By 2014 ESSPIN’s school level programmes reached over 10,000 schools. More than 3.7 million children are in a school that has received ESSPIN support.
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Introduction

The Education Sector Support Programme in Nigeria (ESSPIN) aims to improve learning outcomes for children of basic education age in six states of Nigeria – Enugu, Jigawa, Kaduna, Kano, Kwara and Lagos. Funded by the UK and Nigerian governments, ESSPIN works through a range of activities at the national, state, local and school levels. At the school level, it provides and supports the use of structured training materials for teachers, works with head teachers to improve academic leadership and school improvement planning, and involves communities through the establishment of well-functioning school-based management committees (SBMCs).

ESSPIN conducted school surveys in 2012 and 2014 to understand how well it is meeting its goals and, more broadly, how schools in the six states have been changing over time. We interviewed teachers, head teachers and SBMC members, observed lessons, and tested teachers and pupils. Using an agreed set of indicators, the survey measures teacher competence, head teacher effectiveness, school development planning, inclusive practices in schools, SBMC functionality, and how well children in grade 2 and grade 4 are learning in English and mathematics.

ESSPIN school-level intervention was first piloted in 2,000 schools in 2009/10 and 2010/11. It has since been scaled up to over 10,000 schools, although faster in some states than others. State governments themselves have driven the pace of roll-out, selected schools to participate, and provided the officers who run the programme on the ground. Interventions reached 59% of schools in the six states in 2013/14, and another 9% had received it at some point in the previous years. In Lagos, Kano and Kwara, it has been rolled out to all schools. Over 3.7 million children – 78% of those enrolled in the six states – are in a school that has received ESSPIN support.

ESSPIN has reached over 10,000 schools

Number of schools reached by school improvement programme (SIP)

The numbers shown are of schools that have been included in the SIP for at least one year between 2009/10 and 2013/14.
ESSPIN’s intention was to support states in providing a fully-integrated package of interventions for a manageable number of schools and then, as each state’s capacity grew, gradually include more schools until they were all benefiting from the interventions. This model was followed in Jigawa and Lagos, while other states have scaled up either much more rapidly than intended or more slowly.¹

There have been some changes to ESSPIN’s model for delivering school support. During the pilot phase, state school improvement teams (SSITs) trained directly by ESSPIN staff were responsible for supporting and training head teachers and teachers. As the programme expanded, the school support officers (SSOs) – a second, larger group of existing state employees working at the local government educational authority level – were trained by the SSITs and ESSPIN. Responsibility for working directly with head teachers and teachers has shifted to the SSOs, who are less qualified and have received less training than the SSITs. It is too soon to tell whether this scale-up in 2013/14 has diluted the effects of ESSPIN programmes. But we can examine whether the relatively modest scale-up in the years up to 2011/12 has been sufficient to improve school quality across the states as a whole, and whether ESSPIN has remained effective so far.

### Enrolment is increasing rapidly in northern states

<table>
<thead>
<tr>
<th>State</th>
<th>2009/10</th>
<th>2013/14</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enugu</td>
<td>234,000</td>
<td>179,000</td>
<td>-56,000 -23.7%*</td>
</tr>
<tr>
<td>Jigawa</td>
<td>410,000</td>
<td>486,000</td>
<td>+76,000 +18.5%</td>
</tr>
<tr>
<td>Kaduna</td>
<td>930,000</td>
<td>1,080,000</td>
<td>+150,000 +16.2%</td>
</tr>
<tr>
<td>Kano</td>
<td>1,715,000</td>
<td>2,026,000</td>
<td>+311,000 +18.1%</td>
</tr>
<tr>
<td>Kwara</td>
<td>183,000</td>
<td>179,000</td>
<td>-4000 -2.2%</td>
</tr>
<tr>
<td>Lagos</td>
<td>385,000</td>
<td>387,000</td>
<td>+2000 +0.4%</td>
</tr>
</tbody>
</table>

*Enrolment shown is only for schools listed in both censuses. There were also many more schools in the 2013/14 census than in the 2009/10 census. Some schools may have been missed in the earlier census. Total enrolment increased by 38% in Enugu once these extra schools are added.

