Evaluation of UNICEF Girls’ Education Project Phase 3 (GEP3)

Draft Baseline Synthesis Report prepared by EDOREN on behalf of UNICEF GEP3

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Executive summary

This report presents the findings of quantitative and qualitative baseline data collection undertaken by Education Data, Research and Evaluation in Nigeria (EDOREN) as part of a multi-year evaluation of the Girls Education Project Phase 3 (GEP3). It complements the full technical report of the baseline evaluation, which describes the methodology for the evaluation and the full set of quantitative and qualitative findings in detail.

GEP3 is an eight-year project (2012–20) that seeks to improve school access, retention and learning outcomes for girls in five northern Nigerian states. It is managed by the UN Children’s Fund (UNICEF) and funded by the UK Department for International Development (DFID). Between 2014 and 2017 the project is piloting a series of interventions in primary schools and Integrated Qur’anic schools (IQS). Those most effective in improving education outcomes for girls will be scaled up. A key focus of the evaluation is to inform decisions related to the scale-up of GEP3’s interventions.

The scope of the evaluation involves:

1. a high-level explication and examination of GEP3’s theory of change (ToC);
2. an impact evaluation of GEP3’s early learning intervention; and
3. a performance evaluation of GEP3’s support to IQSs.

The baseline evaluation has three core goals: first, to capture the education situation, and perceptions of this situation, at the start of the re-designed GEP3, so that changes can be measured during follow-up data collection rounds, and project attribution or contribution can be assessed; second, to answer evaluation questions about the relevance of the project; and third, to provide evidence to inform GEP3’s ToC and project implementation.

Examination of GEP3’s ToC

Methodology

The baseline assessment of GEP3’s ToC focuses on two evaluation questions:

- How plausible is GEP3’s ToC in the context of the GEP3 states?
- How appropriate are GEP3’s interventions in terms of the implementation strategy?

The plausibility of the ToC is examined by reviewing stakeholders’ understanding of intended outcomes, interrogating the logic of the outcome chain, and identifying factors that have a key bearing on the achievement of the stated outcomes. GEP3’s implementation strategy is assessed on three dimensions: stakeholder involvement, implementation capacity and the extent to which the project focuses on underserved groups. This assessment is based on key informant interviews (KIs) conducted largely with GEP3 state-level stakeholders in August 2015. KIs were purposively selected, with the support of the GEP3 state teams, based on their knowledge of the project.

Key findings

The plausibility of GEP3’s ToC is supported by its coherent logic, synergies across interventions, and stakeholders’ common understanding of its main objectives – although there are caveats here. Synergies between the project’s interventions could enhance its impact, but also present risks, in that implementation difficulties on one dimension of the project could undermine its performance on other fronts. A second key caveat is that while stakeholders understand GEP3’s main objectives, the project’s operational design is not always understood. For instance, at the time of the interviews government
stakeholders involved in teacher training did not yet understand what capacities need to be developed, in what ways, and when. This could make it difficult for them to assess GEP3’s performance or be held to account for the results achieved.

**Stakeholders noted that the project’s objective of increasing girls’ enrolment is feasible, particularly in primary education, but that improvements in retention and learning outcomes will be harder to achieve.** Stakeholders were of the view that enrolment drives and cash transfers are both effective strategies that address important barriers to girls’ access to education, and that they complement one another. Retention is held to be more challenging as it is shaped by supply-side factors, such as the presence of sufficient teachers, the quality of teaching, and the quality of the school environment. Stakeholders were less likely to recognise learning as a key expected project outcome. When they did, they noted that learning outcomes are more difficult to improve than access, owing to the low quality of teaching, particularly in rural areas, and insufficient investment in the supply of quality education. There was wide consensus amongst KIs that tackling the quality of teaching and teachers is central to improving learning outcomes. This is consistent with the focus on this variable in GEP3’s ToC.

**A wide range of stakeholders endorsed the importance of the early learning intervention.** Stakeholders support the emphasis on literacy during early grades as a foundational skill. However, there is no consensus among stakeholders about the extent to which the use of a mother tongue is a necessary condition to improve learning outcomes. The baseline findings of the early learning evaluation confirm that Hausa is the language of the immediate environment in Katsina and Zamfara, but they also highlight that Hausa knowledge among teachers is low. This needs to be taken into account in the design of the early learning intervention.

**GEP3’s interventions to support school governance are considered to be largely promising, although there are some risks related to the targeted empowerment of School-Based Management Committees (SBMCs).** SBMC empowerment is both a pivotal intermediary outcome in GEP3’s ToC, as well as one of its most precarious links. The expectations placed on SBMCs in terms of roles and responsibilities are very high even though these organisations are often starting from a very low base, particularly in IQSs. At the state level, High-Level Women Advocate (HiLWA) members engage with decision-makers and school communities and have the potential for indirect influence. The Girls Education Steering Committee (GESC) also has the potential to support governance, to the extent that it is active, sufficiently locally owned and addresses key challenges. GEP3’s support to the education management information system (EMIS) and Annual School Census (ASC) will plausibly improve data reliability, although this will not necessarily lead to data being used in the policy-making process.

**The findings point to some specific risks to the scale-up process.** The scale-up process is reliant on government funding. However, there is significant uncertainty about the extent to which this funding will be forthcoming. This is despite certain supportive measures being introduced as part of the recent design of GEP3, notably an increased emphasis on high-level advocacy and a focus on a more manageable set of outcomes. The scale-up of GEP3’s support to IQSs is particularly uncertain because the institutional mandate over IQSs is unclear, the number of well-established IQSs available for scale-up is limited, and there are supply-side constraints, particularly with regards to facilitators. One further constraint is that stakeholders do not have a clear understanding of how scale-up is expected to take place.

**Overall, the baseline findings point to a number of risks to the causal links in the ToC.** Critical assumptions related to the management and resourcing of the education system are highly uncertain, in particular the release of government funding, school investment and human resource capacity remaining on a par with increased enrolment, effective monitoring at the school and intervention levels, and SBMCs’ ability to play the wide-ranging role that is being sought as part of the project.

**Baseline findings on implementation capacity are mixed.** The project makes an appreciable effort to involve a variety of stakeholders. However, their involvement in operational planning is uneven across
interventions. Government capacity building is embedded in project design, but an effective system is needed to identify and address the most important capacity development needs. Monitoring capacity is rightly emphasised in GEP3’s re-design but its operationalisation has yet to advance. With regards to equity, several GEP3 interventions are designed to be equity enhancing, but it is unclear whether the most vulnerable households and groups are able to benefit from and actively participate in GEP3 interventions. Notably, GEP3 is no longer operating in Local Government Areas (LGAs) with the highest gender gap in all states.

Impact evaluation of GEP3’s early learning intervention

GEP3’s early learning intervention aims to improve the early learning skills of children in primary Grades 1 to 3 (Primary 1 (P1)– Primary 3 (P3)) in the mother tongue, while also preparing children to learn with English as a language of instruction by the time they transition to Grade 4. A key measure of the intervention’s success will be improved literacy skills. The intervention will be implemented over a three-year period (2016–2018) in six LGAs in Zamfara and Katsina (three per state). The intervention has three key components at school and community level: the provision of a package of Hausa-medium teaching and learning materials to schools; early grade professional development for teachers and head teachers (including monthly school visits); and a set of community awareness and engagement activities to support early grade literacy.

Methodology

The evaluation of the early learning intervention uses a theory-based approach and is designed as a clustered randomised controlled trial (RCT), stratified by LGA and type of school (primary school vs. IQS), and randomised at the school level. The intervention’s ToC was used as a framework to formulate the evaluation questions. The RCT design allows the evaluation team to measure the attributable impact of the early learning intervention on learning outcomes by comparing outcome changes in a treatment group of schools with those in a control group that is statistically similar on average. The RCT design is combined with the overarching theory-based evaluation approach to measure not only changes in final outcome variables but also net changes in intermediary outcome variables along the assumed causal chain. This will allow the evaluation team to unpack how change takes place.

In order to measure changes in outcomes a panel survey was designed for data collection at baseline, midline and endline. Data will be collected at each of these three stages in a sample of 120 public primary schools and 120 IQSs drawn from the six intervention LGAs across Katsina and Zamfara. Half of the public primary schools and IQSs form part of the treatment group, while the other half serves as the control group. Baseline data collection was conducted in October–November 2015 during the first term of the 2015–2016 school year before the start of implementation of the early learning intervention. Within the sample schools, male and female pupils and teachers were randomly sampled to form part of a panel survey. Seven data collection instruments were administered within each school: pupil English and Hausa literacy assessments, pupil and teacher questionnaires, a teacher knowledge and skills assessment, a teacher classroom observation and a head teacher questionnaire. The literacy assessments were carefully designed and piloted to ensure that item difficulty matched pupils’ ability.

Analysis of the baseline data indicated that randomisation had worked to create comparable treatment and control groups. We assessed whether the randomisation had achieved its intended purpose by checking whether key outcome variables and school-, teacher- and pupil-level characteristics differed between the treatment and control groups at baseline. The great majority of variables investigated did not show any statistically significant difference between the two groups.
Key findings

The baseline findings highlight that the early learning intervention will be implemented in a challenging context. The vast majority of schools are located in rural areas and have poor infrastructure. While a larger share of IQSs than public primary schools have access to drinking water and electricity, they have less rooms on average and have less access to books and functional toilets for girls. Teachers in IQSs are predominantly male. The baseline also found that 40% of IQSs only have one teacher who teaches the integrated curriculum subjects, which raises questions about the applicability of the school-level peer mentoring approach in these IQSs.

Head teachers make some effort to address teacher attendance, but are less likely to take action to improve the quality of instruction. Almost 90% of head teachers in public primary schools reported taking action on teacher attendance. The corresponding figure for IQSs was just over 50%. Over half of the head teachers interviewed had not observed a single lesson during the previous school term. Similarly, half of head teachers do not have meetings with teachers or meet them less than once a month.

A notable share of early grade teachers do not teach languages. Roughly half of teachers reported that they teach only one subject, of which just over 40% teach a subject other than Hausa or English. Given that the Reading and Numeracy Activity (RANA) will emphasise early grade reading, this pool of teachers may not be suitable candidates for the intervention. This needs to be taken into account when selecting teachers for training.

The teachers surveyed demonstrated very limited knowledge and skills in respect of most of the domains covered by the teacher assessments. Less than 3% of teachers were able to display competence in identifying low performers, evidencing judgements and diagnosing pupil performance, interpreting words and phrases, and writing skills. Although all teachers reported that they speak Hausa, less than 40% were able to display competence in primary Grade 1 and 2-level Hausa. This is significant for an intervention that focuses on teaching in Hausa as teachers’ subject knowledge has important implications for the quality of teaching. Teachers’ very poor skills in identifying low performers and diagnosing pupils’ performance are likely to present key hurdles to improving teaching quality given the wide recognition in the education literature that children learn best when teaching is targeted to what the child is ready to learn. There are some minor variations in performance across different groups of teachers, but knowledge and skills levels are consistently low within all groups.

These findings regarding teachers’ knowledge and skills have a few key implications for the early learning intervention. The very low levels of knowledge and skills amongst teachers at baseline indicates that there is substantial scope for improvement in this area. However, it also presents challenges, in that there is often a lack of basic foundational skills that the project can build on. The findings should serve as a useful input to the RANA implementation team as they highlight some of the key areas of weakness that the intervention would need to address. They also provide an indication of the scale of the challenges confronting the project, which will have implications for implementation decisions – for instance related to the frequency and content of training, and the focus of the school visits.

Classroom observations indicate that the quality of early grade instruction is low across all groups of teachers. The extent of pupil-centred learning observed at baseline was low, as was the extent to which teachers link the lesson to previous learning and learning objectives. In contrast, time on task was high, at an average of 96% of a total lesson. However, this finding should be interpreted with caution as it is likely that the presence of observers in the classroom led to an increase in time on task. The baseline also sought to measure gender-sensitive teaching practices using classroom observation data, but extreme compliance effects were observed across all items, raising questions about the validity and reliability of the measure. Teachers’ responses to the assessments indicate that teachers are aware of objectives to target girls in class, as they state that it is important to focus on girls, but their responses also point to the persistence of deeply ingrained gender biases.
The availability and use of teaching and learning materials was observed to be very low. This suggests that the distribution of learning materials by the RANA intervention could fill an important gap. However, it will be vital for materials to be pitched at an appropriate level, taking into account the very low levels of knowledge amongst both teachers and pupils.

Hausa-based teaching is prevalent in the early grades. Hausa was used in all classes observed at baseline. In roughly half of classes, a second language was used in addition to Hausa. However, as noted above, many teachers lack competence in basic Hausa.

The baseline sought to assess teacher motivation and attendance as these variables are likely to influence the extent to which improved knowledge and skills amongst teachers translate into better teaching. Teacher motivation was relatively high on three dimensions: the effort put into, and perceived importance, of teachers’ work; their enjoyment of teaching; and interaction between teachers. Scores related to pressure and work-related tension and teachers’ perceived self-efficacy were low. There was limited variation across teachers. Absenteeism was higher in IQSs than in public primary schools, with facilitators reporting that they were absent for an average of eight days over the previous 60 days. The corresponding figure for public schools was three days.

The baseline findings indicate that in both English and Hausa, very few pupils have levels of knowledge that are appropriate for their grade. In both subjects, the vast majority of P2 pupils assessed have knowledge and skills expected of pre-school children (pre-literacy skills). Furthermore, in both cases, the peak of the distribution of performance falls well below the cut-off point between pre-literacy and emerging literacy. This suggests that substantial effort would be needed to achieve a significant increase in the share of pupils moving from pre-literacy to emerging literacy.

Pupils’ knowledge of phonics is particularly low. The psychometric analysis found that items that require knowledge of phonics rank as the most difficult items in both the Hausa and English assessments. Correctly sounding out letters and identifying similar sounds was more difficult for pupils than writing or reading full passages.

Learning outcomes differ by age and gender. Older pupils in P2 perform better than younger ones and boys perform better than girls. Gender differences in performance are small in the younger years, but increase once girls reach puberty (around 12 years of age).

Regression analysis indicates that pupil characteristics, socio-economic background and school type are associated with learning outcomes, but teacher characteristics are not. The latter finding may reflect the fact that competency levels are very low across all teachers. It is likely that a stronger correlation would be detected if there were greater variation in competency levels across teachers, and if their ability to influence pupils’ learning outcomes was higher. This also implies that if the early learning intervention leads to substantial improvements in teachers’ knowledge and skills we should see a more significant link between teacher characteristics and learning outcomes at endline.

Evaluation of GEP3’s support to IQSs

GEP3’s support to IQSs (IQSS) seeks to improve education outcomes at these schools, with the aim of providing an acceptable alternative form of quality basic education for girls. The intervention seeks to raise learning outcomes in basic literacy and numeracy for pupils at IQSs (especially girls), improve retention among girls, and (to a lesser extent) increase girls’ enrolment. The project targets registered Islamiyya, Qur’anic Tsangoya Education (IQTE) centres that offer an integrated curriculum and in which at least 40% of pupils are girls. These IQSs largely operate as community-based initiatives, but are willing to build links with government for the purposes of monitoring and technical support. GEP3’s IQSS involves the provision of training and mentoring of IQS facilitators, training for head teachers, the distribution of classroom
teaching and learning materials, capacity building for Centre-Based Management Committees (CBMCs) and the provision of mini-grants.

Methodology

The evaluation approach draws on the principles of contribution analysis and relies on a strong mix of quantitative and qualitative methods. It does not make use of a comparison group to make causal inferences but rather seeks to make credible causal claims about the intervention’s contribution to education outcomes by verifying the chain of expected results and assumptions as per a credible ToC, as well as assessing alternative explanations for the outcomes observed. The evaluation will assess three contribution claims:

- GEP3’s IQS contributes to more effective teaching of formal subjects in IQSs;
- GEP3’s IQS contributes to an improved, girl-friendly environment within the schools; and
- More effective teaching of formal subjects and an improved, girl-friendly environment contribute to improved learning levels, particularly among girls.

The quantitative component of the evaluation consists of representative sample surveys among GEP3 IQSs in the 12 GEP3 LGAs in Bauchi and Niger. The baseline survey took place in a sample of 60 IQSs, stratified by LGA. It involved the administration of the same seven instruments used for the early learning intervention evaluation, as well as a pupil numeracy assessment and CBMC questionnaire. The baseline qualitative research took place in six IQSs that were purposively sampled using typical and extreme case sampling and that were also included in the quantitative survey. The same set of IQSs will be visited at midline and endline.

Key findings

Contribution Claim 1: GEP3’s IQSS contributes to more effective teaching of formal subjects in IQSs

The landscape of IQSs is complex. Variations in school structures, pupil–teacher ratios, facilitators’ qualifications, school leadership and management, and the number and hours for which integrated subjects are taught per school suggest that the outcomes of intervening in these schools are likely to differ from one another. Some IQSs may be mobile, which would have implications for continued teaching and learning, particularly for girls who are unlikely to move with the Mallam. The extent of integration varies across IQSs, and is lower on average in Bauchi than in Niger. Across the two states, head teachers reported that an average of three hours per week is spent on teaching the integrated curriculum, which is well below the eight hours recommended by official guidelines. A quarter of IQSs only have one facilitator, which will constrain a mentoring process based on school-based peer interaction. One crucial supportive factor is that integration does appear to have gained acceptance among parents and the community.

Facilitators’ knowledge and skills in key domains associated with effective teaching are very low. Only 2% of facilitators were able to display competence in identifying low performers. Less than 1% had competence in writing skills and none of the facilitators assessed were competent in evidencing judgements and diagnosing pupil performance. Only 34% of facilitators were able to display competence in Grade 1 and 2-level Hausa. Most facilitators display a lack of understanding of what steps they can take to improve pupils’ performance. As with the early learning intervention, these findings indicate that there is tremendous scope for improvement in teachers’ performance, but also that it will be crucial for the intervention to be carefully targeted to the very low levels of skills and knowledge amongst facilitators.

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1 The term Mallam can have different interpretations. We consider the Mallam to be the head of the religious school, responsible for religious education.
Facilitators scored very poorly on a composite index of effective classroom practices. In particular, the depth of pupil-centred learning was found to be low and there was little effort among facilitators to link the lesson to previous learning and learning objectives. Time on task was generally high: in 65% of lessons observed pupils spent 100% of the lesson on task. However, this may have been influenced by the presence of observers.

