.6 | 3.6 | 6.3 | 13.0 | 11.0 | 4.2 | 21.0 ** | 8.1 | 9.5 | 18.0 | 14.0 | 8.1 | 16 * |
|  | SE | 1.5 | 2.2 | 1.3 | 2.0 | 2.3 | 2.4 | 1.4 | 2.9 | 1.9 | 2.2 | 2.8 | 2.5 | 0.79 | 1.2 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 0-24\% on p4 qns (\%) | mean | 54.0 | 57.0 | 75.0 | 78.0 | 51.0 | 57.0 | 69.0 | 58.0 | 36.0 | 35.0 | 26.0 | 32.0 | 58 | 56 |
|  | SE | 4.2 | 4.7 | 2.9 | 3.4 | 3.3 | 3.8 | 3.3 | 3.5 | 3.4 | 3.6 | 3.2 | 3.3 | 1.4 | 1.6 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on p4 qns (\%) | mean | 38.0 | 39.0 | 20.0 | 19.0 | 24.0 | 29.0 | 27.0 | 19.0 | 48.0 | 46.0 | 54.0 ** | 40.0 | 31 | 25 |
|  | SE | 4.1 | 4.7 | 2.7 | 3.2 | 2.8 | 3.5 | 3.2 | 2.8 | 3.5 | 3.8 | 3.6 | 3.5 | 1.3 | 1.4 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on p4 qns (\%) | mean | 7.6 | 3.3 | 4.4 | 2.2 | 24.0 | 12.0 | 3.3 | 17.0 ** | 15.0 | 15.0 | 19.0 | 28.0 | 11 | 15 |
|  | SE | 2.2 | 1.7 | 1.4 | 1.2 | 2.8 | 2.5 | 1.3 | 2.7 | 2.5 | 2.7 | 2.8 | 3.2 | 0.92 | 1.1 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on p4 qns (\%) | mean | 0.1 | 0.6 | 0.2 | 0.3 | 0.4 | 1.9 * | 0.6 | 5.8 | 0.4 | 3.9 | 0.3 | 0.1 | 0.43 | 3.6 |
|  | SE | 0.3 | 0.7 | 0.3 | 0.5 | 0.4 | 1.0 | 0.6 | 1.7 | 0.5 | 1.5 | 0.4 | 0.2 | 0.19 | 0.59 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |

[^4]Annex Table 15 Primary 4 pupil numeracy test scores by learning domain, gender and state