At the same time that ESSPIN has been reaching more schools, there have been large changes in enrolment in some of the states. In the northern states – Jigawa, Kaduna and Kano – the number of pupils in each school has increased by over one-sixth. Over 500,000 extra children were in school in these states in total. Growth in the number of schools and teachers has not kept pace. In Kaduna and Kano, enrolment increased disproportionately quickly in ESSPIN schools. Total enrolment increased by over 60% between 2009/10 and 2013/14 in ESSPIN schools in Kano. This may reflect support to schools to improve access, especially for children from disadvantaged backgrounds. There were substantial increases in the pupil-teacher ratio in all states except Enugu. In Kano and Lagos the pupil-teacher ratio increased most quickly in schools with the most ESSPIN intervention. This may to some extent have offset any effects on learning outcomes of the improvement in school quality due to ESSPIN.

¹Full details are available in the full state reports.
Are schools getting better?

ESSPIN schools out-perform non-ESSPIN ones on many criteria

Proportion of schools meeting criteria for different aspects of school functioning (%)
Across a wide range of indicators of school quality, ESSPIN schools are doing better than other schools. Those that had more ESSPIN intervention in recent years have also been improving faster. ESSPIN schools have more effective head teachers, are better at school development planning, show more evidence of being inclusive, and have more functional and inclusive SBMCs, compared to non-ESSPIN schools.

ESSPIN’s measure of school quality combines indicators of teacher competence, head teacher effectiveness, school development planning and SBMC functionality. Using this measure, the number of children in good-quality schools rose from under 200,000 in 2012 to over 650,000 in 2013/14, and 90% of this increase was in ESSPIN schools.

This pattern of improvements in access and quality has not yet translated into an overall rise in school quality at the state-wide level, however. Most indicators are either static or declining over time for schools in the six states as a whole. Modest improvements between 2012 and 2014 within ESSPIN schools in head teacher effectiveness, school development planning, and functional SBMCs were balanced by a lack of change or worsening of these indicators in the majority of schools without ESSPIN intervention by 2012/13.

Overall, improvements in a range of indicators added up to a significant improvement in quality for schools that received intervention in the relevant period, while there was little change in those that did not receive intervention. At baseline, only 580 schools (4%) in the six states met our overall standard for a quality school; by 2014 this had increased to 1,700 (10%). Moreover, the higher quality of intervention schools does not appear to be simply a result of ESSPIN working in schools that would have done better anyway. Statistical tests (detailed in the full technical report) allow us to control for differences between the six states, providing some evidence that higher quality can be causally attributed to the ESSPIN intervention.

### ESSPIN schools improved more quickly between 2012 and 2014

Overall quality score (%) by ESSPIN intervention during 2011-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Intervention</th>
<th>No intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>2014</td>
<td>40%</td>
<td>30%</td>
</tr>
</tbody>
</table>

Overall quality score based on combining indicators of teacher competence, head teacher effectiveness, school development planning, and SBMC functionality.\(^2\)

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\(^2\)‘Intervention’ schools had ESSPIN intervention in the relevant period (2011/12 and 2012/13). ‘No intervention’ schools did not have intervention during this period (though they may have had intervention before or since).
Do teachers have the skills and support they need?

By each of our measures, teachers are better in ESSPIN than in non-ESSPIN schools. Use of teaching aids, use of more praise than reprimands in lessons, and use of a variety of individual and group work lesson formats all increased between 2012 and 2014, and are better in ESSPIN than other schools. Knowledge of curriculum benchmarks appears to have worsened, although this may be the result of changes in measurement.

Some of these differences may reflect the fact that ESSPIN has – up until 2012/13 – trained more teachers in states such as Lagos and Kwara, where teachers were already better in the first place, than in the states where teachers were weakest. But there are still differences when we compare teachers within each state. Even teachers who have not themselves been trained, but are in ESSPIN-supported schools, do better by our competence measures than those in non-ESSPIN schools. This finding is consistent with a diffusion effect of training through head teacher academic leadership and feedback, SSO work with all teachers, and peer observations of lessons.