There is mixed evidence on facilitators’ attitudes and classroom practices towards girls. The facilitators in the six case study schools expressed positive attitudes towards girls’ education, although these responses are prone to social desirability bias. Indeed, both qualitative and quantitative data point to the persistence of gender biases – for instance related to girls’ abilities. The findings indicate that facilitators are aware of and sometimes practice gender-sensitive techniques, such as actively engaging both girls and boys. However, these practices seem to be performed in a tokenistic way—in line with development projects’ sensitisation efforts—and gender-biased classroom practices continue to take place in IQSs.

As with the early learning intervention, the baseline evaluation sought to assess facilitators’ motivation and attendance. On average, facilitators think that their role is important and they enjoy working as teachers, but they have poor perceptions of their teaching efficacy. The qualitative research found that facilitators feel intrinsically motivated by what they do, and that school stakeholders, including pupils, think that facilitators as generally dedicated. However, it also indicates that the fact that most facilitators are not paid makes it difficult to attract qualified facilitators and hold them accountable. The quantitative findings confirm that a very small share of facilitators are paid a salary or a stipend (3% in Bauchi, 33% in Niger) and point to a positive link between receiving remuneration and teacher motivation. Roughly 75% of facilitators reported that they had been absent at least once in the previous three months. Furthermore, the case study findings indicate that few IQSs have set timetables, and formal subjects are taught as and when a facilitator is available.

The availability and use of teaching and learning materials is very limited. Almost no Hausa materials are available, although it is important to note that Hausa is not the mother tongue of all pupils. In Bauchi, 93% of sampled children reported speaking Hausa at home but the corresponding figure in Niger is just 54%, with 43% speaking Nupe.

School leadership in IQSs is complex, which raises some challenging questions about who precisely should be targeted by the pedagogical leadership component of the IQS intervention. IQSs have a variety of different leadership roles (Mallam, head teachers, proprietor). These may be held by one person or different people and the way in which responsibilities are split across these individuals varies across IQSs. The professional and academic qualifications of head teachers in IQSs are generally low, and, on average, below those of facilitators. This raises questions about head teachers’ technical capacity to exercise pedagogical leadership over facilitators. The appointment of a head teacher is not necessarily based on ability and qualifications but has to do with social status within the community and perceptions around leadership more generally.

Contribution Claim 2: GEP3’s IQSS contributes to an improved, girl-friendly school environment in IQSs

CBMCs have some potential to bring about improvements in the learning environment in IQSs. The management of IQSs is seen as collective, without clearly defined and delegated roles, which provides opportunities for community-based management structures like CBMCs. The baseline findings also indicate that most CBMCs are established and active, as indicated by regular meetings and monitoring activities. CBMCs have considerable community representation, although women are under-represented and very few members are children. This indicates that at present CBMCs are unlikely to provide a forum in which girls’ voices and needs can be heard. In all IQSs included in the qualitative study the Mallam holds a key position in the CBMC, such as chairperson. This raises questions about the extent to which CBMCs can play an effective role in holding school leaders to account.
CBMCs do make an effort to raise resources from the community, but this appears to offer limited scope in regard to bridging resource gaps in IQSs. The qualitative research indicates that CBMCs feel that a lack of funds hinders their ability to ‘solve’ problems at IQSs. They also note that while parents are willing to contribute resources, they often have limited capacity to do so. These findings highlight the case for CBMC training to go beyond a narrow focus on community resource mobilisation to encompass the mobilisation of resources from alternative sources.

CBMC members seem to largely understand their roles and responsibilities but often lack the capacity to enact them. Key areas in which CBMCs are under-performing are school planning and financial management. CBMC members do make an effort to monitor the quality of the teaching and learning, in particular pupils’ and facilitators’ attendance. CBMC members assert that the main constraint that undermines their performance is a lack of funds, particularly to improve infrastructure and pay facilitators.

Most IQSs do not offer a girl-friendly school environment at present. The vast majority face major deficiencies in physical infrastructure. Only 3% of the schools have access to a water source, 20% of the IQSs do not have a physical classroom structure for the students, and less than 25% have functioning toilets for pupils, with only 8% having functioning toilets for girls. Only 3% of IQSs have a mothers’ group, teacher–student association or pupil group where students can discuss their concerns. Gender-biased classroom practices and attitudes prevail, which can affect girls’ learning opportunities and self-confidence. However, there appears to be an openness among school leaders to try and address these issues. Resources mobilised by CBMCs are invested in schools and girl-friendly investments are considered, but the amounts raised appear insufficient given the poor condition of the school environment.

The extent of government engagement with IQSs is limited. The majority of IQSs in the sample had not been visited by a government official during the previous term. Government officials say that they face challenges in reaching all the schools on a regular basis. Communities generally view support from the government negatively, considering government actors to be unreliable.

Contribution Claim 3: More effective teaching of formal subjects and an improved, girl-friendly school environment contribute to improved learning levels, particularly among girls

The baseline evaluation identifies some key findings that are relevant to this contribution claim. Girls and boys are both equally likely to attend IQSs. However, both face challenges in regard to attending and remaining fully engaged with the learning process because of out-of-school responsibilities, which are linked to household poverty. A large share of children who study in IQSs attend another school as well. There were significant cross-state differences, with 72% of pupils in Bauchi reporting attending other schools, as compared to only 13% pupils in Niger. In Bauchi, most of these children were attending a public primary school (94%), as compared to 55% in Niger. This indicates that interventions at local primary schools may constitute an alternative explanation for any improvements in learning outcomes at IQSs.

Pupils’ learning outcomes are very low. In both Hausa and English over 90% of Grade 2 pupils assessed displayed literacy levels associated with pre-school pupils. Furthermore, most of these pupils are a long way from the cut-off for emerging literacy skills (those associated with the P1 curriculum). Numeracy outcomes were better, with 69% of pupils displaying emerging numeracy skills, compared to 21% with pre-numeracy skills. However, only 11% of pupils had numeracy skills associated with the P2 curriculum. Boys and girls both perform poorly, although girls’ performance declines, compared to that of boys, at around puberty (roughly 12 years of age).

Continued barriers to girls’ access to, and retention in, schooling exist. Attitudes towards girls’ education are not always supportive, although this appears to be changing. Changing attitudes alone, however, may not be sufficient to bring about change in behaviour as poverty is often cited as a critical reason why parents do not send their child to any school, public primary or IQS. Both boys and girls often engage in some form of income-generating activity, which parents tend to view as a financial and practical necessity.
This adversely affects school attendance. Early marriage is also cited as a key reason for low enrolment and retention among girls.

**Recommendations**

The baseline findings point to certain key recommendations for GEP3. The baseline assessment of GEP3’s ToC highlights that continued political engagement is required to ensure that government funds are mobilised for project scale-up. The project should specify and communicate its operational objectives and strategies to government and other implementing partners, strengthen its monitoring of assumptions in the ToC, and ensure that monitoring information is used to facilitate learning and accountability. In particular, emphasis should be placed on monitoring GEP3’s support to SBMCs/CBMCs, given their pivotal role in the project’s ToC.

Baseline findings on the early learning intervention highlight that the RANA intervention will need to be carefully tailored to the very low levels of knowledge and skills amongst teachers to ensure that training content and materials are pitched at the right level, and that training is sufficiently intensive to fill the large gaps in teachers’ subject, pedagogical and curriculum knowledge. Teacher capacity development also needs to incorporate actions to change teachers’ awareness of their own potential for influencing learning outcomes, and their understanding of how best to support pupils’ learning. The peer mentoring approach needs to be adapted for the large number of IQSs that only have one teacher who is eligible for support under the intervention. RANA also needs to sufficiently strengthen the capacity of IQS government stakeholders to ensure that they effectively monitor and provide support supervision. Finally, the complexity of the IQS leadership model indicates that special attention needs to be given to ensuring that appropriate individuals at IQSs are targeted for the programme’s pedagogical leadership training.

The findings on the IQSS intervention highlight the need for the project to strengthen its monitoring of the intervention. The IQS context is diverse, flexible and evolving. In order to adapt the intervention to this context, quick learning and feedback based on monitoring data is needed. The selection of facilitators, head teachers and CBMC members for training requires close attention, verification and monitoring. Facilitator training and mentoring needs to be carefully adapted to the very low levels of facilitator competency and the IQS context. Similarly, learning and teaching materials need to be tailored to the very low levels of skills and knowledge amongst both facilitators and pupils, and to the language of the users (particularly in Niger, where Nupe is widely spoken). Training and mentoring on gender-sensitive class practices needs to go beyond a focus on gender-sensitive teaching practices to try and tackle entrenched gender biases, for instance related to girls’ ability to learn. Women and girls’ participation in shaping education and the school environment needs further investigation: at present, both are under-represented on CBMCs, which limits the scope for these bodies to act as forums for women and girls’ participation in the sector. Finally, the baseline findings highlight the need for GEP3 to promote the mobilisation of resources beyond the community and to advocate for facilitators to be adequately remunerated by the government.
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<th>Description</th>
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<tr>
<td>ASC</td>
<td>Annual School Census</td>
</tr>
<tr>
<td>CAPI</td>
<td>Computer-assisted personal interviewing</td>
</tr>
<tr>
<td>CBMC</td>
<td>Centre-Based Management Committee</td>
</tr>
<tr>
<td>DAC</td>
<td>Development Assistance Committee (OECD)</td>
</tr>
<tr>
<td>DEEPEN</td>
<td>Developing Effective Private Education in Nigeria</td>
</tr>
<tr>
<td>DFID</td>
<td>UK Department for International Development</td>
</tr>
<tr>
<td>EDOREN</td>
<td>Education Data, Research and Evaluation in Nigeria</td>
</tr>
<tr>
<td>EMIS</td>
<td>Education management information system</td>
</tr>
<tr>
<td>ESSPIN</td>
<td>Education Sector Support Programme in Nigeria</td>
</tr>
<tr>
<td>FTTSS</td>
<td>Female Teacher Trainee Scholarship Scheme</td>
</tr>
<tr>
<td>G4G</td>
<td>Girls for Girls</td>
</tr>
<tr>
<td>GEP3</td>
<td>Girls Education Project Phase 3</td>
</tr>
<tr>
<td>GESC</td>
<td>Girls Education Steering Committee</td>
</tr>
<tr>
<td>HiLWA</td>
<td>High-Level Women Advocates</td>
</tr>
<tr>
<td>HWI</td>
<td>Household Wealth Index</td>
</tr>
<tr>
<td>IQS</td>
<td>Integrated Qur’anic School</td>
</tr>
<tr>
<td>IQSS</td>
<td>IQS support</td>
</tr>
<tr>
<td>IQTE</td>
<td><em>Islamiyya, Qur’anic Tsangaya</em> Education</td>
</tr>
<tr>
<td>LGA</td>
<td>Local Government Area</td>
</tr>
<tr>
<td>MS</td>
<td>Mothers Association</td>
</tr>
<tr>
<td>NCE</td>
<td>National Certificate in Education</td>
</tr>
<tr>
<td>NGN</td>
<td>Nigerian Naira</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OPM</td>
<td>Oxford Policy Management</td>
</tr>
<tr>
<td>P1</td>
<td>Primary 1</td>
</tr>
<tr>
<td>RANA</td>
<td>Reading and Numeracy Activity</td>
</tr>
<tr>
<td>RCT</td>
<td>Randomised control trial</td>
</tr>
<tr>
<td>SAME</td>
<td>State Agency for Mass Education</td>
</tr>
<tr>
<td>SBMC</td>
<td>School-Based Management Committee</td>
</tr>
<tr>
<td>SCCE</td>
<td>Senior School Certificate Examination</td>
</tr>
<tr>
<td>SUBEB</td>
<td>State Universal Basic Education Board</td>
</tr>
<tr>
<td>ToC</td>
<td>Theory of change</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WCDP</td>
<td>Whole Centre Development Plan</td>
</tr>
</tbody>
</table>
1 Introduction

This report has been prepared by EDOREN. EDOREN is contracted by DFID Nigeria to evaluate GEP3, in line with the GEP3 evaluation framework (EDOREN, 2015). GEP3 is an eight-year project (2012–20) that seeks to ensure more girls complete basic education and acquire skills for life and livelihoods in five northern Nigerian states. It is managed by UNICEF and funded by DFID.

This report provides a synthesis of the findings of the baseline data collection as part of a multi-year evaluation of GEP3. It is accompanied by a comprehensive Baseline Technical Report, which includes a detailed presentation of the analysis, methodology and interventions being evaluated. The objective of the synthesis report is to provide a summary of the key baseline findings without entering into technical details.

The scope of EDOREN’s evaluation work consists of three pieces of analysis:

- a high-level explication and examination of GEP3’s ToC;
- an impact evaluation of GEP3’s early learning intervention; and
- a performance evaluation of GEP3’s IQSS.

The objectives of the baseline analysis are:

- to capture the education situation, and perceptions of this situation, at the start of the re-designed GEP3 project so that changes can be measured during follow-up data collection rounds and project attribution or contribution can be assessed;
- to answer specific evaluation questions about the relevance of the project; and
- to provide evidence to inform the GEP3 ToC and project implementation.

In line with the scope of EDOREN’s evaluation work, the report is structured as follows: Chapter 2 provides a summary of GEP3 and its evaluation framework. Chapter 3 presents the main findings of the baseline assessment of the GEP3 ToC. Chapter 4 starts with a brief presentation of GEP3’s early learning intervention and the impact evaluation methodology, followed by the main findings of the baseline data collection. Chapter 5 summarises the baseline findings of the evaluation of GEP3’s IQSS. Chapter 6 concludes.
2 Project and evaluation background

2.1 Objectives, scope and intervention strategy

GEP3 is an eight-year project (2012–20) that seeks to ensure more girls complete basic education and acquire skills for life and livelihoods in five northern Nigerian states: Katsina, Sokoto, Bauchi, Niger and Zamfara. It is managed by UNICEF in partnership with federal and state governments and funded by DFID. The project aims to improve access, retention and learning outcomes for girls, and to reduce the disparities between girls’ and boys’ education outcomes. Over the long term the project seeks to contribute to improved social and economic opportunities for girls in northern Nigeria.

In 2014 the project was re-designed and its ToC revised, resulting in a reduced number of interventions. GEP3 works on a pilot-to-scale-up approach. Over the period 2014–2017 interventions are being piloted in 210 public primary schools and 200 IQSs in each state. During this pilot period, interventions are mainly funded by GEP3. By the end of this period GEP3 aims to secure state governments’ buy-in to invest their own resources to scale up piloted interventions that have had demonstrable results.

GEP3 supports interventions in three output areas:

- Output 1: increased enrolment and retention of girls in basic education;
- Output 2: improved teaching and learning support for girls in basic education; and
- Output 3: improved governance to strengthen girls’ education.

In terms of finances, 40.7% of the GEP3 budget is allocated to output 2, 26.6% to output 3 and 12.9% to output 1.

Table 1 provides an overview of the GEP3 interventions that are being piloted in 2014–2017 in the different states. GEP3’s interventions are intended to be broadly delivered through government education structures at state and local government levels. Government bodies at these levels therefore constitute the programme’s primary stakeholders.

<table>
<thead>
<tr>
<th>Output</th>
<th>Intervention</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output 1</td>
<td>Unconditional cash transfer programme in public primary schools</td>
<td>Niger and Sokoto</td>
</tr>
<tr>
<td></td>
<td>Enrolment drives in catchment areas of public primary schools</td>
<td>All states</td>
</tr>
<tr>
<td></td>
<td>Girls for Girls (G4G) groups in public primary schools and IQSs</td>
<td>Bauchi, Katsina, Zamfara</td>
</tr>
<tr>
<td>Output 2</td>
<td>Teacher capacity development in public primary schools and IQSs</td>
<td>Public primary schools: Bauchi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IQSs: Bauchi, Niger, Sokoto</td>
</tr>
<tr>
<td></td>
<td>Head teacher training in public primary schools and IQSs</td>
<td>Public primary schools: all states</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IQSs: Bauchi, Niger, Sokoto</td>
</tr>
<tr>
<td></td>
<td>Early learning intervention in public primary schools and IQSs</td>
<td>Katsina and Zamfara</td>
</tr>
<tr>
<td>Output 3</td>
<td>Capacity building of SBMCs/CBMCs in primary schools and IQSs (including school grants)</td>
<td>Public primary schools: all states</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IQSs: Bauchi, Niger, Sokoto</td>
</tr>
<tr>
<td></td>
<td>Support to the ASC, the EMIS and IQS data collection</td>
<td>All states</td>
</tr>
<tr>
<td></td>
<td>Enhanced political engagement for girls’ education through GESC</td>
<td>All states</td>
</tr>
</tbody>
</table>

In Katsina and Zamfara, interventions will only take place in 40 IQSs in each state, based on an initial list of 200 pilot schools.
2.2 Objectives and scope of GEP3 evaluation

The main objective of the GEP3 evaluation is to assess whether and how well interventions contribute to GEP3’s objectives. In line with GEP3’s emphasis on learning outcomes, the evaluation will prioritise measuring changes in learning over changes in access to education. The evaluation focuses on interventions that absorb a high share of the budget, have a relatively weak evidence base, are innovative in nature and are of strategic interest to GEP3 management and DFID. These are the early learning intervention, GEP3’s IQSS and the cash transfer programme. The first two will be subject to EDOREN-led evaluation and data collection, with GEP3 research studies providing additional evidence. Evidence for the third intervention will be generated through research studies and monitoring conducted under GEP3.

2.3 Evaluation design and methods

During 2014–2015, EDOREN, in collaboration with UNICEF and DFID Nigeria, developed an evaluation framework in parallel with GEP3’s re-design. The evaluation framework defined the objectives, scope, questions, design and partner responsibilities of the evaluation. The evaluation focuses on the period 2014–2017 in order to inform decision-making around scale-up. The rest of this section outlines the main elements of the evaluation framework. Subsequent chapters contain more information on the design of the different evaluation components led by EDOREN.

2.3.1 Evaluation questions

Evaluation questions were selected considering the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee’s (DAC) criteria for evaluating development assistance. Table 2 provides an overview of the key evaluation questions.³ The first three questions will be addressed through EDOREN-led evaluation; the question related to the cash transfer programme will be addressed by UNICEF-commissioned independent research; and the efficiency question will be addressed through the DFID-managed annual review process. This report focuses on the EDOREN-led evaluation.