| Impact-level indicators | Enugu |  |  | Jigawa |  | Kaduna |  | Kano |  | Kwara |  | Lagos |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stat | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| Results by learning domain |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of pupils scoring 0-24\% on number concepts (\%) | mean | 7.5 | 8.8 | 40.0 | 30.0 | 11.0 | 6.6 | 17.0 | 15.0 | $1.2{ }^{\text {*** }}$ | 0.0 | 2.4 | 0.9 | 16 | 13 |
|  | SE | 2.2 | 2.7 | 3.3 | 3.8 | 2.1 | 1.9 | 2.7 | 2.5 | 0.8 | 0.0 | 1.1 | 0.7 | 1.1 | 1.1 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on number concepts <br> (\%) | mean | 25.0 | 15.0 | 26.0 | 36.0 | 47.0 | 44.0 | 45.0 * | 31.0 | 38.0 | 31.0 | 30.0 | 28.0 | 39 | 32 |
|  | SE | 3.6 | 3.4 | 3.0 | 4.0 | 3.3 | 3.8 | 3.6 | 3.3 | 3.4 | 3.5 | 3.3 | 3.2 | 1.4 | 1.5 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on number concepts <br> (\%) | mean | 54.0 | 57.0 | 27.0 | 20.0 | 24.0 | 41.0 * | 26.0 | 31.0 | 46.0 | 51.0 | 42.0 | 50.0 | 31 | 36 |
|  | SE | 4.2 | 4.7 | 3.0 | 3.3 | 2.8 | 3.8 | 3.1 | 3.3 | 3.5 | 3.8 | 3.5 | 3.5 | 1.3 | 1.5 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on number concepts (\%) | mean | 13.0 | 19.0 | 6.6 | 14.0 * | 17.0 | 8.5 | 12.0 | 23.0 * | 15.0 | 18.0 | 25.0 | 21.0 | 14 | 20 |
|  | SE | 2.9 | 3.7 | 1.7 | 2.9 | 2.5 | 2.1 | 2.3 | 3.0 | 2.5 | 2.9 | 3.1 | 2.9 | 1 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 0-24\% on addition and subtraction (\%) | mean | 19.0 | 18.0 | 57.0 | 50.0 | 34.0 | 20.0 | 38.0 | 32.0 | 9.1 | 6.0 | 8.6 | 6.0 | 34 | 27 |
|  | SE | 3.3 | 3.7 | 3.4 | 4.1 | 3.1 | 3.1 | 3.5 | 3.3 | 2.0 | 1.8 | 2.0 | 1.7 | 1.4 | 1.4 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 25-49\% on addition and subtraction (\%) | mean | 41.0 | 40.0 | 22.0 | 25.0 | 30.0 | 47.0 * | 26.0 | 33.0 | 32.0 | 27.0 | 26.0 | 26.0 | 28 | 33 |
|  | SE | 4.1 | 4.7 | 2.8 | 3.6 | 3.0 | 3.8 | 3.1 | 3.4 | 3.3 | 3.4 | 3.1 | 3.1 | 1.3 | 1.5 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on addition and subtraction (\%) | mean | 26.0 | 34.0 | 16.0 | 14.0 | 18.0 | 21.0 | 25.0 * | 14.0 | 45.0 | 51.0 | 41.0 | 40.0 | 25 | 20 |
|  | SE | 3.7 | 4.5 | 2.5 | 2.9 | 2.6 | 3.1 | 3.1 | 2.5 | 3.5 | 3.8 | 3.5 | 3.5 | 1.3 | 1.3 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on addition and subtraction (\%) | mean | 15.0 | 8.0 | 5.1 | 11.0 * | 18.0 | 12.0 | 11.0 | 22.0 * | 15.0 | 16.0 | 25.0 | 28.0 | 14 | 19 |
|  | SE | 3.0 | 2.6 | 1.5 | 2.6 | 2.6 | 2.5 | 2.2 | 3.0 | 2.5 | 2.8 | 3.1 | 3.2 | 1 | 1.2 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring $0-24 \%$ on multiplication and division (\%) | mean | 47 | 51 | 74 * | 61 | 50 | 39 | 60 | 58 | 23 | 20 | 22 | 15 | 52 | 49 |
|  | SE | 4.2 | 4.8 | 3 | 4 | 3.3 | 3.8 | 3.5 | 3.5 | 3 | 3 | 3 | 2.5 | 1.5 | 1.6 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring $25-49 \%$ on multiplication and division (\%) | mean | 45 | 44 | 23 | 32 | 42 | 50 | 36 | 26 | 65 | 69 | 60 | 67 | 40 | 37 |
|  | SE | 4.2 | 4.7 | 2.8 | 3.9 | 3.3 | 3.8 | 3.4 | 3.1 | 3.3 | 3.5 | 3.5 | 3.3 | 1.4 | 1.5 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 50-74\% on multiplication and division (\%) | mean | 7.4 | 4.9 | 3.2 | 6.8 | 8.2 | 11 | 4.2 | 17 ** | 11 | 12 | 17 | 18 | 7.2 | 14 ** |
|  | SE | 2.2 | 2.1 | 1.2 | 2.1 | 1.8 | 2.4 | 1.4 | 2.7 | 2.2 | 2.4 | 2.7 | 2.7 | 0.75 | 1.1 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |
| Proportion of pupils scoring 75-100\% on multiplication and division (\%) | mean | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | SE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  | N | 142 | 111 | 218 | 147 | 228 | 170 | 197 | 195 | 203 | 175 | 195 | 201 | 1185 | 999 |

[^5]
## References

ESSPIN (March 2013). Overall findings and technical report of ESSPIN composite survey 1 (2012). Report number: ESSPIN 060


[^0]:    Source: Composite Survey 2012

[^1]:    Source: Composite Survey 2012. See Annex Table 1.

[^2]:    Source: Composite Survey 2012. See Annex Table 9.

[^3]:    Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level (***), 0.05 level (**) or 0.1 level ( ${ }^{*}$ ).

[^4]:    Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level (***), 0.05 level (**) or 0.1 level (*).

[^5]:    Source: Composite Survey 1 2012. Note: (1) Asterisks mean that there is a statistically significant gender difference between estimates at 0.01 level (***), 0.05 level (**) or 0.1 level (*).