Teachers in both types of school are struggling, however, with basic English and mathematics. We did not test this in 2012, and so do not know how this has changed over time, although other teacher tests conducted in 2009 suggest a low starting point. Around 80% of teachers can answer grade 1 English questions correctly, but only 20% can answer grade 5 questions correctly. Around one-third of teachers could answer grade 5 mathematics questions correctly. These patterns vary dramatically by state. In Lagos and Enugu, the average teacher scores over 40% even in grade 5 English items, while in Jigawa teachers scored on average 34% in grade 2 English items, and only 9% in grade 5 English.
Teachers’ scores are higher in ESSPIN schools, but (when we compare teachers within the same state) the difference is only a few percentage points. For example, ESSPIN-trained teachers in Lagos and Kwara scored on average 39% in English writing, while ESSPIN-trained teachers in the other states scored 30%, and untrained teachers scored 29%. Large proportions of teachers in all types of school are unable to answer primary-level English and mathematics questions.

**Many teachers are unable to answer primary-level test questions in English and mathematics**

Examples of questions and results from the teacher tests

<table>
<thead>
<tr>
<th>Example of question</th>
<th>Correct answer</th>
<th>Percentage of teachers who answered correctly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Here is one bird. Complete the sentence: Here are two</td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>Sort 10 balls into sets of 2. Draw the sets here:</td>
<td></td>
<td>43%</td>
</tr>
<tr>
<td>Think about a journey you have made. Write three sentences about it. Explain when you travelled, where you travelled to and what happened on the way there.</td>
<td></td>
<td>8%</td>
</tr>
</tbody>
</table>

**Teachers struggle most with primary grade 5 test questions**

Average scores by grade level of test item (%)
Scaling up school improvement in Nigeria: findings from a new survey

Are children learning more in school?

Average learning outcomes in English and mathematics appear to have declined in the six states as a whole. However, they are significantly better in ESSPIN schools than non-ESSPIN schools. Pupil test results in intervention schools either improved slightly (for grade 2 literacy) or worsened more slowly compared to schools that did not receive the intervention.

What explains this pattern of results? We cannot totally rule out measurement error, although the differences are quite consistent across different types of test items. The large expansion of school enrolments described above may be part of the story. We test whether schools where enrolments (or the pupil-teacher ratio) rose more quickly have had worse declines in learning outcomes, but do not find any evidence to support this hypothesis. Still, as access is widened, many of the additional children entering school may be first-generation learners or from families that are less able to support their learning. Has the profile of learners been changing over time, and if so has this made it harder for schools to improve learning outcomes? We do not have detailed background information on the half million additional learners who enrolled in the six states in 2012 and 2014, and so this remains a question for future research.

Learning outcomes are highest in Lagos and Enugu, and lowest in Jigawa, Kaduna and Kano. Children in the northern states appear to struggle more with English literacy than mathematics, while in the southern states the reverse is true. Children particularly struggle on questions designed to measure their writing in English, their comprehension of written passages, and multiplication and division. In each case, three-quarters of children answer fewer than 25% of questions correctly. Learners who are in grade 4 are fairly capable of answering questions pitched at grade 1 or grade 2 level, but only a small proportion can answer questions that reflect the grade 4 curriculum.
Schools that received ESSPIN intervention differ in a number of ways from other schools. They are disproportionately located in Kwara and Lagos and, since 2013/14, Kano, as a result of the respective state governments’ decisions to roll out the school improvement programme (SIP) to all schools at the states’ own expense. Across all six states, they are typically longer-established and more urban, and with lower pupil-teacher ratios than the typical school that was not selected for ESSPIN. Are higher learning outcomes in ESSPIN schools really the result of ESSPIN intervention, or of these pre-existing differences? We control statistically for these characteristics in Enugu, Jigawa, Kaduna and Kano, and still find significant ESSPIN effects. The estimated effect amounts to a difference of around 6 percentage points in the literacy tests and 1-2 percentage points in the numeracy tests.