<table>
<thead>
<tr>
<th>DAC criteria</th>
<th>Evaluation question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>• Is GEP3’s ToC appropriate to achieve its planned objectives within the context of the GEP3 states?</td>
</tr>
<tr>
<td>Effectiveness/Impact</td>
<td>• To what extent has the early learning intervention improved learning outcomes in the early grades of school, especially for girls?</td>
</tr>
<tr>
<td></td>
<td>• How well has GEP3’s IQSS contributed to better learning outcomes, especially for girls, by improving teaching and school leadership and management?</td>
</tr>
<tr>
<td></td>
<td>• How has the cash transfer programme changed attitudes and behaviour in regard to girls’ education among recipient caregivers?</td>
</tr>
<tr>
<td>Efficiency</td>
<td>• How well have project organisational processes facilitated the delivery of expected outputs? How could such processes be improved?</td>
</tr>
</tbody>
</table>

³ The GEP3 Evaluation Framework document presents a comprehensive overview of all evaluation questions identified (EDOREN 2015).
2.3.2 Evaluation design and methods

The evaluation questions will be answered by applying various evaluation approaches using mixed-methods data collection. Approaches have been selected in line with the context, available resources and methodological constraints. The use of a theory-based approach is particularly appropriate for the evaluation of GEP3 as it helps unpick how GEP3 interventions are making a difference within their specific context. This is useful for making judgements about whether the outputs and outcomes observed during the pilot phase would be likely to occur during scale-up, which in turn would inform decisions related to scale-up. Furthermore, it allows credible judgements to be made regarding the causal relationship between GEP3 interventions and their outcomes, even when a valid counterfactual cannot be constructed.

EDOREN will implement three sets of evaluation methodologies and activities to answer the evaluation questions that are its responsibility:

- The first set of evaluation activities centre on a high-level explication and examination of GEP3’s ToC based on state-level KIs and document and data review.
- Second, EDOREN will conduct an impact evaluation of the early learning intervention based on a randomised counterfactual design using mainly quantitative school surveys.
- Third, GEP3’s IQSS will be evaluated using a mixed-methods approach based on the principles of contribution analysis.

The different designs are summarised in their respective chapters and discussed extensively in the Baseline Technical Report accompanying this synthesis report.

2.3.3 Inclusion and ethics

The evaluation adheres to DFID’s principles of ethics in research and evaluation (DFID, 2011) and follows UNICEF’s guidelines on conducting research with children (Graham et al., 2013). Steps taken to ensure ethics and inclusion include: ethics review of the evaluation design and data collection protocols; attention to age, mother tongue and disability during data collection with children; an avoidance of gender bias in measurement; an evaluation design that ensures disaggregation by gender with sufficient statistical power; analysis of learning that focuses on pupils at the low end of the learning distribution; and intensive field researcher training.

2.3.4 External validity of the findings

The findings of the quantitative baseline surveys are representative of the GEP3 schools in which the early learning and IQSS interventions are being implemented. The early learning intervention is being implemented in a subset of GEP3 LGAs that were purposively selected for the intervention. The qualitative component of the IQSS evaluation was not designed to produce results that are generalisable, but instead provides insights that complement the quantitative findings. The theory-based approach enables us to unpick how and under what conditions impact on learning occurs, which allows for more generalisable findings that go beyond the intervention groups.

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4 The evaluation design and data collection protocols were approved by OPM’s Ethical Review Committee. In addition, data collection protocols were submitted to the National Health Research Ethics Committee of Nigeria, which provided exemption.

5 A Rasch psychometric analysis of pupil test items was undertaken in order to identify whether test items would be interpreted differently by girls or boys. It was found that the items did not discriminate on the basis of gender.
3 Baseline ToC assessment

3.1 Methodology

This chapter presents the baseline assessment of GEP3’s ToC. It focuses on two evaluation questions related to the relevance of GEP3:

- How plausible is GEP3’s ToC in the context of the GEP3 states?
- How appropriate are GEP3 interventions in terms of implementation strategy?

The plausibility of the ToC is examined by: (i) reviewing stakeholders’ common understanding of its intended outcomes; (ii) interrogating the logic of its outcome chain; and (iii) making explicit those factors that are either necessary for, or a hindrance to, achieving the stated outcomes. The appropriateness of GEP3’s implementation strategy is assessed on the following dimensions: (i) stakeholder involvement in GEP3 implementation; (ii) implementation capacity; and (iii) the likelihood that the programme will reach the target population in an equitable manner.

This assessment is based on KIs, largely with GEP3 state-level stakeholders, conducted in August 2015. KIs were purposively selected, with support of GEP3 state teams, based on their knowledge of the project and specific interventions. KIs were government staff in management positions in the education ministries, departments and agencies that GEP3 partners with; representatives of government or non-government agencies involved in GEP3 implementation (including GEP3 state teams and UNICEF field office staff); and non-government informants that could provide further insights regarding specific interventions.

3.2 Plausibility of GEP3’s ToC

**Summary answers to evaluation questions**

<table>
<thead>
<tr>
<th>Question</th>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: How plausible is GEP3’s ToC in the context of the GEP3 states?</td>
<td>The plausibility of the re-designed GEP3 ToC is backed by its potentially synergetic, coherent logic and stakeholders’ common understanding of its main objectives and overarching strategy. Critical assumptions related to the management and resourcing of the education system are highly uncertain – in particular, the release of government funding, school investment and human resource capacity remaining on a par with increased enrolment, effective monitoring at school and intervention level, and SBMC’s ability to deliver on its multiple project responsibilities. SBMCs and Mothers Associations (MAs) have a pivotal role in the success of many interventions. SBMC/CBMC/MA functionality and capacity to undertake the multiple roles assigned as part of GEP3 interventions is a critical assumption of GEP3’s ToC and requires close monitoring. The plausibility of GEP3’s scale-up approach is dependent on uncertain government funding and varies by intervention. The scale-up of the IQSS is particularly uncertain because the institutional mandate over IQSSs is unclear, and due to the SAME’s limited and uncertain access to resources, the limited number of well-established IQSSs available for scale-up, and supply-side constraints (particularly with regards to facilitators).</td>
</tr>
</tbody>
</table>

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3.2.1 General assessment

Stakeholders generally have a common understanding of GEP3’s intended outcomes and overarching strategy, but lack an understanding of the project’s operational design. Stakeholders commonly recognise increased girls’ enrolment as the main intended outcome of GEP3. Whilst retention and learning are considered important, they are referred to less frequently, particularly among government KIs, which suggests GEP3 is foremost associated with improving girls’ access to school, represented by its target of getting 1 million additional girls into school. Stakeholders have relatively good knowledge of GEP3’s overall strategy and acknowledge that the re-design has improved the project’s focus. At the same time, the project’s operational design is not always understood. Attributes of intervention-specific outputs and outcomes—such as priority target groups, the specification and meaning of outputs/outcomes, and timelines—are often not clear to stakeholders. This could make it difficult for them to assess GEP3’s performance or be held accountable for the results achieved.

GEP3’s design is perceived to be coherent, with potential synergies between outputs and intervention. However, these synergies also constitute a risk of intervention problems spreading across the programme. GEP3 seeks to holistically improve education access, quality and governance in the five states in which it works. There are synergies across its interventions, which have the scope to reinforce one another’s outcomes. However, this also means that if a certain intervention is poorly implemented, this could undermine the impact of other GEP3 interventions. For instance, successful efforts to build the capacity of SBMCs would support the outcomes of interventions seeking to improve access, such as enrolment drives, which are implemented by SBMCs. Conversely, if efforts to build SBMCs’ capacity were unsuccessful, this would undermine the implementation and efficacy of enrolment drives.

Stakeholders emphasised that the timely release of funds by state governments is a central uncertain factor that could undermine the success of the project. Stakeholders acknowledge that the project re-design has mitigated the risk of state governments not providing their committed financial contributions. This has been achieved through an emphasis on high-level advocacy and a focus on a more manageable set of outcomes. The 2015 elections are also seen to have resulted in increased state support to education. Nonetheless, stakeholders indicate that the non-release of funds remains an important concern, with fund release dependent on the decisive influence of the governor.

Effective monitoring was highlighted by several KIs as key to the success of the project. This corresponds to both monitoring and oversight of school activities by the SBMC, head teacher or local/state government officers, as well as monitoring of GEP3 project implementation. Some KIs link this to a need for interventions to have a stronger results orientation, with people held to account for results. KIs acknowledge that monitoring systems are weak, although investments have been made in the past to strengthen monitoring and quality control. Therefore, GEP3 rightly emphasises monitoring in its ToC. Effective monitoring requires a common understanding of its objectives, roles and responsibilities, and approach, and sufficient resources for implementation.

Contextual factors are likely to influence project outcomes. Insecurity and conflict have had an impact on schooling in Bauchi, Zamfara and Katsina. While stakeholders indicated that GEP3 schools were not strongly affected at the time of the interviews, insecurity continues to pose risks to the project. Government policies and structures may also lead to variations in GEP3 outcomes across states. For example, some states have agencies targeting girls’ education. These agencies may introduce initiatives that could influence girls’ education outcomes. Similarly, other donor-funded projects operating in the GEP3 states could contribute

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6 In Sokoto, school quality assurance officers have been screened and trained with the support of the Northern Education Initiative project. In Zamfara, the SUBEB recently supplied quality assurance officers with new motorcycles and fuel allowances, according to one KI. In Bauchi, the SUBEB increased the number of its zonal offices from three to 10, so as to have more quality assurance units closer to the schools.
to some of the project’s outcomes. This will make it difficult to attribute improvements in education outcomes to GEP3.

3.2.2 Output 1: Increased enrolment and retention of girls in basic education

Achieving the project’s objective of increasing girls’ enrolment is plausible, particularly in primary education. Stakeholders were of the view that enrolment drives and cash transfers are both effective strategies that address important barriers to girls’ education, and that they complement one another. Enrolment drives are an intervention that is supported by stakeholders at different levels. These drives are able to penetrate the communities, with the active involvement of those communities. Similarly, the cash transfer interventions can count on a high level of interest in the targeted communities, according to the project implementation units, which have received strong capacity support to successfully implement the intervention. Funding deficiencies resulting in delayed cash transfers constitute a risk to achieving enrolment objectives. In areas where both enrolment drive and cash transfer interventions are implemented, girls’ enrolment is expected to increase. As the GEP3 re-design has shifted the project’s focus from basic education to primary education, favourable results are expected to be achieved in primary education.

Retention is uncertain due to supply-side challenges. Stakeholders were of the view that it will be more difficult to retain girls in school. Retention is shaped, among other things, by supply-side factors, such as the presence of sufficient teachers, the quality of teaching, and the quality of the school environment. A key assumption of the GEP3 ToC is that government can supply primary schools and teachers to meet increasing demand. In all states KIs perceived that increased enrolment is not sufficiently accommodated in terms of key resources such as teachers and classrooms, although some see this as a problem that is present mainly in urban areas.

SBMCs and MAs are considered central to the success of interventions to improve access. Stakeholders highlight the central role that SBMCs and MAs play not only in sensitising communities about the importance of girls’ schooling but also in facilitating intervention implementation and supply-side responses to increased enrolment. Their functionality and capacity to undertake these multiple roles is a critical assumption in GEP3’s ToC, and one that requires close monitoring. This is reflected in GEP3’s SBMC effectiveness monitoring system.

3.2.3 Output 2: Improved capacity of teachers to deliver effective learning for girls

The quality of teaching and teachers is considered central to improving learning outcomes. Stakeholders are less likely to recognise learning as a key expected project outcome, than enrolment and retention. When they do, they acknowledge that learning outcomes are more difficult to achieve than increasing access for girls due to the low quality of teaching, particularly in rural areas, and a lack of investment in the supply of quality education. There is a wide consensus among the KIs, in line with GEP3’s ToC, that tackling quality of teaching and teachers is central to improving learning outcomes. Factors such as teacher commitment and motivation, their deployment and transfers, initial skills and knowledge, the school environment, and monitoring and supervision are likely to play an important role in determining the final outcome of teacher capacity development interventions.

Stakeholders are not sufficiently aware of the more concrete attributes of the training approach and outcomes. Although the teacher capacity development component has been re-designed, at the time of the interviews government stakeholders involved in teacher training did not yet understand what capacities need to be developed, in what ways, and when. While a well targeted teacher capacity development approach is postulated as an assumption in the ToC, what this targeting concretely entails remains unclear. The plausibility of the ToC would be increased if such attributes were more commonly understood, so they can be monitored and accounted for.
The wide variation in the background of IQS facilitators warrants specific attention and adaptation. There appears to be large variation in the background of the IQS facilitators, and among the IQSs in which they are teaching, in terms of facilitators’ teaching experience, teaching hours, the availability of learning materials, teaching facilities, pupil characteristics and the type of IQS. Head teacher support will vary in terms of how this role is filled and by whom since a head teacher position is not necessarily a separate position from the proprietor or Mallam in the IQS context. Therefore, not only does the capacity building approach need to be adapted to the IQS context, but it also needs to take into account large variations across IQSs. Remuneration of IQS facilitators appears to be particularly problematic for IQS facilitators. The baseline findings of the IQSS evaluation confirm that a very small share of facilitators are paid, despite an allowance being policy in the states. While facilitators are not motivated solely by remuneration, the baseline findings find a positive association between receiving remuneration and teacher motivation, and indicate that school stakeholders state that it is difficult to hold non-paid facilitators to account.

A wide range of stakeholders underline the importance of the early learning intervention. Stakeholders support the emphasis on literacy during early grades as a foundational skill. There is no overall consensus among stakeholders about the extent to which the use of a mother tongue is a necessary condition to improve learning outcomes. The baseline findings of the early learning evaluation has confirmed that Hausa is the language of the immediate environment in Katsina and Zamfara, which validates the ToC assumption for this intervention. However, while all teachers surveyed reported speaking Hausa, Hausa literacy levels among teachers are low, which needs to be taken into account in the development of Hausa teaching and learning materials. Implementing early learning in IQSs will require careful design because of the difference in grade levels compared to public primary schools, the use of a mother tongue in this grade structure, and the variety of ways in which formal education is organised in the IQS.

### 3.2.4 Output 3: Improved governance to strengthen girls’ education

GEP3 provides support at the school level and the state level to improve governance to strengthen girls’ education.

At the school level, SBMC empowerment is both a pivotal intermediary outcome in GEP3’s ToC as well as one of its most precarious links. The expectations placed on SBMCs, in terms of roles and responsibilities, are very high even though the capacity building and empowerment process will be gradual, and often starts from a low base. The composition of the SBMCs, their acceptance in the school and community, their access to schools, and the institutionalisation of government support to SBMCs are key factors that will influence their capacity development. They face a more challenging situation in IQSs since their empowerment is based on a larger set of assumptions, such as SBMCs being established in the first place, their being accepted by the IQS proprietor and the acceptance of integration in the community. It is also assumed that IQSs are not mobile or that if they are, this does not affect their functionality.

Stakeholders support the significant role of SBMCs in the school-level governance of education but the scope of their governance role remains to be clarified. Stakeholders consider SBMCs a key instrument by which to promote community ownership of schools and address demand, supply and governance problems. They note that channelling financial support to schools through SBMCs (for instance through the provision of GEP3 grants) can make an important contribution to their empowerment. While SBMCs’ role in school-level governance is broadly supported, their role in regard to influencing wider education processes—such as holding state and local governments to account for service delivery—is considered promising by non-government KIs but remains unaddressed by government KIs. While GEP3 does not aim to support a governance role for SBMCs beyond the school level, this is likely to have its limitations because several aspects of schools’ performance (such as human resource management, provision of learning materials, school infrastructure) depend on state and local government action.

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7 Teachers in IQSs are referred to as facilitators.
At the state level, HiLWA members engage with decision-makers and school communities and have the potential for indirect influence. HiLWA members seem to be in a position to engage with decision-makers to promote women’s and girls’ participation in the education sector. They also have the scope to promote GEP3’s outcomes at the school level through their involvement in enrolment drives and engagement with SBMCs. HiLWA members’ influence comes from the credibility of their members. Their capacity to influence is mainly indirect and should not be overstated as most members do not hold positions of direct influence.

The GESC offers a multi-stakeholder platform to support governance around girl’s education to the extent that it is active, sufficiently locally owned and addresses key challenges. GEP3 seeks to improve governance through the GESC at the state and national levels. Stakeholders appreciate the multi-sector and multi-stakeholder character of the GESC. The GESC met infrequently during the first part of 2015 due to the project re-design and elections, although in several states it seems to have been reactivated. Its effectiveness can likely be strengthened by more government ownership. It would also be in a better position to contribute to GEP3’s outcomes if monitoring and political engagement around GEP3 funding were explicitly incorporated in its mandate and planned for.

GEP3’s support to EMIS and ASC will plausibly improve data reliability, although this may not necessarily translate into data being used in policy-making processes. The capacity needs in terms of generating reliable data are commonly understood and GEP3 support seems to be well targeted. Although stakeholders expect that reliable data will be used in policy-making processes, GEP3’s ToC does not consider the interface between data production and usage and leaves the translation of data production into use as an implicit assumption. It would be worth examining whether the demand side of EMIS needs strengthening in order achieve effective use in evidence-based planning, resource allocation and policy orientation to improve girls’ education. Incorporating IQS data in EMIS (beyond those IQSs that are well aligned with the formal education system) does not seem plausible at this moment, not least because of a lack of reliable school identification data and the capacity constraints faced by SAMEs in regard to regularly and systematically capturing IQS data.

3.2.5 GEP3’s pilot-to-scale-up approach

The nature of scale-up is not commonly understood and its implementation is dependent on uncertain government funding. A key assumption underlying GEP3’s strategy is that state governments are willing and able to implement large-scale change for girls’ education. Government funding availability was cited as the main uncertain condition for GEP3 scale-up. Stakeholders also did not have a clear understanding of how scale-up would happen. Limited planning had taken place at the time of the interviews in 2015. State GEP3 teams and UNICEF staff interviewed recognise that planning for scale-up is important and needs to start well ahead of 2017.

The plausibility of scale-up varies across interventions. The scale-up of teacher and SBMC capacity building is relatively more plausible because the need for these interventions is well recognised and a supporting institutional framework is in place. However, scaling up the cash transfer scheme is less plausible because it is capital intensive, is not well institutionalised, and is seen as a donor priority. The scale-up of IQSS is particularly uncertain because of a lack of clarity about which institution is responsible for integration, the SAMEs’ limited and uncertain access to resources, the limited number of well-established IQSSs available for scale-up, and supply-side constraints – particularly with regards to facilitators.
3.3 Appropriateness of GEP3’s implementation strategy

### Summary answers to evaluation questions

| Q2: How appropriate are GEP3’s interventions in terms of implementation strategy? | The project is making an appreciated effort to involve a variety of stakeholders, although their involvement in operational planning remains uneven across interventions. Government capacity building is embedded in project design, but an effective system is needed to identify and address the most important capacity development needs. Monitoring capacity is rightly emphasised in GEP3’s re-design but its operationalisation has yet to advance. Several GEP3 interventions are designed to be specifically equity enhancing, but empirical verification is required as to whether the most vulnerable households and groups are able to benefit and actively participate in GEP3 interventions. GEP3 is no longer operating in LGAs with the highest gender gap in all states. |

#### 3.3.1 Stakeholder involvement

The project is making an appreciated effort to involve a variety of stakeholders, although their involvement in operational planning remains uneven across interventions. GEP3’s operational plan supports stakeholder ownership by emphasising implementation with and through state education partners. The operation of GEP3 from within state governments contributes to government involvement and coordination between the GEP3 state team and government staff. However, government involvement remains to some extent externally driven and government partners are not always aware of, or lack clarity about, operational planning. The operationalisation of structures and systems that facilitate government involvement, like the GESC, have been influenced by changes in staffing and the elections in 2015. Stakeholders consider the involvement of a broad range of stakeholders at different levels (community, local, state and national level) a strength of GEP3’s implementation strategy (in particular the participation of SBMCs and MAs).

#### 3.3.2 Government capacity

Government capacity building is embedded in the project design, but an effective system is needed to identify and address the most important capacity development needs. GEP3 provides direct support to government staff and mobilises specific technical expertise to increase government capacity. This is demonstrated more at the state than at the local level, and varies across interventions. Given the limited resources and the capacity constraints, particularly at the local level, identifying and addressing where capacity needs are highest, is essential. GEP3’s implementation is likely to be influenced by institutional capacity constraints, particularly the lack of clarity regarding the division of roles and responsibilities for the integration of formal education in Qur’anic schools across the SAMEs and State Universal Education Boards (SUBEBs).

Monitoring capacity is rightly emphasised in GEP3’s re-design but its operationalisation has yet to advance. Most stakeholders noted that monitoring and supportive supervision are essential for project success. However, they also highlighted that the government has inadequate organisational capacity to monitor interventions. Therefore, GEP3 has rightly emphasised strengthening monitoring capacity as part of the re-design. However, the results in this regard will depend on its operationalisation, which had not yet advanced at the time of the interviews. This was indicated, for instance, by the low quality information about GEP3-supported IQSs that was provided for the baseline sampling.
3.3.3 Equity

**GEP3 is no longer operating in LGAs with the highest gender gap in all states.** Equity in education is a central consideration for GEP3, as the project intends to reduce gender disparities in education. While the project targeted LGAs with the highest gender gap in education at the start, at the time of the GEP3 re-design the targeted LGAs were no longer always those with the highest gender gap. Based on 2014–2015 school census data, GEP3 is mostly operating in LGAs with a relatively high primary gender gap in primary education in Bauchi and Niger, while in Katsina, Zamfara and Sokoto GEP3 is implemented in LGAs with relatively low gender disparities in primary schools.

**Several GEP3 interventions are designed to be specifically equity enhancing.** The cash transfer programme targets schools with the highest proportion of out-of-school girls. The IQSS is meant to expand access to quality basic education for marginalised children in rural locations. However, the degree to which the most vulnerable groups are actually reached will be influenced by how equity considerations are operationalised on the ground. For example, empirical verification is required as to whether the most vulnerable households are able to receive the cash transfer as planned. Active participation in SBMCs/CBMCs may be limited to only specific community members, due to the constraints imposed by social norms and school accessibility.
4 Baseline of the early learning intervention evaluation

4.1 GEP3’s early learning intervention

GEP3’s early learning intervention aims to improve the early learning skills of children in primary Grades 1 to 3 (P1–P3) in the mother tongue, while also preparing children to learn with English as a language of instruction by the time they transition to Grade 4. A key measure of the intervention’s success will be improved literacy skills. To this end, UNICEF has contracted a third party to implement the RANA project.

RANA will be implemented over a three-year period (2016–2018) in six LGAs in Zamfara and Katsina (three LGAs per state). The intervention targets 120 public primary schools and 80 IQSs that form part of GEP3’s pilot school lists (60 public primary schools and 40 IQSs per state). The main activities that RANA will implement at the school and community level are presented in Box 1.

Box 1. RANA activities at school and community level

- Provision of a package of teaching and learning materials in Hausa
- Early grade teacher in-service professional development, including cluster-level training, weekly school-based peer mentoring, on-site monthly supervisory support and monitoring, and head teacher training
- Community awareness and engagement activities, including community sensitisation and the appointment of a literacy champion among the SBMC/CBMC to coordinate literacy activities

The materials and teacher professional development will be rolled out to grades P1 and P2 during the second and third term of the 2015/2016 academic year. P3 will be covered from the start of the 2016/2017 academic year. The intervention package will be similar for public primary schools and IQSs. The RANA pilot project is scheduled to end in August 2018.

Annex A presents the ToC of the early learning intervention. It describes and visualises the causal pathways of how the early learning intervention is assumed to improve pupils’ literacy in early grades, as well as discussing underlying assumptions. The main causal assumption underlying the ToC is that literacy learning outcomes, particularly in Hausa as the mother tongue, will improve in early grades if teaching practices improve through the use of improved teaching and learning materials and the presence of more knowledgeable and skilled teachers.

4.2 Baseline methodology

The evaluation of GEP3’s early learning intervention takes a theory-based approach. The intervention’s ToC was used as a framework to formulate the evaluation questions (listed in Annex B). These questions address the impact of the early learning intervention on a range of intermediary and final outcomes identified in the ToC. Besides the intervention’s ToC, the choice of questions has been based on the following considerations: an emphasis on measuring impact on learning; the inclusion of an equity perspective by seeking to understand the impact on the lowest performing pupils; a preference for quantifying attributable impact; and a focus on the linkage between teachers’ knowledge and skills, and teachers’ classroom practices, and learning.

The evaluation is designed as a clustered RCT, stratified by LGA and type of school (primary school vs. IQS), and randomised at the school level. The RCT design allows the evaluation team to measure the attributable impact of the early learning intervention on learning outcomes by comparing outcome changes in a treatment group of schools with those in a control group that is statistically similar on average. For each
type of school an equal sized sample of schools was randomly selected from among all GEP3 schools in each of the six GEP3 LGAs in which RANA is implemented. In each LGA, half of the sample was then randomly assigned to a treatment group and the other half to a control group. The RCT design is combined with the overarching theory-based evaluation approach, which measures net changes in intermediary and final outcomes along the assumed causal chain. This will allow the evaluation team to unpack how change takes place.

In order to measure changes in outcomes a panel survey was designed for data collection at baseline, midline and endline. Data will be collected at each of these three stages in a sample of 120 public primary schools and 120 IQSs drawn from the six RANA LGAs across Katsina and Zamfara. Half of the public primary schools and IQSs form part of the treatment group; this consists of schools that receive the early learning intervention. The other half serves as the control group, in which the early learning intervention will not be implemented. Baseline data collection was conducted by OPM Nigeria in October–November 2015, during the first term of the 2015–2016 school year before the start of implementation of the early learning intervention. The survey was successful in achieving the planned school sample size.

Within the sample schools, male and female pupils and teachers were randomly sampled to form part of a panel survey. The target populations were: pupils enrolled in P2 grade (or its equivalent in IQSs) and teachers teaching in P1–3 grades (or equivalent in IQSs). The final sample consisted of 2,653 pupils, of which 45% are girls, and 477 teachers (see Annex C). In addition, the head teacher in each school was surveyed. All data have been analysed using sampling weights, and therefore represent the entire targeted population.

Seven data collection instruments were administered within each sampled school: pupil English and Hausa literacy assessments, a short pupil questionnaire, a teacher questionnaire, a teacher knowledge and skills assessment, a teacher classroom observation and a head teacher questionnaire. Except for the teacher assessments, all data were collected electronically using computer-assisted personal interviewing (CAPI).

Literacy assessments were carefully designed and piloted to ensure item difficulty matched pupils’ ability. Rasch modelling (using item response theory) was used to test the items’ psychometric properties and to place pupils and items on the same metric. Literacy proficiency bands were drawn through a benchmarking workshop undertaken with stakeholders of several education projects in northern Nigeria. Teacher assessments were analysed using subscales for subject, curriculum and pedagogical knowledge.

### 4.3 Comparison of baseline characteristics between treatment and control schools

The evaluation design uses randomisation to ensure that no systematic differences exist between treatment and control schools. It thus addresses the issue of selection bias in impact measurement. We assessed whether the randomisation had achieved its intended purpose by checking whether key outcome variables and school, teacher and pupil-level characteristics differed between the treatment and control

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8 Midline data collection is scheduled for May–June 2017, which will be the fifth school term of RANA implementation. This is before the intervention is scheduled to finish. The timing of the midline has been chosen to allow for evaluation findings to inform GEP3 scale-up decision-making in 2017. The exact timing of the endline data collection has yet to be decided.

9 22% of the originally sampled IQSs had to be replaced at the start of the baseline due to the IQSs not being considered eligible for the survey (see Baseline Technical Report).

10 The same pupils and teachers surveyed at baseline will be resurveyed at midline.

11 An equal number of girls and boys were targeted for sampling within each school – that is, six girls and six boys.

12 The final pupil sample equals 92% of the targeted sample size (96% in public primary schools and 88% in IQSs), while the final teacher sample represents 80% of the targeted sample (83% in public primary schools and 74% in IQSs).

13 A benchmarking workshop with the Teacher Development Programme (TDP), GEP3, Developing Effective Private Education Nigeria (DEEPEN) and Education Sector Support Programme in Nigeria (ESSPIN) stakeholders took place in November 2015.
groups. The great majority of variables investigated did not show any statistically significant difference between the two groups. This indicates that the randomisation had worked to create comparable groups. For the small minority of variables that showed a difference, the magnitude and the degree of statistical significance are low and do not represent a concern. An overview of the main randomisation checks are included in Annex D.

### 4.4 Baseline findings

This subsection presents the main findings of the baseline of the early learning evaluation. The findings are structured according to the ToC. Throughout the text we will make reference to the evaluation questions in summary boxes. Since the evaluation questions are causal questions related to the early learning intervention, they can only be answered at midline/endline. Nonetheless, we synthesise evidence that provide a baseline assessment of the outcomes expected and assumptions underlying the causal chain.

#### 4.4.1 Teaching in the early grades

The early learning intervention aims to improve Hausa-based literacy teaching in early grades as an intermediary outcome that may increase pupil literacy levels. In this section we first discuss the teaching context and some characteristics of the teachers in early learning schools. Next, we present the baseline data on teacher knowledge and skills. We follow this with a discussion of teacher instruction, the use of teaching and learning materials, and the use of Hausa in the classroom. We end the section with findings on teacher motivation and attendance, which are considered to be important assumptions in the ToC.

<table>
<thead>
<tr>
<th>Summary of evidence related to evaluation questions</th>
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<tbody>
<tr>
<td>Q2. To what extent does teachers’ knowledge in literacy and language acquisition in early grades improve as a result of the intervention?</td>
</tr>
<tr>
<td>Teachers demonstrate very limited knowledge in the majority of the areas required to function effectively as a teacher. While all teachers report that they speak Hausa, less than 40% are proficient in primary Grade 1 and 2-level Hausa.</td>
</tr>
<tr>
<td>The teacher knowledge and skills test carried out at baseline shows that the great majority of teachers do not have sufficient curriculum, pedagogical or subject knowledge to function effectively as teachers. In particular, while all teachers report to speak Hausa, less than 40% of teachers were able to display competence in Grade 1 and 2-level Hausa. The baseline evaluation also found that the vast majority of teachers are not able to display competence in evidencing judgements and diagnosing pupils’ work or writing. These skills are essential for teachers to target their teaching to pupils’ learning levels, which in turn is widely recognised as an important component of effective teaching.</td>
</tr>
<tr>
<td>The very low levels of knowledge and skills amongst teachers at baseline indicates that there is substantial scope for improvement in this area. However, it also presents challenges, in that there is often a lack of basic foundational skills on which the project can build. The findings should serve as a useful input to the RANA implementation team with regards to ensuring that the intervention design is tailored to teachers’ existing knowledge and skills.</td>
</tr>
<tr>
<td>The baseline evaluation also found that many teachers in the early grade are subject-specific teachers. This highlights that training will need to be properly targeted so that teachers who teach Hausa literacy are trained.</td>
</tr>
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</table>

| Q3. To what extent do teacher skills in early grade, gender-sensitive instruction improve as a result of the intervention? |
| Teachers’ instructional skills are weak. |
| Teachers perform poorly on a composite index that was constructed to assess their skills in early grade teaching. In particular, the extent of pupil-centred learning is low and most teachers make limited efforts to link the lesson to |
previous learning or to learning objectives. In contrast, time on task was high in the classes observed, although this needs to be interpreted carefully as the presence of an observer may have led to an increase in time on task.

The early learning intervention relies partly on a peer mentoring approach to improve teacher skills. This rests on the assumption that schools have more than one teacher engaged in early grade literacy teaching. However, the baseline found that a considerable share of IQSs only have one facilitator teaching the integrated curriculum.

The ToC also assumes that improvements in teachers’ skills will be supported by head teachers’ pedagogical leadership. The baseline evaluation found that lesson observation and frequent supportive teacher meetings are practised by only half of head teachers in the sample. This underlines the scope for improvement on this front.

The baseline survey attempted to measure gender-sensitive teaching practices, but across all items extreme compliance effects were observed, significantly calling into question the validity and reliability of the measure. Therefore, gender-sensitive teaching could not be measured reliably through classroom observations. The teacher assessments do indicate that teachers are aware of objectives to target girls in class, as they state that it is important to focus on girls, but their responses also point to the persistence of deeply ingrained gender bias.

<table>
<thead>
<tr>
<th>Q4. To what extent and how do teachers adjust and change their classroom practices as a result of the intervention?</th>
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<tbody>
<tr>
<td><strong>Hausa instruction is common. However, pedagogical competence to enable pupils to learn is low. Teacher attendance and supportive monitoring—conditions that support classroom practice—require attention in IQSs.</strong></td>
</tr>
<tr>
<td>The vast majority of teachers tested at baseline were unable to demonstrate proficiency in knowing the learners in their setting, knowledge of how to provide the conditions that enable pupils to understand or proficiency in the selection of appropriate learning and teaching materials. Regarding Hausa instruction, Hausa was used in all classes observed. In half of the classes another language was used as well.</td>
</tr>
<tr>
<td>Teacher motivation and attendance may influence the translation of improved knowledge and skills into teaching practices. Overall, teachers consider their role to be important and enjoy working as teachers, whilst being conscious of the fact that they are limited in their ability to contribute to pupils’ learning. At baseline, 60% of teachers self-reported that they had been absent at least once in the previous three months. Absence rates are higher in IQSs than in public primary schools. Most head teachers in public primary schools report that they take action to improve teachers’ attendance, while just over half do in IQSs. The findings indicate that teacher attendance in IQSs merits attention. Lesson observations indicated that students were engaged during most of the class.</td>
</tr>
<tr>
<td>The large majority of schools (80%) report that they receive visits by government or other organisations, and the visits are regular. This is much less the case in IQSs. It will be important to pay particular attention to monitoring patterns in IQSs so as to ensure that visits by GEP3 trainers and other stakeholders occur as frequently as for public primary schools.</td>
</tr>
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<table>
<thead>
<tr>
<th>Q5. Are more reading and learning materials in Hausa used in the classroom due to the intervention? Do they contribute to more effective teaching and learning?</th>
</tr>
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<tbody>
<tr>
<td><strong>Access to and use of Hausa material is completely inadequate.</strong></td>
</tr>
<tr>
<td>The distribution of a package of teaching and learning materials as part of RANA is therefore highly relevant in terms of providing access to such materials. It will be important for the materials to be carefully adapted to the low Hausa literacy levels amongst teachers, and that peer/supervisory support is regularly available to facilitate their use.</td>
</tr>
</tbody>
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Teaching context and teacher characteristics

Schools are mostly rural and have poor infrastructure. The great majority of early learning schools are located in rural areas, with only 14% located in urban areas. The average school has slightly more than four teachers teaching in early grades. This number is substantially higher in urban areas (seven teachers in urban areas, versus on average a few less than four teachers in rural areas). In terms of infrastructure, almost all schools are reportedly in need of major repairs. Only a minority have access to a source of drinking water. With regards to school characteristics often associated with a girl-friendly environment, only 26% of schools have separate functional toilets for girls and 9% of teachers are female.

There are notable differences between IQSs and public primary schools, with implications for project implementation. IQSs are substantially smaller than public primary schools in terms of number of teachers. Importantly, 40% of IQSs only have a single teacher to teach the integrated curriculum subjects (the corresponding figure for public primary schools is 3%). This finding suggests that school-level peer mentoring is not applicable to a large proportion of IQSs. Since peer-to-peer mentoring is an important assumption underpinning the effectiveness of the trainings envisaged, it is recommended that the project identifies alternative ways of ensuring that trained teachers can provide peer support, possibly by engaging with teachers from different but nearby schools. While a larger share of IQSs have access to a source of drinking water and electricity, they have less rooms on average and fewer have access to books and playgrounds. They also have less access to separate functional toilets for girls, and almost all teachers are male.

Table 3: School characteristics in public primary schools and IQSs

<table>
<thead>
<tr>
<th></th>
<th>Public primary schools</th>
<th>IQSs</th>
<th>All schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>% schools located in rural area</td>
<td></td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Average number of rooms</td>
<td>9</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Average number of teachers in early grades*</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>% female teachers in school teacher roster</td>
<td>14%</td>
<td>4%</td>
<td>9%</td>
</tr>
<tr>
<td>% schools in need of major repairs</td>
<td>92%</td>
<td>97%</td>
<td>95%</td>
</tr>
<tr>
<td>% schools with source of drinking water</td>
<td>41%</td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td>% schools with a separate functional toilet for girls</td>
<td>46%</td>
<td>6%</td>
<td>26%</td>
</tr>
</tbody>
</table>

* This only includes teachers teaching non-religious subjects.
Source: GEP3 Baseline survey 2015

Head teachers make an effort to address teacher attendance but there is less attention to teacher instruction. There are differences between public primary schools and IQSs in this regard. Across all schools, 71% of head teachers report having taken action to improve teacher attendance during the previous term. This differs starkly between public primary schools and IQSs, as is shown in Figure 1. Error! Reference source not found.. This difference may be due to the different type of leadership structure in IQSs, where head teachers are not always the school private proprietor and may not be, or may not perceive themselves to be, responsible for teacher attendance. It will be important for the early learning intervention to ensure that the relevant chain of teaching responsibility within each school is clearly understood and its influence maximised when running the training. In both types of school, head teachers are less active in monitoring actual teaching (see Figure 1). Less than 50% of head teachers observed a lesson during the previous school term and around 50% never have meetings with teachers, or meet them less than once a month. This is a cause for concern. Head teacher pedagogical leadership should therefore...
improve as part of the early learning intervention to facilitate improvements in teaching. Teacher administration, in terms of keeping updated teacher attendance records, appears to be well organised in public primary schools, but is almost non-existent in IQSs. With regards to external monitoring by government or other organisations, almost all public primary schools reported receiving a visit over the previous school year. The corresponding figure for IQSs was only 58%. It will therefore be important to pay particular attention to monitoring patterns in IQSs, so as to ensure that visits by mentors and government staff occur as frequently as for public primary schools.