However, the results are less positive when we compare change over time in ESSPIN and non-ESSPIN schools. We do not find robust evidence of learning outcomes improving more quickly (or worsening more slowly) than non-ESSPIN schools, once the characteristics and location of each school have been taken into account.

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### Most children struggle with basic reading and arithmetic

Examples of questions and results from the pupil tests

<table>
<thead>
<tr>
<th>Question</th>
<th>Grade</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Read the letters or make the sounds as quickly and carefully as you can.</td>
<td>(2)</td>
<td>22 out of 50 letters correctly</td>
</tr>
<tr>
<td>Read the words as quickly and carefully as you can.</td>
<td>(4)</td>
<td>6 out of 25 words correctly</td>
</tr>
<tr>
<td>17 + 15 = __________</td>
<td>(2)</td>
<td>18% wrote the correct answer</td>
</tr>
<tr>
<td>3 x 2 = __________</td>
<td>(4)</td>
<td>28% wrote the correct answer</td>
</tr>
</tbody>
</table>
Are all children learning equally?

The school surveys and annual censuses provide rich data on inequalities in learning outcomes and enrolment. There are large gender gaps in enrolment in Jigawa, Kano, Kaduna and Kwara. In Jigawa there are only 76 girls for every 100 boys in government schools; for Kaduna there are 86. The gender gap declined rapidly between 2009 and 2013, yet is still a long way from parity. However, we find no significant gender differences in mean pupil test scores in either 2012 or 2014. Once in school, it appears that girls learn just as well as boys in the six states, and there is little difference between ESSPIN and non-ESSPIN schools in this respect.

The gender gap in pupil enrolment may be influenced by the gender of their teachers: only 14% of teachers are female in Jigawa and 24% in Kano, compared to 84% in Enugu and Lagos. Female teachers and head teachers are on average better than male ones, even controlling for state, although the reasons for this are not clear. Among other differences, female teachers are more likely than male ones to encourage equal participation of boys and girls in the lesson.

Rural-urban gaps are extremely wide. Children in urban schools are, on average, scoring around 20 percentage points higher than those in rural schools. Children in more remote rural schools have particularly low learning outcomes. For every increase of 10 kilometres in distance between the school and the headquarters of the local government authority, average test scores dropped by around one percentage point.
Learning outcomes differ starkly by wealth, to the extent that children from the richest 20% of households within each state score (on average) around twice as highly as those in the poorest 20%. Wealth inequalities are particularly strong for English literacy. Does being in an ESSPIN school in Composite Survey 2 dampen the effect of wealth inequality? We find evidence that the poorest children are benefiting disproportionately from ESSPIN, and that wealth disparities are smaller in the group of children who attend ESSPIN schools than in the group of children who attend non-ESSPIN schools.

We do not find any evidence that pupils who mainly speak a minority language at home attain significantly different results in the numeracy and literacy tests than those who speak the majority language of each state. Around one-third of children in the six states are overage for their grades (older than eight in grade 2 or older than 10 in grade 4), mostly by just one year. Although in many contexts overage is associated with low attainment and high risk of drop-out, in the states where ESSPIN works, overage children have better learning outcomes than children of the appropriate age for their grade. We were not able to estimate results for children with disabilities, as we only found 54 children in the survey schools with a disability affecting their ability to take the test.

The roll-out of ESSPIN interventions and their impact have been very varied across the six states. The following sections look at each state in more detail.
Enugu

In Enugu, the ESSPIN SIP was first delivered to around 120 schools in 2011, and expanded so that around 45% of the state’s primary schools had benefited from at least one year of support by 2014. (For this evaluation, we disregard intervention in 2013/14, as it is too recent to have had an effect by the time of the 2014 survey.) The state was not included in ESSPIN’s pilot phase. As well as working with government schools, in Enugu ESSPIN also worked with low fee-paying mission schools run by the Catholic, Anglican and Methodist missions.