**Figure 1: School management actions in PS and IQS**

Teachers speak Hausa, they often teach one subject and they have varying degrees of qualifications and experience. All teachers surveyed report being able to speak Hausa. This partly validates the assumption that teachers will be able to use Hausa during instruction. However, as discussed below, this does not mean that they are literate in Hausa. Most teachers also report that they speak English, with differences between public primary school teachers and IQS facilitators. Other teacher characteristics are summarised in Table 4. It is worth noting that around half of the teachers say they teach only one subject, of which 25% teach only mathematics and another 18% teach only non-language subjects. Given that RANA will emphasise the instruction of early grade reading, the relevance of the training for this proportion of teachers who teach mathematics or other, non-language subjects is worthy of attention when selecting teachers for training. Public primary school teachers and IQS facilitators also differ in terms of professional and academic qualifications and years of teaching experience. The teacher training will need to be adapted to this kind of variation in teacher background.
Table 4: Summary of teacher characteristics

<table>
<thead>
<tr>
<th>For surveyed teachers the average...</th>
<th>Of teachers...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ...age is 36 years.</td>
<td>• ...all (100%) speak Hausa; 85% speak English (91% in public primary schools, 73% in IQSs).</td>
</tr>
<tr>
<td>• ...teaching experience is 10 years (11 years in public primary school, eight years in IQS); 89% of teachers have at least two years of teaching experience and 71% have had that experience in the current school (79% in public primary schools – 52% in IQSs).</td>
<td>• ...only 15% are female (21% in public primary schools, 3% in IQSs).*</td>
</tr>
<tr>
<td>• ...teachers are likely to teach one (non-religious) subject; this being mostly maths, Hausa or English.</td>
<td>• ...the majority (54%) hold an National Certificate in Education (NCE) qualification (70% in public primary schools, 22% in IQSs) and 72% have passed the Senior School Certificate Examination (SCCE) (74% in public primary schools, 67% in IQSs).</td>
</tr>
<tr>
<td>• ...40% attended training during the last two years (41% in public primary schools, 46% in IQSs).</td>
<td></td>
</tr>
</tbody>
</table>

* The percentage of female teachers slightly differs from the data presented in Table 3 because the data sources are different. Data in Table 3 are based on the teacher school roster, while data in this table are based on the teacher survey.

Source: GEP3 Baseline survey 2015

Teachers’ knowledge and skills

The GEP3 early learning intervention seeks to improve teachers’ knowledge in literacy and language acquisition in early grades. Teachers draw on three types of knowledge within classroom practice: subject knowledge, pedagogical knowledge and curriculum knowledge.¹⁴

The teachers surveyed demonstrated very limited knowledge and skills in the majority of the areas required to function effectively as a teacher. Rudimentary levels of skills were observed among a small share of the assessed teachers in identifying low performers, evidencing judgements and diagnosing pupils’ performance, teacher writing skills and interpreting words and phrases (see Figure 2). A greater share of teachers was able to display knowledge and skills in Grade 1 and 2-level Hausa and in comprehension. Nevertheless, it is striking that 60% of teachers were unable to display competence in Grade 1 and 2-level Hausa.¹⁵ This finding is significant for an intervention that focuses on teaching in Hausa because teachers’ low Hausa knowledge is likely to negatively affect teachers’ ability to pass their knowledge on to pupils. Also, teachers’ inability to identify low performers, evidence teacher judgements concerning pupil performance, and diagnose the next steps of teaching present challenges to improving pupil learning as a student learns best when teaching is targeted to what s/he is ready to learn. Regarding curriculum knowledge, a large minority of teachers (about 43%) were unable to demonstrate proficiency in knowing what should be taught to a group of students.

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¹⁴ Subject knowledge refers to knowing the essential questions of the subject, the networks of concepts, theoretical framework and methods of inquiry. Pedagogical knowledge refers to knowledge of the learners in the setting, knowledge of how to provide the conditions that enable pupils to understand, and the selection of learning and assessment materials. Curriculum knowledge refers to knowing what should be taught to a group of students, knowledge of the national syllabus, understanding the school- and grade-level planning documents and knowledge of the content of examinations.

¹⁵ Items tested included basic grammar and the initial letters of everyday objects and animals.
There are few differences in the knowledge levels demonstrated by different groups of teachers. Although teachers with a professional educational qualification demonstrate slightly higher levels of knowledge and skills, levels tend to be low across all groups of teachers. For example, we observe no differences between teachers in public primary schools and IQSs, or between teachers that did or did not attend previous GEP/UNICEF training.

The findings suggest that teachers do not have the knowledge or skills to drive improvements in pupils’ learning. A qualitative review of incorrect teacher responses to items in the teacher knowledge and skills assessment indicates that teachers are unable to ascertain which activities are best suited to improve pupil performance in a specific subject. Teachers generally perceived pupil effort to be the cause of low performance and therefore perceived increasing pupil (and to some extent teacher) effort as the best response to low performance. The focus on pupil effort as a cause of low performance within this context is likely to be a reflection of the low levels of competence amongst teachers – teachers lack both the knowledge and skills to improve pupils’ learning, which leaves few available options for improving pupil learning, beyond pupils ‘trying harder’. While teachers said that they should focus on girls’ learning in the class, they were not able to explain why such a focus is necessary. In addition, teachers did not have a clear understanding of girls’ learning needs, and in some cases held deeply ingrained biases regarding the limited capacity of girls or their role in society.

These findings have a few key implications for the early learning intervention. First, they highlight some of the key issues that the intervention needs to address through an appropriate combination of teacher training and carefully tailored teaching and learning materials. Second, they provide an indication of the scale of the challenge confronting the project, which could feed into design decisions related to the frequency of training and the level at which it is pitched. Third, they suggest that there is tremendous scope to improve knowledge and skills amongst teachers, although, equally, teachers’ very low levels of skills and knowledge at baseline may also present challenges for an intervention that works primarily through in-service training and support.
Teachers’ instructional skills and practices

The classroom observations carried out at baseline indicate that teachers’ instruction skills in early grade teaching are low across all groups of teachers. A composite index was constructed to measure this outcome variable. This consisted of measures of the extent of pupil-centred learning activities observed in the classroom, observations of the teacher linking the lesson to previous learning and learning objectives, and time on task in class. Overall, teachers scored poorly on the index. This was driven by their performance on the first two components of the index. In contrast, time on task was high: pupils were observed to be engaged in an activity related to learning for 96% of lesson time. Roughly 85% of classrooms were observed to be ‘on task’ for over 90% of the lesson. However, these findings should be interpreted carefully as it is likely that the presence of observers in the classroom increased the percentage of on task time in lessons.

There was limited variation in scores on the index across different groups of teachers. Public primary school teachers scored slightly higher than those in IQSs, while there were no clear differences by state. There were also no observable patterns between teacher practices and teacher motivation or perceived teacher efficacy. This indicates that teachers’ perceived self-efficacy is either not representative of their actual competencies or the levels of competency in teacher practices are so low that differences cannot be detected.

The baseline survey attempted to measure gender-sensitive teaching practices, but across all items extreme compliance effects were observed, significantly calling into question the validity and reliability of the measure. Therefore, gender-sensitive teaching could not be measured through classroom observations. The teacher assessments indicate that teachers are aware of objectives to target girls in class, but that deeply ingrained gender biases remain. Teacher assessment responses stating that teachers should focus on girls in the class were not supported by justifications for such a focus, did not reflect the needs of girls in the classroom and in some instances made an argument regarding the limited capacity or societal roles of girls.

Use of teaching and learning materials

As part of the early learning intervention Hausa teaching and learning materials will be distributed. This is expected to contribute to an improvement in Hausa-based teaching, insofar as the materials are used and aligned with the competency levels of the teachers. We therefore examined the use of teaching and learning materials at baseline.

Teaching and learning materials are rarely used. During the classroom observations at baseline, very few teachers used a textbook or other materials: 17% of observed teachers used a text book, while 19% used other materials.

The use of Hausa materials is especially rare. Materials in Hausa were observed being used in 2.4% of observed lessons. Materials in Hausa were available for the subject observed, but were not used in a further 1% of observed lessons. Interestingly, almost 18% of teachers indicated that they have the Hausa materials they need to do their jobs. This would suggest that roughly 14% of teachers either do not see a need for Hausa materials, or have access to materials that they do not routinely use during lessons.

Hausa-based teaching in early grades

The early learning intervention seeks to improve Hausa-based literacy teaching in early grades. A composite index was developed in order to measure changes in Hausa-based teaching in the early grades. Typically,

16 The measures included in the composite index were devised using the percentage of time the teacher spoke Hausa in class and teachers’ Hausa skills.
teachers in IQSs scored higher in Hausa-based teaching in the early grades than teachers within public primary schools, as did teachers who do not speak English or Arabic.

**Hausa was used in all classes observed.** In all classrooms the use of Hausa was observed on at least one occasion. In approximately half of the classes a second language was used in addition to Hausa. The frequency of Hausa use was documented during classroom observations and a measure of the percentage of time for which the teacher spoke Hausa was calculated. In just under 30% of observed lessons, Hausa was spoken by the teacher for 50%–60% of the lesson (as depicted by the green bar in Figure 3). In almost half of the observed lessons, Hausa was spoken by the teacher for 30%–50% of the lesson (depicted by the blue and purple bars in Figure 3).

**Figure 3: Frequency of Hausa use in the class**

![Frequency of Hausa use in the class](image)

**Source:** GEP3 Baseline survey 2015

**Teacher motivation and attendance**

Teachers’ motivation and attendance are assumptions contained in the ToC that are considered to influence the intermediary outcomes regarding teaching. Low teacher motivation and attendance may lead to Hausa-based literacy teaching not improving, despite the early learning intervention taking place. We measure motivation according to five dimensions that are translated into measurement subscales (see **Error! Reference source not found.**).\(^{17}\)

\(^{17}\) The teacher motivation scales were drawn from a previous study undertaken by EDOREN for the TDP. In this study, ‘motivation’ was understood as: *a mixture of perceived efficacy and effort / importance attached to teaching work; but is also measured less directly through interest/enjoyment and pressure/tension items*. Based on this definition, a motivated teacher is one who: sees themselves as effective and as making an effort; sees their work as important; is interested in and enjoys their work; and manages work pressure and tension. Details of the theory underpinning the teacher motivation scales can be found in Section 3.2.9 of the Baseline Technical Report.
Teacher motivation is investigated through the use of a range of motivation scaled scores, which form the basis for the construction of a composite motivation index. The subscales cover the following dimensions:

- perceived teacher efficacy;
- interest in, and enjoyment of, teaching;
- effort put into, and perceived importance of, teaching;
- pressure and work-related tension; and
- teacher-to-teacher interaction

Overall, teachers consider their role to be important and enjoy working as teachers, whilst being conscious of the fact that they are limited in their ability to contribute to pupils’ learning. An analysis of the different motivation subscales shows that, on average, the surveyed teachers score highest on effort and lowest on perceived teacher efficacy (see Figure 4). Interest in and enjoyment of teaching is relatively high among teachers when compared to pressure and work-related tension. It is also notable that the teacher-to-teacher interaction score seems to indicate a relatively high level of collaboration amongst teachers, which could help the development of spill over effects within schools of any teacher-specific intervention, including teacher training.

**Figure 4: Comparison of motivation subscales**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-to-teacher interaction</td>
<td>3.47</td>
</tr>
<tr>
<td>Pressure and work related tension</td>
<td>2.19</td>
</tr>
<tr>
<td>Effort and importance</td>
<td>3.73</td>
</tr>
<tr>
<td>Interest and enjoyment of teaching</td>
<td>3.57</td>
</tr>
<tr>
<td>Perceived teacher efficacy</td>
<td>1.99</td>
</tr>
</tbody>
</table>

Source: GEP3 Baseline survey 2015

**Overall motivation appears relatively homogeneous across teachers.** A composite motivation index that comprises all motivation subscales shows a relatively homogeneous situation across teachers. Motivation among urban and rural teachers is very similar, and no difference at all is detectable between teachers across states and types of schools (public primary schools and IQSs). While receiving a salary seems to be somewhat positively associated with motivation, the difference between teachers who receive and do not receive any remuneration is small.

**Absenteeism is found to be more prevalent in IQSs than in public primary schools.** The baseline data on absenteeism shows that 60% of teachers self-reported having been absent at least once in the last three months across all school types. The estimated average number of days that they reported having been absent over this period was just under five days. Absenteeism is more prevalent in IQSs than in public primary schools. IQS facilitators reported having been absent for roughly eight days on average, compared
to just over three days among public primary school teachers. However, attendance data on IQSs needs to be interpreted with caution as the IQS teaching schedule is not as structured as in public primary schools. This could partly explain the difference in absenteeism rates. Teachers who do not receive some form of remuneration are more likely to be absent, and to be absent for longer periods. It will be important to incentivise trained teachers and lead teachers to regularly attend their classes so as to ensure that their improved knowledge and teaching practices are passed on to pupils in school.

4.4.2 Pupils’ literacy in early grades

In this section we discuss pupils’ literacy in the early grade sample. First, we provide background information on key pupil characteristics that are important for the analysis and the early learning intervention. We then describe the learning levels of pupils in Hausa and English literacy, which is followed by an investigation of the factors associated with these levels. Section 4.4.3 then investigates the robustness of some of the descriptive associations through regression modelling.

<table>
<thead>
<tr>
<th>Summary of evidence related to evaluation questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1. To what extent does the early learning intervention improve Hausa literacy and English language learning outcomes among girls and boys in the early grades in public primary schools and IQSs?</strong></td>
</tr>
<tr>
<td>To what extent does the early learning intervention reduce the gap between the learning outcomes of the lowest performing pupils and the expected learning outcomes, as expressed in the curriculum?</td>
</tr>
<tr>
<td><em>Pupil literacy performance is very low and is well below the expected learning outcomes as expressed in the curriculum. While teacher competencies are not found to be associated with learning outcomes, this may be due to very low teacher competency levels and ineffective teaching. Pupil-level factors are significantly correlated with learning outcomes.</em></td>
</tr>
<tr>
<td>Baseline findings on pupils’ characteristics show that Hausa is the mother tongue of every pupil, which is an assumption of the programme’s ToC. However, the findings of the Hausa literacy assessment indicate that very few pupils have acquired the knowledge and skills appropriate for their grade. Furthermore, the peak of the distribution of performance in Hausa literacy falls well below the cut-off point between pre-literacy and emerging literacy. When it comes to English, 96% of pupils could not demonstrate literacy skills in English beyond pre-literacy skills. As with Hausa, the peak of the distribution of performance falls well below the cut-off point between pre-literacy and emerging literacy. This suggests that substantial effort would be required to achieve significant gains in the percentage of pupils moving from pre-literacy to emerging literacy in both Hausa and English. The regression analysis shows that pupils’ individual characteristics and socioeconomic background are associated with pupils’ achievement, while most of the school-level variables, such as presence of a source of drinking water or separate toilets for girls, do not show any significant correlation with Hausa literacy.</td>
</tr>
</tbody>
</table>

| **Q6. To what extent does the early learning intervention improve pupil retention, especially retention of girls?** |
| No evidence about retention is available at baseline. |

Pupil characteristics

**Hausa is the language of the immediate environment.** All pupils report speaking Hausa at home (with almost no students reporting speaking English or any other local language at home). This validates the ToC assumption that Hausa is the pupils’ mother tongue.
Pupil characteristics vary between PS and IQS. IQS pupils are older on average than PS pupils. A substantial proportion of pupils are aged 11 years and over in IQS (41%) compared to hardly any in PS (3%).18 IQS pupils in the sample are also from more disadvantaged backgrounds in terms of household wealth than pupils in PS.19

Pupils’ learning outcomes

In this subsection we present the findings about pupils’ learning outcomes. Error! Reference source not found. summarises how learning outcomes have been measured.

<table>
<thead>
<tr>
<th>Box 3. Learning outcomes measurement</th>
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<tbody>
<tr>
<td>Hausa and English literacy outcomes are measured based on two assessment tools. The Hausa and English literacy assessments are each designed to test the same literacy knowledge and skills. The English literacy assessment contains 13 items, with each item being made up of several sub-items. Regarding the Hausa literacy assessment, items are not merely translated, but rather parallel items are developed to test similar concepts as applied to the Hausa language. The assessments test a range of literacy knowledge and skills across the pre-literacy, emerging and basic literacy ranges. Knowledge and skills tested include letter recognition, phonological knowledge, print concepts, oral literacy, verbal comprehension, initial sounds and letters, reading high frequency words, verbal and written grammar, writing high frequency words, reading fluency, copying and spelling high frequency words. English literacy and Hausa literacy assessments were constructed following five steps: clarifying constructs, test targeting, administration, psychometric analysis, drawing benchmarks and secondary data analysis.</td>
</tr>
</tbody>
</table>

The overwhelming majority of pupils have not yet acquired the knowledge and skills expected by the Nigerian curriculum in Hausa literacy. It is expected that pupils who are beginning P2 will have mastered the P1 curriculum and will be ready to receive the P2 curriculum. However, the learning assessment results indicate that only 5.3% of pupils are performing within the expected range. A further 2.6% of pupils are able to demonstrate emerging literacy skills, while 92% of the pupils could not demonstrate literacy skills in Hausa beyond pre-literacy skills. As can be seen in Figure 5, most pupils score well below the cut-off point between pre-literacy and emerging literacy, indicating that achieving large gains in the percentage of pupils moving from pre-literacy to emerging literacy will require substantial effort.

The majority of pupils have not yet acquired either emerging or basic English literacy skills. Less than 1% of pupils demonstrated at least some skills that fall within the basic English proficiency range and 3.3% of pupils demonstrated at least some of the skills that fall within the emerging literacy range. However, 96% of pupils could not demonstrate literacy skills in English beyond pre-literacy skills. The results of the English literacy assessment suggest that pupil proficiency in Hausa after more than a year of schooling is not significantly higher than pupil proficiency in English. Similar to the distribution of Hausa literacy scores, the cusp of the distribution of English literacy falls well below the cut-off point between pre-literacy and emerging literacy.

Knowledge of phonics is very low. The psychometric analysis finds that items that require knowledge of phonics rank as the most difficult items in both the Hausa and English assessments. Correctly sounding out letters and identifying similar sounds was more difficult for pupils than writing or reading full passages. This indicates that currently pupils within the context who have achieved basic literacy are doing so without significant exposure to phonics knowledge. Evidence suggests that systematic phonics teaching is

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18 The actual percentage numbers need be handled with caution as a large number of pupils (35%) in the sample did not report age. This missing data were evenly spread across public primary schools and IQS.
19 Poverty differentiation is based on a Household Wealth Index (HWI) using a series of household assets as an indication of wealth.
associated with better progress in reading accuracy though not always in reading comprehension.\textsuperscript{20} Whilst the use of phonics instruction has advantages, if literacy is understood as being able to understand and interact with written text, reading fluency is a bridge to literacy, rather than a measure of literacy itself. Furthermore, the evidence base on the links between phonological awareness and reading accuracy and comprehension mainly comes from studies in contexts with highly literate and qualified teachers. As discussed above, these conditions do not hold in the context in which GEP3 is being implemented. The early learning intervention will need to take these caveats into account when promoting a phonics approach to teaching.

**Figure 5: Distribution of Hausa literacy proficiency**

| 934.78 | 848.81 | 799.60 | 759.89 | 730.13 | 709.37 | 693.62 | 680.30 | 668.05 | 655.91 | 643.14 | 629.03 | 612.97 | 594.73 | 574.30 | 551.65 | 526.67 | 499.18 | 468.25 | 432.47 | 391.83 | 344.18 | 263.23 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

5.3% of the pupils demonstrated Grade 2 Hausa literacy skills. This level of proficiency can be described as **basic literacy**.

2.6% of pupils demonstrated knowledge and skills within the range expected by the P1 curriculum. This level of proficiency can be described as **emerging literacy**.

Over 92% of pupils demonstrated pre-literacy Hausa skills. Children achieving within the **pre-literacy proficiency** range do not yet have emerging literacy skills.

**Source:** GEP3 Baseline survey 2015

**Learning outcomes differ by age and gender.** Male pupils achieved higher average scores than female pupils, although this was mainly driven by differences in IQS. This can be partly explained by the association between age, learning outcomes and the gender gap. The baseline data highlight that older pupils perform better than younger ones (see Figure 6). It also suggests that learning outcomes are more closely associated with cognitive development that with years of schooling – as average years of schooling do not differ substantially between older and younger children in the sample. When disaggregating literacy achievement by age and gender a trend emerges across both Hausa and English (see Figure 6). Gender differences in performance are small in the younger years, but increase once girls reach puberty (around 12

\textsuperscript{20} Torgeson, Brooks, and Hall, 2006.
years of age). In line with this, the larger gender gap in IQSs could partly reflect the fact that pupils at IQSs also tend to be older.

Figure 6: Mean Hausa scale score by age and gender (95 % confidence interval)

![Figure 6: Mean Hausa scale score by age and gender (95 % confidence interval)](image)

Source: GEP3 Baseline survey 2015

4.4.3 Analysis of relationships

In addition to the descriptive analysis presented above, the evaluation team conducted regression analysis to make more statistically robust claims about the relationship between learning outcomes (Hausa literacy and English literacy) and a wider set of school-, teacher- and school-level explanatory factors. In Error! Reference source not found. we present the categories of explanatory variables that are included in the pupil regression model. Tables with regression coefficients are included in Annex E.

Box 4. Explanatory factors included in the pupil regression model

- Pupils’ personal characteristics, including gender and age group
- Pupils’ socioeconomic status, as defined by the HWI tertile categorisation
- Information about pupils’ schools, including whether they attend public primary schools or IQSs, whether they attend other schools in parallel and whether they can write
- Location information, including whether the school is in Katsina or Zamfara and whether it is located in an urban or rural area
- School infrastructure21, including whether the school has separate toilets for girls and whether it has access to a source of drinking water
- Teachers’ average motivation level, as defined in our overall motivation index illustrated above, in the school attended by the pupil
- Teachers’ average subject and pedagogical knowledge, as defined in the relevant indexes illustrated in the section above, in the school attended by the pupil
- Teacher knowledge 1: Teachers’ subject knowledge
  - Teacher knowledge 2: Teachers’ syllabus and curriculum knowledge
  - Teacher pedagogy 1: Teachers’ pedagogical knowledge

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21 Other variables on school context information, including for instance electricity or pupil/teacher, teacher/classroom, pupil/classroom and pupil and teacher gender ratios were not included as they would have reduced the regression sample size. Data on the factors above and other school aspects were in fact collected only from a limited number of schools.
Teacher pedagogy 2: Mother tongue teaching in early grades.

Teacher-level factors do not appear to be significantly correlated with literacy learning outcomes. In particular, none of the teacher motivation, knowledge or pedagogy indexes are found to be significantly associated with either Hausa or English learning outcomes. This may reflect the fact that competency levels are very low across all teachers. It is likely that a stronger correlation would be detected if there was greater variation in competency levels across teachers and that their ability to influence pupils’ learning outcomes would be higher. This also implies that if the early learning intervention does lead to substantial improvements in teachers’ knowledge and skills, we should see a more significant link between teacher characteristics and learning outcomes at endline.

The location (urban/rural) and type of school (public primary school/IQS) are associated with learning outcomes. Most of the school-level variables, such as presence of a source of drinking water or separate toilets for girls, do not show any significant correlation with Hausa literacy. Similarly, whilst being in Katsina or Zamfara state does not have any association with literacy outcomes, rural/urban location does, with pupils attending schools in rural areas achieving lower Hausa and English scores than those in urban areas. Finally, pupils in public primary schools appear to achieve lower literacy scores in both languages tested than pupils in IQs. The regression analysis indicates that the statistically significant better performance of IQS pupils remains even after controlling for the potentially confounding effect of pupils’ age.

Pupil-level explanatory factors are significantly correlated with learning outcomes. Age, unsurprisingly, is significantly correlated with learning, with older pupils doing better than younger ones. Household socioeconomic status is also associated with literacy outcomes, with relatively wealthier pupils found to perform better than their poorer counterparts, although an economic threshold exists below which improvements in socioeconomic status do not appear to affect learning. At the same time, given the generally low level of literacy amongst the surveyed pupils, it seems reasonable to presume that wealth is not sufficient to achieve good learning outcomes. Gender is correlated with learning: male pupils perform better than their female counterparts. However, the correlation only emerges when controlling for all possible school-level characteristics and the statistical significance of the correlation is low. RANA’s community engagement activities could help to counter some of the effects of socioeconomic background on learning outcomes by promoting a supportive home learning environment for all children.
5 Baseline of the IQSS evaluation

5.1 GEP3’s IQSS

GEP3’s strategy for integrated Qur’anic education focuses on the improvement of education in IQSs, with the aim of providing an acceptable alternative form of quality basic education for girls. The final outcomes expected are: improved learning outcomes in basic literacy and numeracy (especially for girls), improved retention of girls, and, to a lesser extent, increased enrolment of girls.

GEP3 targets registered IQTE centres that implement an integrated curriculum (becoming IQSs) and that largely operate as community-based initiatives, but that are willing to build links with government for the purposes of monitoring and technical support. At least 40% of the students enrolled should be girls for the IQS to be supported by GEP3. During the 2015–2017 period 200 IQSs per state across the six GEP3 LGAs in Niger, Bauchi and Sokoto will receive a full school-level support package.22 Box 5 summarises the IQSS package that will be implemented at school community level (a more detailed description is presented in Chapter 4 of the Baseline Technical Report).

Box 5. IQSS activities at school and community level

- Training and mentoring of IQS facilitators, with, at its core, a 1.5-year cycle of monthly cluster-level training/mentoring meetings initiated by five-day induction workshop
- Provision of a package of classroom teaching and learning materials
- Training of head teachers, consisting of three-day training sessions per term over a two-year period
- Capacity building for CBMCs, consisting of an initial multi-day cluster-level training with follow-up mentoring visits, at least once a term, over a period of nine to 12 months
- Provision of mini-grants, at most twice over a two-year period, and conditional on the development of a Whole Centre Development Plan (WCDP) and attendance at CBMC training

GEP’s IQSS began in August 2015 and involves a 2–2.5-year period of mentoring and follow-up training. A first cohort of one facilitator per IQS attended the induction workshop in August/September 2015. A second facilitator from each IQS will start the training and mentoring cycle in July–September 2016. The head teacher training was originally planned to start between April and June 2016 but this has yet to be confirmed. The materials are planned to be delivered to the IQSs by April–May 2016. The initial CBMC cluster-level training is scheduled to take place in July–September 2016.

Annex F presents the ToC of the IQSS intervention. The ToC is discussed in detail as it forms an integral part of the contribution analysis approach that is used for the IQSS evaluation. The main logic of GEP3’s IQSS is that girls’ learning can improve in an IQS when the IQS can provide quality basic education, which requires that facilitators teach more effectively and that the school environment improves and becomes more girl-friendly. Effective teaching is expected to improve with GEP3’s support for facilitator training and mentoring, head teacher training and the distribution of teaching and learning materials. CBMC training and the provision of mini-grants are expected to contribute to an improvement in the school environment. At the government level, GEP3’s state advocacy and LG(E)A capacity support are expected to contribute to the improvement of monitoring and support supervision by government staff, as well as to sustained government financial support. This in turn is expected to contribute to more effective teaching and an improvement in the school environment.

22 In Niger and Sokoto the targeted IQSs are registered with the SAME, which is the lead agency coordinating the implementation of the support. In Bauchi, 191 GEP3 IQSs are managed by the SUBEB. The remaining nine IQSs fall under Bauchi SAME.
5.2 Baseline methodology

The ToC of GEP3’s IQSS was used as a framework to formulate the evaluation questions. The evaluation questions interrogate a wide range of the cause–effect assumptions underlying different steps in the ToC, in order to better understand how change may come about. Error! Reference source not found. Annex B presents a list of the evaluation questions. We will also synthesise baseline evidence per evaluation question as part of the presentation of the baseline findings. The evaluation prioritises the question of how GEP3’s support is contributing to changes in learning outcomes (rather than retention or enrolment), particularly by looking at changes in teaching and the school environment. Similar to the early learning evaluation, we apply an equity perspective in measuring learning outcomes. Because of the multifaceted nature of IQSS and the complex IQS context the evaluation questions aim to obtain an understanding of how IQSS contributes to intended changes within the IQS context, rather than to quantify the attributable effect of the intervention. Furthermore, the evaluation will pay attention to unintended consequences of the IQSS. At midline in 2017 evaluation questions related to GEP3’s contribution to teaching and the school environment will be answered, while the effect on learning outcomes will be the subject of the endline analysis.

To evaluate IQSS we apply an evaluation approach that draws on the principles of contribution analysis and relies on a strong mix of quantitative and qualitative methods. Contribution analysis is a pragmatic theory-based evaluation approach that assesses causal pathways within the ToC, reports on whether the intended changes occurred or not, and identifies the main contributions to such changes. The IQSS evaluation does not make use of a comparison group to make causal inference but seeks to make credible causal claims about the contribution IQSS is making to observed outcomes by verifying the chain of expected results and assumptions of a credible ToC, as well as assessing the contribution of alternative explanations to observed outcomes (Mayne, 2012; Delahais and Toulemonde, 2012). Based on the IQSS ToC and in line with the evaluation questions three contribution claims were identified, on which evidence will be collected during several rounds of data collection:

1. Contribution Claim 1: GEP3’s IQSS contributes to more effective teaching of formal subjects in IQSs.
2. Contribution Claim 2: GEP3’s IQSS contributes to an improved, girl-friendly school environment in IQSs.
3. Contribution Claim 3: More effective teaching of formal subjects and an improved, girl-friendly school environment contribute to improved learning levels, particularly among girls.

Data collection takes a mixed-methods approach, combining quantitative and qualitative methods. Quantitative data collection consists of representative sample surveys among GEP3 IQSs in the 12 GEP3 LGAs across Bauchi and Niger. Baseline, midline and endline surveys will be conducted in a cohort of IQSs sampled at baseline. The qualitative research takes place in purposively sampled case study IQSs that are also included in the quantitative survey sample. The same case study IQSs will be visited at baseline, midline and endline. Both quantitative and qualitative baseline data collection took place during October–November 2015.

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23 We decided not to use a comparison group for several reasons. First, the evaluation questions prioritised understanding of how IQSS contributes to intended changes within the IQS context, rather than to quantify the attributable effect of the intervention. Second, it was difficult to construct a comparison group as no sample frame of IQSs similar to the GEP3 pilot IQSs was available. Third, resources were not available to construct comparison groups for all of the interventions under evaluation. Priority was given to the early learning intervention.

24 At that time the induction workshop of the first IQS facilitator cohort had already taken place. Because of logistical reasons the baseline could not take place earlier. We do not expect this to significantly affect the validity of the baseline data since the cluster-level monthly meetings are considered to be the core of the capacity development intervention and had not yet started at the time of the baseline. Furthermore, while teaching knowledge and skills may have been affected to limited extent, it is highly unlikely that pupil learning outcomes will already have been influenced.

25 Midline data collection is scheduled for May–June 2017, together with the early learning intervention data collection.
The IQS survey took place in a sample of 60 IQSs, stratified according to the 12 GEP3 LGAs in Bauchi and Niger Katsina (five IQSs per LGA, 30 IQSs per state). Baseline data collection was conducted by OPM Nigeria. The survey was successful in achieving the planned school sample size. It is important to note that a higher proportion of the sampled IQSs are located in urban areas in Bauchi compared to Niger (27% in Bauchi, versus 10% in Niger). Within the schools male and female pupils as well as teachers were randomly sampled as part of the survey. Similar to the early learning intervention baseline, the target populations were: pupils enrolled in a P2 equivalent grade and teachers teaching in P1–3 equivalent grades. The final sample includes 576 pupils (of which 48% are girls) and 96 teachers (see Annex C). In addition, the head teacher in each school was surveyed, as well as CBMC representatives in 52 IQSs. All data have been analysed using sampling weights, and therefore represent the entire targeted population. The same seven data collection instruments as were used in the early learning survey were administered using CAPI. In addition, a pupil numeracy and CBMC questionnaire were administered to pupils and CBMC members respectively.

The qualitative case studies took place in six IQSs using purposive ‘typical case sampling’ and ‘extreme case sampling’. Cases were selected from three different LGAs per state that were themselves selected after a categorisation according to average public primary school performance on girls’ education indicators. The qualitative research made use of four research techniques or instruments: qualitative classroom observation and unstructured teacher practice discussions; KIIIs with the IQS proprietors/ Mallsams, head teachers, community leaders and local government IQS officers; and focus group discussions with parents, girl pupils and boy pupils. Applied thematic analysis was used to interpret the data according to themes that were based on the IQSS ToC.

5.3 Baseline findings

In this section we present a synthesis of the baseline findings per contribution claim set out in the methodology. In line with the mixed-methods approach we combine quantitative and qualitative data in the synthesis. A more detailed presentation of the data is included in the evaluation technical report. Throughout the text we will make reference to the evaluation questions in summary boxes. Since the evaluation questions are causal questions related to the IQSS intervention, they can only be answered at mid/endline. Nonetheless, we synthesise evidence that provide a baseline assessment of the outcomes expected and the assumptions underlying the causal chain.

5.3.1 Contribution Claim 1: GEP3’s IQSS contributes to more effective teaching of formal subjects in IQSs

GEP3’s strategy for integrated Qur’anic education aims to provide access to quality education in IQSs, particularly for girls, by improving effective, gender-sensitive teaching of the formal subjects included in the harmonised integrated curriculum. GEP3’s contribution to more effective teaching assumes that IQS facilitators’ knowledge and skills and gender-sensitive class practices can be improved through training and mentoring. Mentoring is also assumed to increase teacher motivation, which can again contribute to more effective teaching. In addition, the distribution of Hausa teaching and learning materials is expected to support effective teaching processes, as is improved pedagogical leadership and school management by the head teacher. In this section we summarise the baseline findings on these different intermediary outcomes. We first describe the context in which the teaching takes places and some of the facilitators’

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26 35% of the originally sampled IQSs had to be replaced, mainly due to the IQS not being considered eligible for the survey given the study universe (see Baseline Technical Report).
27 Unlike the early learning intervention panel survey, a cross sectional survey is used for pupil-level data collection (see Baseline Technical Report).
28 The following indicators were used: the gender parity index, girls’ transition rate in primary school and a composite index of the pupil-to-qualified-teacher rate, the share of qualified female teachers and the pupil–classroom ratio.
characteristics. A more in-depth discussion of the school environment is provided in the discussion of Contribution Claim 2.