Between 2012 and 2014, the proportion of good-quality schools improved significantly in Enugu. In 2012, around half of the teachers in the state met our competence standard, and this increased to three-quarters in 2014. The proportion of good-quality schools rose from 7 to 18% during the same period, and children’s test scores increased in both literacy and numeracy.

Across all the indicators measured in the composite surveys, schools that benefited from the SIP had higher performance in 2014 than non-ESSPIN schools. Head teacher effectiveness, school planning, inclusiveness, SBMC functionality, and overall school quality all improved.

Improvements were found both in schools that received the SIP interventions and those that did not, and so cannot be attributed to ESSPIN’s school-level interventions. For many indicators, the change in scores was larger in schools that did not receive the intervention, so that the big gaps between SIP and non-SIP schools in 2012 have partly closed. The schools chosen by the state government for SIP were better in quality and learning outcomes than other schools in Enugu at the start of the intervention, and remained better in 2014.

Enugu schools continue to enjoy some of the highest learning outcomes of the six states. Still, over one-third of students score below 50% in literacy tests (at grades 2 and 4) and few grade 4 students can answer mathematics questions based on the curriculum for grade 3 or 4. Similarly, Enugu teachers have some of the highest test scores, although substantial proportions still struggle with primary-level English and mathematics material.

In short, Enugu schools are improving well even without being direct beneficiaries of the SIP. School-level interventions targeted the schools that were already among the best in 2012, and we have not found clear evidence that these schools are doing better as a result.

Scores have risen across the board in Enugu
Average scores in composite output, outcome and impact indicators in Enugu (%)

[Graph showing scores in various indicators for 2012, Non-ESSPIN 2014, and ESSPIN 2014]

Scaling up school improvement in Nigeria: findings from a new survey

Jigawa

In Jigawa, the ESSPIN SIP was first rolled out to a pilot group of nearly 200 schools. These schools have received training and visits regularly since 2009/10. The programme expanded to a much larger scale from 2012, including around 300 additional schools in 2012/13 and a further 500 in 2013/14. (For this evaluation, we disregard intervention in 2013/14, as it is too recent to have had an effect by the time of the 2014 survey.) By the time of our 2014 fieldwork, nearly half of Jigawa’s primary schools had benefited from at least one year of ESSPIN support, but the majority of these had joined the intervention only recently.

In 2014, the ESSPIN intervention schools achieved higher scores than other schools across all of our measures of how well schools are functioning. These positive differences were statistically significant in all indicators except teacher and head teacher effectiveness. Schools benefiting from the SIP are much more likely to meet our standards for school development planning and overall quality, and have improved rapidly in these criteria between 2012 and 2014. There was, however, evidence of both ESSPIN and non-ESSPIN schools becoming less inclusive over time, and there was no significant change over time in the functioning of SBMCs.

The quality of teaching in Jigawa appears to be improving over time, at least in some respects. Teachers use more teaching aids and interact more positively with students in their classrooms than they did in 2012, although their familiarity with English and mathematics curriculum benchmarks has declined. This does not seem so far to have translated into better learning outcomes, however. Learning outcomes remain much higher in ESSPIN than non-ESSPIN schools, but have not improved significantly, and for grade 4 numeracy, have become worse during 2012-14.

What explains these seemingly contradictory results? Conflict in the neighbouring Yobe state has caused an influx of displaced people seeking safety and putting a strain on services, including education, and there has also been some violence within Jigawa. The effect of this tension and insecurity cannot be quantified, but may have disrupted the expected chain of events from inputs, such as better school management and teaching, to impacts, in the form of children learning more.
Many teachers struggle with basic literacy in English and are having to deal with increasingly large classes. Total pupil enrolment has also increased by over 30% between 2009 and 2013, and there has been a large increase in the pupil-teacher ratio. This may reflect children displaced by conflict, but also previously excluded children entering the school system. For every 100 boys in school, there are now 76 girls, compared to only 69 in 2012. The downside of widening access without a corresponding increase in resources and competent teachers may have been a worsening or stagnation of the quality of learning for those children who are in school. It remains to be seen whether the scale-up of the SIP since 2013 can offset or reverse this trend.