<table>
<thead>
<tr>
<th>Summary of evidence related to evaluation questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1: How well has GEP3 teacher capacity development (training and mentoring) contributed to improved teacher knowledge and skills, and more effective teaching in the classroom?</strong></td>
</tr>
<tr>
<td>Levels of facilitator knowledge of, and competence in, effective teaching are very low. Additional capacity development is therefore highly relevant but needs to be well targeted to the needs of the facilitators, to reach the appropriate facilitators, and to take into account the diverse and challenging teaching context in IQSs. Facilitators’ motivation is shaped by issues of remuneration, social status and community roles and relations.</td>
</tr>
<tr>
<td>Facilitators demonstrated very low levels of pedagogical, curriculum and subject knowledge. For instance, less than 3% of facilitators could demonstrate competence in identifying low performers, interpreting words and phrases, and displaying writing skills. The use of pupil-centred approaches was also limited. This was despite 43% of facilitators reporting having received training in the past two years. The appropriate facilitators are not always trained and only a limited share of facilitators have professional teaching qualifications. Facilitators show interest in being trained, particularly in subject knowledge.</td>
</tr>
<tr>
<td>Facilitators consider their role to be important and enjoy working as teachers, whilst having a more negative perception of their teaching efficacy. Facilitators themselves, as well as community members, do not perceive their lack of competence to be a cause of low pupil performance. While remuneration does not appear to be the main motivation for facilitators to teach in IQSs, the lack of adequate remuneration makes it difficult to attract qualified facilitators and hold them accountable.</td>
</tr>
<tr>
<td>A quarter of IQSs only have one facilitator, which will constrain a mentoring process that is based on school-based peer interaction. 90% or more of the facilitators report speaking Hausa and English, although this does not mean that they are literate in Hausa or English. Notably, only 34% of facilitators were found to be fully competent in Grade 1 and 2-level Hausa.</td>
</tr>
<tr>
<td>The teaching of the integrated curriculum in IQSs appears to have gained acceptance but is implemented to varying degrees. This is likely to influence the scope for gains in effective teaching. Facilitator attendance seems to be flexible, with non-religious subjects being taught as and when a facilitator is available. A more structured, intensified teaching programme will be hard to enforce because baseline results suggest the need for integration to be gradual and for the school to retain its Qur’anic character.</td>
</tr>
<tr>
<td><strong>Q2: How well has GEP3 teacher capacity development contributed to an improvement in gender-sensitive teaching?</strong></td>
</tr>
<tr>
<td>While facilitators display some gender-sensitive techniques, gender-biased classroom practices prevail.</td>
</tr>
<tr>
<td>Facilitators, who are mostly male, express positive attitudes towards girls’ education. They are also are aware of, and sometimes display, gender-sensitive techniques. However, gender biases continue to affect classroom organisation and practices during the teaching of the integrated curriculum. This reflects entrenched gendered attitudes and expectations about the benefits of education for girls, and cultural norms about how girls and boys relate.</td>
</tr>
<tr>
<td><strong>Q3: How well has GEP3 head teacher capacity development (training and mentoring) contributed to improved pedagogical leadership and</strong></td>
</tr>
<tr>
<td><strong>School leadership roles in IQSs are not clearly defined, are possibly shared, and are not always assigned based on ability and qualifications. This is likely to complicate the process of identifying who precisely should be targeted for training.</strong></td>
</tr>
</tbody>
</table>
| School leadership in IQSs is complex and is shared amongst many...
school management?

stakeholders. IQSs at times choose head teachers based on social status and perceptions regarding leadership, rather than based on teaching knowledge. The lack of clarity about leadership roles can make it difficult to identify whose leadership capacities to build. GEP3 needs to consider whether those attending training are the most qualified to carry out a leadership role, particularly with regards to pedagogical leadership.

Head teachers demonstrate some degree of pedagogical leadership (particularly in Niger) and take actions to improve pupil and teacher attendance. However, record-keeping is poor. 43% had attended training during the last two years. Head teachers’ professional and academic qualifications are generally low and, on average, below those of facilitators.

Q4: To what degree have teaching and learning materials supplied through the intervention been perceived by teachers and head teachers as appropriate and well targeted? Have they been used for more effective teaching?

The availability of teaching and learning materials in IQSs is very limited. GEP3’s distribution of such materials can fill an important gap. However, materials need to be appropriate for the languages spoken in the IQS, the subjects taught and the skill levels of the facilitators.

The availability of teaching and learning resources is very limited. Almost no Hausa materials are available, although Hausa is not necessarily the mother tongue in all cases. In Niger 43% of pupils reportedly speak Nupe at home. IQSs mostly teach mathematics and languages as core integrated subjects, which makes the distribution of numeracy and literacy materials by GEP3 well aligned with the subjects taught in the IQSs. Given the low Hausa literacy levels of facilitators Hausa materials will need to be fit-for-purpose, not only in relation to what needs to be taught, but also with respect to the skill levels of facilitators.

Teaching context and teacher characteristics

IQSs provide a diverse and challenging teaching context. 20% of the IQS sample did not have classrooms, and 30% had only one classroom. As shown in the qualitative case studies, some IQSs provide classes in the open air, with a blackboard hanging on the outer wall of the Mallam’s house. Grade progression is organised in various ways. Around two-thirds of the IQSs in the survey sample seem to be organised in six levels, like public primary schools; the remainder organise the teaching of the curriculum into one or two stages. Classroom observation data indicate that the pupil–teacher ratio is quite varied, with from four to 183 children being taught by one teacher, with a mean of 45. Therefore, the facilitator training will need to take into account the diverse teaching context of the facilitators.

The potential mobility of the traditional Tsangaya Qur’anic schools is likely to pose some challenges. This would likely interrupt teaching of the integrated curriculum and may affect the gender inclusiveness of the school, as the facilitator may not move with the religious teacher (the Mallam), the Mallam would move only with the boys, and the facilitator may not continue teaching the integrated curriculum in the absence of the Mallam and the male pupils. At baseline we do not have quantitative data on the mobility of the school sample. The head teachers of the case study IQSs all stated that their schools are sedentary, but in one school in Bauchi pupils indicated that moving was planned for the future. GEP3 needs to closely monitor the mobility of the IQSs. School mobility and its consequences for effective teaching of the integrated subjects could be discussed as part of the head teacher training, in order to sensitise school leadership.

Integration has been implemented across Bauchi and Niger, but to varying degrees. A condition for effective teaching of formal subjects is for the Qur’anic school to be actually integrated – that is, providing the integrated curriculum. This is not necessarily the case: 22% of the GEP3 IQSs contacted for the baseline

28 The Tsangaya element means that the institution has a mobile element, in which the Mallam moves with his pupils ’in the belief that an itinerant life is essential for them to fully concentrate on their study’ (Antoninis, 2012).
survey were non-integrated and 14% had been integrated for less than one year. Among the surveyed schools, IQSs were integrated on average for two years in Bauchi and three years in Niger. Few IQSs provide all five core subjects of the integrated curriculum in the early grades. Interviews with head teachers indicate that only 12% of IQSs teach mathematics, Hausa, English, basic sciences and social sciences, while English and mathematics are provided in around 90% of IQSs (see Error! Reference source not found.). According to the head teachers interviewed, Hausa is also frequently taught, although only 32% of facilitators interviewed indicated that they taught Hausa. The fact that not all core subjects are taught may be related to the limited number of teaching hours for non-religious subjects. Head teachers reported that on average three hours per week are dedicated to the integrated curriculum, which is substantially below the eight hours recommended in the National Benchmark for Integrated Basic Education. Furthermore, the qualitative case studies suggest that actual instructional time is more limited than the time declared by the head teachers.

### Figure 7: Core subjects taught in IQSs

The degree of integration is somewhat different in Niger and in Bauchi. In the former state, 20% of IQSs provide the five core subjects, while this is only the case for 3% of IQSs in Bauchi. Reported instructional time is four hours on average in Niger, compared to two hours in Bauchi. Hence, IQSs in Niger seem to be more integrated than in Bauchi, which is confirmed by the difference in the number of years of integration and in the fact that more IQSs in Niger are organised into six levels, like public primary schools. The variation in the degree of integration is likely to affect the gains in effective teaching that can take place. Also, the varied adoption of the integrated curriculum deserves attention during implementation, to the extent that GEP3 seeks to improve effective teaching of all core subjects. The fact that most surveyed IQSs are teaching mathematics and languages supports the plausibility of literacy and numeracy being the core GEP3 learning outcomes to improve.

Integrated education appears to have gained acceptance. In order for effective teaching of the integrated curriculum to take place facilitators, proprietors, parents and the school community need to be supportive

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30 According to the National Benchmark for Integrated Basic Education in Qur’anic schools (2013) the first stage curriculum (P1–P3) is made up of mathematics, the language of the immediate environment, English, social studies and basic sciences.

31 Hausa is not necessarily the language of the immediate environment in all school communities – particularly in Niger, where Fulfulde can be the mother tongue. We focus on Hausa since GEP3 will be providing teaching and learning materials in Hausa.

32 This could be due to the fact that another facilitator teaches Hausa, or it may be that head teachers are over-reporting the teaching of Hausa.
of integrated Qur’anic education. The qualitative case studies indicate that this is the case. This is underpinned by a recognition that both religious and non-religious forms of education are important, and that neither type of education is sufficient in isolation. However, interviewed stakeholders indicated that integration needs to be gradual and that the schools should not lose their Qur’anic character and be turned into formal schools.

**Most IQSs have one or two facilitators.** The average number of teachers of non-religious subjects is 2.4 in Bauchi and 3.2 in Niger. This difference suggests, again, that in Niger IQSs are more integrated. 25% of IQSs have only one teacher of non-religious subjects, while 37% have two. Facilitators mostly teach one or two subjects. More facilitators teach multiple subjects in Niger than do so in Bauchi. In IQSs with only one facilitator school-based peer interaction as a mechanism to strengthen knowledge and skills will not be feasible, which may lower the impact of the IQSS intervention. In IQSs with more than two facilitators GEP3 needs to consider how knowledge can be disseminated and embedded beyond the two facilitators targeted for GEP3 training. This is highlighted by the qualitative case studies, which indicate that knowledge sharing after training does not necessarily happen. Since facilitators mostly teach a limited number of subjects, it will be important for GEP3 to target those facilitators for training who actually teach the subjects to which the training relates.

**The facilitator profiles differ slightly between Bauchi and Niger.** Only 9% of the surveyed facilitators were female, although this was higher in Niger compared to Bauchi, despite more IQSs in Bauchi being located in urban areas (see Table 5). Facilitators in Bauchi are more experienced and professionally qualified. This may be related to the fact that in Bauchi the SUBEB is managing most of the GEP3 schools, while in Niger the SAME is responsible. Across the two states, less than half of the facilitators have some degree of professional educational qualification (NCE or Grade 2 certificate). The facilitator training needs to be adapted to this fact. The qualitative case studies confirm that the level of facilitator qualification varies significantly across the cases. Among the cases, the more professionally qualified facilitators are also teaching in public primary schools. The facilitators with a higher level of qualification felt more confident teaching the integrated curriculum. With regards to language, 90% or more of the facilitators reported speak Hausa and English. It is important to acknowledge this fact since the IQSS intervention includes the distribution of Hausa teaching materials. However, as will be discussed below, this does not mean that the facilitators are literate in Hausa, which means that careful attention will need to be given to the facilitator training methodology used. In Niger 39% of the facilitators indicated that they speak Nupe, which is noteworthy since almost half of the pupils in Niger indicated that they spoke Nupe at home.

**Table 5: Summary of facilitator characteristics**

<table>
<thead>
<tr>
<th>For surveyed facilitators the average...</th>
<th>Of teachers...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ...age is 32 years;</td>
<td>• ...96% speak Hausa; 90% speak English; 17% speak Arabic; in Niger 39% speak Nupe, while 13% in Bauchi speak Fulfulde.</td>
</tr>
<tr>
<td>• ...teaching experience is seven years (nine years in Bauchi and five years in Niger); 82% of teachers have at least two years of teaching experience; and</td>
<td>• ...only 9% are female (2% in Bauchi, 16% in Niger));</td>
</tr>
<tr>
<td>• ...teachers are likely to teach one or two non-religious subjects – these being mostly mathematics or English.</td>
<td>• ...14% also teach religious subjects;</td>
</tr>
<tr>
<td></td>
<td>• ...35% hold an NCE qualification (51% in Bauchi, 20% in Niger) and 66% have passed the SCCE (61% in Bauchi, 70% in Niger); 33% in Bauchi have a religious education qualification, compared to 11% in Niger; and</td>
</tr>
<tr>
<td></td>
<td>• ...43% attended training during the last two years (36% in Bauchi, 49% in Niger).</td>
</tr>
</tbody>
</table>

*Source: GEP3 Baseline survey 2015*
There is room for further expansion and deepening of facilitator training. 43% of facilitators reported that they have received training in the past two years. Teachers with a professional qualification are more likely to have attended training. Amongst those who received some form of training, around 80% reported being trained on teaching methods and around 70% indicated that the training was implemented by GEP/UNICEF. The survey also identified that the appropriate facilitators are not always trained – not all trainees who attended GEP3’s facilitator training in August–September 2015 were in fact facilitators teaching at an IQS. Within the sampled IQSs for which the survey team had lists of trained facilitators 22% of facilitators were unknown or not teaching at the IQS. According to the findings of the qualitative case studies facilitators are interested in receiving training; they express a need for more training in subject knowledge in order to effectively use the tools that seem to be the focus of the training, together with sensitisation about the value of inclusive instruction. The case studies also suggest that facilitators within the same IQS are not necessarily aware of each other’s participation in training, which may hinder knowledge spillover. Hence, knowledge dissemination strategies need to be considered to reinforce impact.33

Facilitators’ knowledge and skills

Facilitators displayed very low levels of competence across the six domains covered by the teacher assessments. Levels of competence were particularly low on the two domains associated with pedagogical knowledge: only 2% of facilitators were competent in identifying low performers and none of the facilitators were competent in evidencing judgements and diagnosing pupil performance (see Figure 8). There is a very strong tradition in educational research that acknowledges that a student learns best when teaching is targeted to what s/he is ready to learn. Facilitators’ weak skills on these fronts therefore present major challenges to improving pupil learning.

Facilitators also display almost no evidence of competence in writing and interpreting words and phrases. Knowledge of Grade 1 and 2-level Hausa appears more prevalent, although a large share (66%) of facilitators were not able to display competence in this, which raises questions about facilitators’ ability to raise pupils’ learning levels in this area. Similar to the findings of the early learning baseline, writing skills appear to be correlated with other skills, which suggests that the literacy levels of the facilitators may be a key issue – if those levels are low this limits performance across a range of the areas facilitators need to be competent in in order to improve pupil learning.

The qualitative case study findings reinforce this picture. Facilitators were often unable to explain which subject matter should be taught, or why they teach what they teach. Many facilitators were teaching at the level that they were themselves taught to. Whilst facilitators displayed awareness of teaching and pedagogical methods, in most cases facilitators themselves did not seem to have sufficient subject knowledge to teach effectively.

33 The findings of the motivation composite index (see section on facilitator motivation and attendance) indicate that facilitators have a relatively positive perception about teacher-to-teacher interaction. There is therefore opportunity to promote knowledge exchange.
Facilitators do not seem to perceive their own lack of competence to be a cause of low pupil performance. Facilitators generally perceive pupil effort to be both the cause of low pupil performance as well as the best response to low performance. When facilitators were asked what steps they could take to improve pupils’ performance, their responses focused on encouraging pupils to increase their effort and to pay attention in class. There was little discussion of the errors in pupils’ work, and what facilitators could do to improve this. The focus on pupil effort within this context is likely to be a reflection of the low levels of competence amongst facilitators themselves, and their lack of understanding of what they could do to improve pupils’ performance. A related finding of note from the qualitative case studies is that community members often perceive facilitators’ subject knowledge to be high. This is in stark contrast to the findings of the teacher assessments, and can be explained by parents’ own limited knowledge. This suggests that parents are unlikely to hold facilitators to account for low quality teaching.

Gender-sensitive class practices

Facilitators stated having positive attitudes towards girls’ education, but gender biases persist. The facilitators in the six case study schools expressed positive attitudes towards girls’ education. However, it is unclear whether this accurately represents facilitators’ attitudes as we cannot rule out some degree of social desirability bias in these responses. Indeed, both qualitative and quantitative data point to some deeply ingrained gender biases. Some case study facilitators, while perceiving girls’ education to be important, think that girls are less able than boys, and that girls do not require as much education as boys do. In all but one case, facilitators perceived boys to be more intelligent than girls. Facilitators’ attitudes seem to be influenced by the perceived importance attached to girls’ education, given the gendered roles

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Footnote:

34 Social desirability bias refers to the tendency of respondents to answer questions in a manner that will be viewed favourably by others. This is likely to have been the case in the quantitative survey, in which we observed extreme compliance effects across all items developed to measure attitudes towards girls – this points to social desirability bias and calls into question the validity and reliability of the measure. Therefore, changes in the gender sensitivity of facilitators’ classroom practices is best detected through the qualitative research, although some desirability bias may also be observed here too.
girls are expected to take up in future life. This is confirmed by the responses as part of the teacher assessments, which indicated that girls are perceived to be naturally less suited to the demands of education than boys, or more suited to other roles within society.

**While facilitators display gender-sensitive techniques, gender-biased classroom practices prevail.** Both qualitative as well as quantitative findings indicate that facilitators are aware of, and sometimes practice, gender-sensitive techniques, such as actively engaging both girls and boys, and even focusing more on girls. However, these practices seem to be performed in a tokenistic way—in line with development projects’ sensitisation efforts—and are unlikely to be able to surmount the gender-biased classroom arrangements within traditional Qur’anic schools, such as the practice of segregating boys and girls in the classroom. Furthermore, teaching practices are influenced by facilitators’ and pupils’ gender-biased attitudes about girls’ ability to learn and the importance of education in their future life. It is, therefore, important that facilitator training not only encourages the use of gender-sensitive techniques in the classroom, but that it also seeks to contribute to the transformation of the facilitators’ attitudes towards girls’ abilities and the importance of girls’ education.

**Facilitators’ motivation and attendance**

Within the IQSS ToC facilitator motivation and attendance are considered both to be intermediary results of mentoring and better school management as well as supporting factors to achieve more effective teaching. We measure motivation through a five-scale motivation index (see Error! Reference source not found. in the early learning baseline section).

**Overall, facilitators consider their role to be important and enjoy working as teachers, but they have a negative perception of their teaching efficacy.** The quantitative findings of the motivation scale scores are very similar to those of the early learning sample. On average, the surveyed facilitators score highest on effort and lowest on perceived teacher efficacy (see Figure 9). The facilitators in the case study IQSs report feeling intrinsically motivated by what they do, and school stakeholders, including pupils, consider facilitators generally to be dedicated.

**Figure 9: Comparison of motivation subscales, IQSS sample**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher-to-teacher interaction</td>
<td>3.47</td>
</tr>
<tr>
<td>Pressure and work related tension</td>
<td>2.19</td>
</tr>
<tr>
<td>Effort and importance</td>
<td>3.73</td>
</tr>
<tr>
<td>Interest and enjoyment of teaching</td>
<td>3.57</td>
</tr>
<tr>
<td>Perceived teacher efficacy</td>
<td>1.99</td>
</tr>
</tbody>
</table>

*Source: GEP3 Baseline survey 2015*
Facilitators’ motivation is shaped by issues of remuneration, social status and community roles and relations. The qualitative findings indicate that the fact that most facilitators are not paid makes it difficult to attract qualified facilitators. The quantitative findings confirm that a very small share of facilitators are paid either a salary or a stipend (3% of the survey sample in Bauchi and 33% in Niger) and point to a positive association between receiving remuneration and teacher motivation. Facilitators in the case study IQSs report not feeling valued due to their low pay, as it makes them struggle to ‘move up a level’ in life as compared to their peers. Lack of remuneration is likely to particularly influence men due to the gendered expectations of men as breadwinners within society. Stakeholders of the case study IQSs acknowledge that there is an inherent inconsistency here, with facilitators expected to deliver at the standard of a teacher, while fending for themselves financially. As is evident from the qualitative findings, by not paying facilitators, the expectations placed on a facilitator, and the degree to which the community can hold facilitators to account, decrease. Yet, remuneration clearly is not the main motivation for facilitators to teach at an IQS. In all six case study IQSs, facilitators are members of the local community and several have previously been pupils under the Qur’anic tutelage of the Mallam or his predecessor. Stakeholders perceived this to be the main reason why facilitators agree to teach voluntarily. The quantitative findings suggest that pedagogical leadership may have an influence on facilitator motivation, as posited in the IQSS ToC. Facilitators who have individual meetings with the head teachers are more motivated than those who do not.