### Schools with ESSPIN interventions work better in Jigawa

Average scores in composite output, outcome and impact indicators in Jigawa (%)

![Graph showing comparison of ESSPIN and Non-ESSPIN performance in Jigawa](image-url)
Kaduna

In Kaduna, ESSPIN began implementing the SIP with 165 pilot schools, which have been engaged continuously with training and school visits since 2009/10. A further 850 schools have been brought into the programme since 2011 in three further phases. (For this evaluation, we disregard intervention in 2013/14, as it is too recent to have had an effect by the time of the 2014 survey.) A large majority of Kaduna’s almost 4,000 public primary schools still had not received any specific school improvement interventions by 2014. At the same time – as in Jigawa and Kano – there have been large increases in enrolments and an increase of over 50% in the pupil-teacher ratio.

Teacher competence and inclusiveness worsened over time in Kaduna between 2012 and 2014. Over three-quarters of teachers met the competence standard in 2012, but only 62% in 2014. Head teacher effectiveness, SBMC functionality, school development planning, and overall school quality did not change significantly. However, there was evidence of SBMCs placing more emphasis on inclusion: in 2014, they were more likely to have raised issues around children’s exclusion from school in the community or government, to have taken action on commonly excluded groups of children such as orphans or nomadic children, or to have involved children in the SBMC itself.

Was some of this worsening over time offset by ESSPIN intervention in some of Kaduna’s schools? A number of indicators are better in 2014 for intervention schools than for the rest. Teachers who received training were significantly more competent than those in other schools. School development planning, inclusiveness, and SBMC functionality are all higher in ESSPIN than other schools. Overall quality seems to have improved in schools receiving intervention while worsening in other types of schools. However, learning outcomes have worsened significantly since 2012, with little difference between intervention and other schools.

A significant level of violence and conflict in Kaduna is likely to have made school improvement more difficult. More than 30 violent incidents in Kaduna have been reported in the media every year since 2011, taking over 1,700 lives in total. Pupil-teacher ratios increased, especially in many of the schools where the SIP has been implemented, and teachers’ subject knowledge in English and numeracy is very low. With a difficult working environment, larger class sizes, relatively limited scale-up of the SIP, and stagnant inputs, it may not be surprising that teacher competence was not able to improve, and pupil learning outcomes worsened.

### Schools in Kaduna show little sign of improvement since 2012

Average scores in composite output, outcome and impact indicators in Kaduna (%)

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Teacher competence</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Headteacher effectiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School Development Planning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBMC functionality</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBMC women’s inclusiveness</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SBMC children’s inclusiveness</td>
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<td></td>
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<tr>
<td>School quality</td>
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<td></td>
</tr>
<tr>
<td>Grade 2 literacy</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Grade 4 literacy</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Grade 2 numeracy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 4 numeracy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Kano

Kano began with a pilot roll-out of ESSPIN support to a selection of 317 schools in 2009/10 and 2010/11, which then received further support in 2013/14. In 2013/14, Kano rolled out the programme to its remaining 5,238 public primary schools. This massive scale-up presents a challenge to ensuring quality of delivery and support. Kano has only one state school improvement team member for every 80 schools, a ratio much lower than in other states. And despite its size, Kano receives no more resources for training delivery than the other states. (For this evaluation, we disregard intervention in 2013/14, as it is too recent to have had an effect by the time of the 2014 survey.)

Across many indicators, there is a wide difference between the pilot schools and other schools. Pilot schools score higher in teacher competence, head teacher effectiveness, school development planning, SBMC functionality and inclusiveness, and overall school quality. 15% of the pilot intervention schools met our overall standard for a good-quality school, compared to 1.5% of the remaining schools. However, the proportion of pilot schools in the state was low, so these differences did not translate into state-wide improvements. Across the state as a whole, many indicators worsened between 2012 and 2014. There was no change in pupil test scores between 2012 and 2014, except for a significant drop in the numeracy of children in grade 2. Children’s test scores were low and not significantly higher in pilot than in other schools.

Violent conflict, limited teacher subject knowledge, and rapid increases in enrolment may each have contributed to the limited improvements in learning outcomes found in the state. The break in ESSPIN school support for two school years following the pilot in 2009/10 and 2010/11 may also have been a factor. Kano has experienced ongoing conflict and violence, which is likely to have impacted on schools’ and communities’ ability to deliver effective education, and on pupils’ attendance and performance in school. Few teachers are able to answer English and mathematics questions at primary grade 5 level. Pupil enrolment has increased substantially in Kano’s schools, which may have hindered any potential improvement in the quality of teaching and learning outcomes.

### Schools in the ESSPIN pilot have stronger outcomes in Kano

Average scores in composite output, outcome and impact indicators in Kano (%)

![Graph showing comparison between ESSPIN pilot and non-ESSPIN schools in Kano](graph.png)
In Kwara, the ESSPIN programme began in 2009/10 and covered all public primary schools in the state. All schools received teacher and head teacher training from the beginning (Output stream 3), and the SBMC and participation training (Output stream 4) was rolled out more selectively.

School planning, SBMC functionality and inclusiveness, overall school quality, and children’s test scores in literacy have all improved in Kwara between 2012 and 2014. The proportion of good-quality schools has increased rapidly, from 11% to 29%. However, school inclusiveness and children’s numeracy have worsened. Schools that received more ESSPIN intervention in the form of SBMC and participation training outperformed the other schools in terms of how well SBMCs were working and in overall school quality.

The outputs targeted by ESSPIN Output stream 3 – teachers and headteachers specifically – saw no significant change between 2012 and 2014. In addition, teachers who received training were no more competent than those who did not. This may reflect the break in ESSPIN training during 2011/12 and 2012/13, and helps explain why pupil test scores did not see improvements across the board.

There were large improvements in how well SBMCs worked. The number of schools meeting our standard for SBMC functionality more than doubled from 30% in 2012 to 70% in 2014. SBMCs meeting the women and children inclusiveness standards also more than doubled. Schools which received Output stream 4 support performed significantly better in these indicators, although there were improvements between 2012 and 2014 in both groups of schools.
Lagos

In Lagos, the ESSPIN programme began with a pilot in 2009/10 and has been rolled out through additional phases in 2011/12 and 2012/13. The take-up of ESSPIN interventions by the state has been very extensive in Lagos, covering all schools since 2012/13, and with sustained intervention in schools once they have joined the programme.

Between 2012 and 2014, there were large improvements in Lagos in head teacher effectiveness, school planning, how well SBMCs work, and overall school quality. The proportion of schools with effective head teachers increased from 8% in 2012 to 67% in 2014, and the proportion of schools classed as good quality overall increased from 40 to 64%. Schools that started ESSPIN intervention earlier were doing better in most respects than those that joined in 2011/12 or 2012/13.

School quality increased more quickly in the schools that joined the programme more recently (in 2012/13), from a lower baseline. This suggests that the programme may have been able to bring rapid gains in schools that start from a relatively low starting point, gains that then trail off as schools remain in the programme for longer.

Despite the sometimes dramatic improvements over time in school functioning, improvements in pupil test results were relatively modest. Only in grade 2 literacy was a statistically significant improvement found. Teacher competence also did not improve for Lagos as a whole between 2012 and 2014. Moreover, pupil test results in schools that had had intervention for the longest were not significantly higher than those that recently joined the intervention. The most positive results for teachers were among those who received ESSPIN training directly and among new entrants to the programme. It may be that a lack of improvement among the 25% of teachers not yet selected for direct training is part of the reason for the limited changes in children’s learning outcomes. An additional reason may be large increases in the pupil-teacher ratio in some schools, making it difficult for teachers to apply newly learned methods and deliver better learning outcomes.

### Schools are improving in Lagos

Average scores in composite output, outcome and impact indicators in Lagos (%)

<table>
<thead>
<tr>
<th>Teacher competence</th>
<th>Headteacher effectiveness</th>
<th>School Development Planning</th>
<th>Inclusiveness</th>
<th>SBMC functionality</th>
<th>SBMC women’s inclusiveness</th>
<th>SBMC children’s inclusiveness</th>
<th>School quality</th>
<th>Grade 2 literacy</th>
<th>Grade 4 literacy</th>
<th>Grade 2 numeracy</th>
<th>Grade 4 numeracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>80</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

A wide range of school-level indicators are both improving over time and better in schools that received ESSPIN interventions than in other schools. Head teachers are more effective, they are better at planning the school’s development, and they are doing more about access. More SBMCs are functioning properly and inclusively. Teachers are more competent in intervention than in other schools. Children are learning more in intervention schools – by as much as 6 percentage points in literacy and 1-2 percentage points in numeracy – even controlling for school location and other characteristics. Yet, in the six focus states as a whole, we do not find evidence of teachers getting better or children learning more. They may even be getting worse.

Understanding the processes underlying this pattern of results is beyond the scope of the composite surveys. However, we can point to some tentative explanations. First, the surveys have focused on ESSPIN intervention up to 2012/13, by which time it reached around one in six schools across the six states as a whole. The interventions can therefore have had only a modest impact on the state-wide results.

Second, pupil enrolments have increased rapidly in some states, and may have increased faster in intervention than other schools. 480,000 children who were not in school in 2012 and whose learning levels were not tested at that time were included in the 2014 learning outcome measurements. Teacher and school numbers have not kept pace. We do not have a clear picture of how the profile of pupils may have changed or what pressures have been placed on schools, but it is likely that this has made it more difficult to maintain or improve learning outcomes.

Third, as the programme scaled up, the model for delivering school support changed. SSOs, who are much less qualified and who have received much less training than SSITs, now provide support to head teachers and teachers. In addition, all support at school level is dependent on financial resources from the states, which is unpredictable and inconsistent.

Finally, many teachers’ own knowledge of English and mathematics is very limited. ESSPIN training includes lesson plans designed to boost teachers’ subject knowledge as well as helping them to plan and conduct lessons. Teacher subject knowledge has not been tested over time consistently enough to be able to assess if this is working, or if it has been sufficient to overcome the limits of teachers’ own education.

ESSPIN and its state partners now face a particularly challenging situation. The programme covers a wide range of school types, but until 2013 they were disproportionately urban and in Kwara and Lagos. Impacts to date have been uneven across the six states, reflecting the existing capacity and constraints in each state’s education system as well as different delivery models. The programme will need to address increasingly difficult and entrenched problems such as low levels of teacher literacy in English, poorly functioning remote rural schools, and areas affected by conflict, at the same time as operating on a much larger scale than before and in a context of widening access. Nevertheless, if it can maintain at least some of its effectiveness while reaching a much larger number of schools, the composite survey results suggest it could have an important impact on children’s learning across the states where it works.
About the author and contributors

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About the project

ESSPIN is a partnership between the United Kingdom Department for International Development (DFID) and the Nigerian Government. ESSPIN is managed by a consortium of partners led by Cambridge Education, a member of the Mott MacDonald Group. The eight and a half-year programme (2008-2017) supports federal and state governments – Enugu, Jigawa, Kaduna, Kano, Kwara and Lagos – to develop effective planning, financing and delivery systems that will improve the quality of schools, teaching and learning. For more information see www.esspin.org

Oxford Policy Management (OPM) is responsible for the quantitative evaluation of ESSPIN. This note is based on a series of technical reports which analyse findings from two rounds of a school survey carried out by ESSPIN and OPM Abuja with support from the State Universal Basic Education Boards (SUBEBs). For more information see http://opm.global/1KrcKDR

Photography: Bob Wilkinson, with thanks to the teachers and pupils in Kwara state for their willing participation in the lesson plan photography.
The number of children in good-quality schools rose from under 200,000 in 2012 to over 650,000 in 2014. 90% of this increase was in ESSPIN-supported schools.