Teacher attendance is flexible. Around 75% of the facilitators reported having been absent at least once during the previous three months, with facilitators in Bauchi being more likely to be absent, and for longer, than facilitators in Niger. There is no marked difference in the absenteeism rates for teachers by remuneration status. The case study findings highlight that few of the case study IQSs seem to have set timetables, and formal subjects are taught as and when a facilitator is available. Teacher attendance in the context of IQSs is therefore a flexible concept. Furthermore, teacher attendance does not necessarily mean that the teacher is providing instruction. For example, in several of the case study IQSs it was common for pupils to run (part of) the class with the help of a class monitor – that is, a pupil who teaches younger students if the facilitator is not present. In general, the interviewed stakeholders perceive the facilitators to be punctual and do not see facilitator absenteeism as a key reason for loss of instructional time – rather, they attribute this to an IQS not having enough facilitators. Instructional time is also influenced by facilitators and pupils having to engage in income-generating activities. Additionally, many pupils in the case study IQSs also attend public primary school, thus restricting IQS instructional time to the afternoon and evening, when Qur’anic teaching also occurs.

Facilitators’ teaching

Overall, levels of competence in effective teacher practices were low across all groups of facilitators. The findings of the baseline quantitative survey were used to develop a composite index to measure the ToC intermediary outcome: to improve teacher practices and gender sensitivity. The index is based on the extent of pupil-centred learning activities observed in the classroom, observations of the teacher linking the lesson to previous learning and learning objectives, and time on task in class. Scores on the index were low for all groups of facilitators, although with some variations. Facilitators meeting head teachers regularly (once a week or more), older facilitators (aged >50) and those in Bauchi demonstrated somewhat higher levels of effective teaching practice. The qualitative case studies further indicate that facilitators have some awareness of pedagogical practices (for example, the importance of lesson planning and actively involving pupils) but lack a deeper understanding of the value of certain methods or when to make use of which method or practice.

35 Which involved, for example, observations of teachers assisting in group discussion, using a child’s name, asking or responding to an open question etc.
36 This included, for example, observations of the teacher talking about the previous lesson, outlining the objectives of the observed lesson etc.
37 Measured as percentage of time the pupils were engaged during lesson observations.
Time on task was generally good in lessons observed as part of the quantitative survey—within the majority of lesson observed (64.5%), children spent 100% of the lesson on task—although this may be influenced by observers being in the lessons. In about 10% of classrooms facilitators were not present at some point during class. As mentioned above, the qualitative case studies highlight that instructional time in IQSs is organised in a flexible, *ad hoc*, way and varies across IQSs. Pupils, facilitators and other stakeholders reported that lessons normally last around 20 minutes, and that about two subjects are taught per day, but with strong variation across IQSs.

**Hausa is the most common language of instruction but often various languages are used in teaching during the same class.** In Bauchi, the majority of facilitators (72%) used just one language during the lesson observation. A further 24% were observed using two languages. In Niger, 25% of facilitators used just one language during the lesson, while 60% used two languages. A small minority of facilitators in both states used three or more languages during a lesson. The majority of facilitators in both states were observed using Hausa at least once during the lesson (100% in Bauchi and 72% in Niger, see Figure 10). English was also widely used, particularly in Niger. 48% of teachers observed in Niger also made use of a language other than Hausa, English and Arabic (the classroom observation tool did not record what these other languages were, although it is likely that Nupe features prominently here given that it is spoken by a notable share of facilitators and pupils).

**Figure 10: Facilitator language use: Share of facilitators who used the language at least once during the lesson**

![Facilitator language use: Share of facilitators who used the language at least once during the lesson](image)

**Source:** GEP3 Baseline survey 2015

**Availability and use of teaching and learning resources**

The availability of teaching and learning resources is very limited, as highlighted by Figure 11. The most commonly used resources are those made by hand by facilitators. A text book was available and used in only 9% of classes observed. When the materials were available, they were mostly used. The qualitative case studies point again to strong diversity among IQSs: one case study IQS had access to a wide range of resources including computers, while others did not have any formal materials but used stones, sticks and bottle tops to facilitate mathematics classes. Some case study IQSs had received a curriculum for teaching Hausa, and some flashcards and other teaching aids, which facilitators perceived to appropriate, although the reliability of this finding needs to be interpreted with caution as facilitators seemed to perceive access to any materials to be positive. The case studies also indicate that many children lack basic materials, such
as notebooks and pens, the procurement of which is the responsibility of the parents. Several respondents considered the inability of parents to purchase learning materials to be a reason why children will not attend school.

**Figure 11:** Availability and use of teaching and learning materials

![Bar chart showing the availability and use of teaching and learning materials](image)

*Source: GEP3 Baseline survey 2015*

Almost no Hausa materials are available but it should be noted that Hausa is not necessarily always the mother tongue. Figure 11 shows that materials in Hausa were available in almost none of the observed lessons. This provides a clear baseline for the IQSS intervention, with much opportunity for improvement. However, while almost all facilitators surveyed reported speaking Hausa, correspondingly only 73% of the sampled children reported speaking Hausa at home – with a strong difference between Bauchi and Niger: 93% in Bauchi, versus 54% in Niger. In Niger 43% of pupils reportedly speak Nupe at home. Furthermore, the teacher assessment demonstrates that facilitators have low literacy levels in Hausa, hence Hausa materials will need to be fit-for-purpose, not only in relation to what needs to be taught, but also with respect to the skill levels of facilitators.

**Pedagogical leadership**

**School leadership in IQSs is complex.** IQSs are private institutions that can be owned by individual proprietors or owned in a more collective way by the community whilst still having an individual in charge. The religious teaching is generally led by a *Mallam*, who in the more traditional Qur’anic schools is generally also the proprietor of the school. With integration, the head teacher functions of the non-religious education are added to this existing Qur’anic school leadership arrangement. The case studies show that the school leadership positions (proprietor, *Mallam*, head teacher and CBMC members) are not necessarily separate roles within the IQS context. In the case study IQSs, the most common scenario seems to be one person taking on the three roles of proprietor, *Mallam* and head teacher. The quantitative data were not able to confirm this. In one-third of the IQS survey sample, the head teacher was also considered to be the proprietor, and this was more common for schools in Bauchi. However, the quantitative data need to be interpreted with caution because of the various ways in which the different positions are referred to. In general, there is a lack of clarity within most communities regarding who has what role, and what that role entails. The lack of clarity about these roles can make it difficult to identify whose leadership

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38 As Antoninis (2014) outlines, there are broadly two types of religious education institution in northern Nigeria: Qur’anic religious education institutions and Islamiyya religious education institutions. Qur’anic institutions encompass both *makaranta ollo* (‘school of the slate’) and *Tsangaya*. 
capacities to build. Different actors may be involved in the implementation of similar roles and the most qualified person may not lead on the role, for example, of pedagogical leadership.

**Head teachers are almost always male and have low professional and academic qualifications with differences between Bauchi and Niger.** All of the head teachers in Bauchi are male and only 7% of heads in Niger were reported to be female. The head teachers in Bauchi are about 10 years older, on average, than head teachers in Niger, have 10 more years of work experience at the current school, and have more years of teaching experience (see Table 6). Given that integration is relatively recent in Bauchi, this suggests that, particularly in Bauchi, the head teacher may also be the *Mallam*. The professional and academic qualifications of head teachers are generally low, and, on average, below those of facilitators, which may challenge the head teachers’ technical capacity to exercise pedagogical leadership over facilitators. Head teachers in Niger have higher academic qualifications: 57% have passed the SSCE, versus only 23% having done so in Bauchi. In terms of professional qualifications, in both states only a minority of head teachers have an NCE, but a majority of head teachers in Bauchi have a religious education qualification, indicating again that the head teacher role is quite often taken up by the *Mallam* in Bauchi. The qualitative case studies further highlight that the qualifications of the head teacher differ considerably across cases, with some having no formal education at all. However, most head teachers appeared confident in their abilities to instruct their facilitators. However, pedagogical leadership seems to be shared amongst many stakeholders, with CBMC members guiding head teachers, head teachers advising facilitators, and proprietors and community leaders also offering their perspectives.

**Table 6: Summary of head teacher characteristics**

<table>
<thead>
<tr>
<th>For surveyed head teachers the average...</th>
<th>Of head teachers...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ...age is 40 years (44 years in Bauchi, 36 years in Niger);</td>
<td>• ...only 3% are female (0% in Bauchi, 7% in Niger);</td>
</tr>
<tr>
<td>• ...years of work experience at current school is 10 years (15 years in Bauchi and five years in Niger); and</td>
<td>• ...23% hold an NCE qualification (27% in Bauchi, 20% in Niger) and 40% passed the SSCE (23% in Bauchi, 57% in Niger); 56% in Bauchi have a religious education qualification, compared to 20% in Niger; and</td>
</tr>
<tr>
<td>• ...years of work experience as a teacher is 14 years (17 years in Bauchi, 10 years in Niger).</td>
<td>• ...43% attended training during the last two years (37% in Bauchi, 50% in Niger).</td>
</tr>
</tbody>
</table>

*Source: GEP3 Baseline survey 2015*

The appointment of a head teacher is not necessarily based on ability and qualifications but has to do with social status within the community and perceptions around leadership more generally. In the case study IQSs, the head teacher role is mainly considered a ‘school leader’ role – having the social status to supervise teachers and provide advice, and influence the community with regards to integration and girls’ education. As such, *Mallams* may be assigned the position based on perceived political and social status, rather than pedagogical teaching knowledge. However, given their often low academic and professional qualifications it is questionable whether the head teachers have the ability to provide pedagogical supervision and mentoring. It will likely be a challenge to pinpoint who to train, and for what leadership role, since the assigned head teachers may not be the most qualified, in terms of formal education, to take up a pedagogical leadership role, but they may have the social status to provide moral leadership.

**More head teachers have been trained in Niger, while more external monitoring is happening in Bauchi.** A larger share of head teachers in Niger (50%) have received some sort of training in the last two years than in Bauchi (37%). Head teachers with higher professional or academic qualifications were more likely to be

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39 We define head teachers as the persons who are responsible for day-to-day management and supervision of the non-religious teaching.
trained, and this difference is larger than the Bauchi/Niger difference. Though both states reported training being mostly organised by GEP and UNICEF, more head teachers in Bauchi reported training by SUBEB or the LGEA, which suggests greater interaction with government bodies. This is also supported by the finding that a greater share of schools in Bauchi reported receiving any monitoring visits from a government body during the last term. This may be partly explained by the fact that more IQSs in the Bauchi sample are located in urban areas. In general, though, only 44% and 33% of IQSs in Bauchi and Niger, respectively, report having received any monitoring visit from government officials, non-governmental organisations (NGOs) or external agencies during the last school year.

**Head teachers demonstrate some pedagogical leadership, particularly in Niger, and they take actions to improve pupil and teacher attendance, but record-keeping is poor.** There is a marked difference between Niger and Bauchi in terms of head teachers observing lessons of facilitators. In Bauchi few head teachers reported having sat in on any lessons taught by facilitators for the entire duration of the lesson, while more than half of head teachers in Niger reported having done so during the last term (see Figure 12). There were fewer differences between Bauchi and Niger for other pedagogical leadership and management actions, such as meeting facilitators to discuss their teaching or actions to improve teacher and pupil attendance, although head teachers in Niger seem to be meeting more frequently with the facilitators, individually or in groups. Interestingly, trained head teachers were more likely to observe lessons, have observation records or meet teachers. Record-keeping by head teachers was generally found to be poor, with only 30% of heads able to present P2 pupil enrolment or attendance records, and far fewer instances of updated attendance records (10%). P2 pupil attendance record-keeping was markedly better in Bauchi.

**Figure 12: Head teacher pedagogical leadership and management actions in Niger and Bauchi**

<table>
<thead>
<tr>
<th>Action</th>
<th>Percentage of head teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT who meet teachers in group</td>
<td>Niger: 50%        Bauchi: 40%</td>
</tr>
<tr>
<td>HT who meet teachers individually</td>
<td>Niger: 70%        Bauchi: 60%</td>
</tr>
<tr>
<td>HT took action to improve pupil attendance</td>
<td>Niger: 60%        Bauchi: 50%</td>
</tr>
<tr>
<td>HT took action to improve teacher attendance</td>
<td>Niger: 40%       Bauchi: 30%</td>
</tr>
<tr>
<td>HT observed a lesson</td>
<td>Niger: 10%        Bauchi: 20%</td>
</tr>
</tbody>
</table>

Source: GEP3 Baseline survey

### 5.3.2 Contribution Claim 2: GEP3’s IQSS contributes to an improved, girl-friendly school environment in IQSs

GEP3’s IQSS seeks to contribute to an improved, girl-friendly school environment by strengthening school management, promoting the mobilisation of more resources and increasing the involvement of the community in the IQS. The main gateway to achieve these intermediary outcomes is the empowerment of CBMCs, by training them and providing them with mini-grants. In addition, head teacher training is assumed to contribute to better school management as well as improved government monitoring and
support supervision. In this section we first discuss the baseline findings in respect of school management, with specific attention given to the role of the CBMC, followed by findings on resource mobilisation, community involvement, the school environment and government monitoring and support, drawing from both quantitative and qualitative data.

Summary of evidence related to evaluation questions

| Q4: How well has GEP3’s CBMC capacity development contributed to improved school management and increased mobilisation of resources for school investment? |
| CBMCs are active and functional to varying degrees. There is scope for improvement in their representativeness, their school development planning and their financial management. CBMCs are able to mobilise resources but significant resource gaps remain.

CBMCs exist in 87% of the IQS schools. Most of the established CBMCs appear to be active, as indicated by regular meetings and monitoring activities. 63% of CBMCs had already received training during the last two years, although clear areas for improvement in CBMC functionality remain, including: child representation, attendance rates at meetings (particularly female), school development planning and financial management.

CBMCs are able to successfully mobilise resources from the communities but significant resource gaps remain. The perception of IQS stakeholders is less that parents are unwilling to contribute funds, but more that parents have limited funds to give due to poverty, which is one of the key reasons why parents send their children to IQS. CBMC training on resource mobilisation should consider the mobilisation of alternative resources, given that there appears to be limited scope to raise resources from parents.

Community support of IQSs and CBMCs is evidenced by community membership in the CBMC, and by community members donating money and other resources for school improvement activities. Head teachers and proprietors are usually part of the CBMC, and often chair the CBMC. This testifies to their acceptance of the CBMC’s involvement in school management. Since IQS school management is often seen as collective in the community, GEP3 will need to consider how to ensure that all relevant stakeholders are included, and that conflicts of interest are avoided when proprietors/head teachers have overlapping roles. CBMC members see their roles as broad, covering a range of responsibilities, but feel that they have weak capacity and limited resources to fulfil them. |

| Q5: How well have CBMCs been able to adequately manage mini-grants and invest these resources in the improvement of a girl-friendly school environment? |
| IQSs are able to invest in the school environment and do consider making girl-friendly investments, but the financial resources they have access to are generally small. Additional training and supervision in financial management are needed.

IQSs are universally deficient in ‘soft’ and ‘hard’ infrastructure, and provide a poor school environment for the attending children, particularly girls. IQSs have severe shortages of hygiene facilities for girls and offer few spaces where girls and boys can participate in shaping education or voice their needs. CBMCs reported utilising an average of 80% of the total funds raised in the past years on school improvements. The qualitative case study findings indicate that CBMCs have considered the attendance and retention of girls when allocating resources. However, almost 50% of CBMCs reported not having access to any funds during the last year and the median amount raised is limited (Nigerian Naira (NGN) 20,000). Financial management practices are poor and necessitate further training. Government monitoring and supervision is limited and considered unreliable by IQS stakeholders. |
School management and the role of the CBMC

School management is seen as collective, without clearly defined and delegated roles. As was discussed in the previous section, school leadership in IQSs is complex, which is reflected in school management. While the quantitative survey shows that 90% of the IQSs have a sole proprietor, the qualitative case studies suggest that the management of the IQS is not an individual responsibility with clearly defined and delegated responsibilities. This creates confusion around who is in charge of what. Several actors are perceived—and perceive themselves—to be part of the successful running of the school, in many cases meaning that management becomes collective. These actors include not only those who are actively involved with the school, but also stakeholders such as community leaders and imams who often have influence over the school’s vision and the community’s acceptance of integration. Such perceived collective responsibility over the school provides an opportunity for a community-based management structure like the CBMC, where responsibilities can be held collectively. The importance of existing social structures and norms within the IQS communities mean that GEP3 will need to consider how to ensure that all relevant stakeholders are included, and for training to especially target those who hold decision-making authority within communities.

Most CBMCs are established and active, and a large share have received training. The CBMC can only contribute to the improvement of the school environment under the assumption that it is actually established and active. In 13% of the IQSs surveyed the CBMC was not established. This was the case in 20% of IQSs in Bauchi, versus 7% in Niger. While most CBMCs appear to be active (as indicated by having met during the past school year), the average attendance rate at the last meeting was less than half of the members (see Table 7). While CBMCs in Bauchi met almost twice as often as those in Niger, the attendance rate was lower. Approximately 60% of CBMCs had received some sort of training during the last two years.

CBMCs have considerable community representation, although women are a minority and children are hardly included. Parents make up most of the members in a typical CBMC, although in the majority of the IQSs surveyed the CBMC is not chaired by a parent but by the proprietor or head teacher (see Table 7). In all IQSs included in the qualitative study, the Mallam—often also being the proprietor—holds a key position in the CBMC, such as chairperson. There is thus a question around potential conflicts of interest in regard to the CBMC’s monitoring role and ability to hold school leadership to account. Women form a minority among the members, although 87% of all CBMCs had at least one female member. The average female attendance rate at the last meeting was 35%, which is below the attendance rate for all members. Almost no children (defined as anyone under the age of 15 years) are included in CBMC membership. This indicates that at present CBMCs do not provide a forum for girls’ voices and needs to be heard, and for girls to influence investments in the school and broader decision-making related to school management. Interviewed CBMC members mostly consider women to be an important resource of the CBMC as they have the potential to convince mothers to send their children to school. However, gender roles and responsibilities undermine the extent of women’s involvement in CBMCs.

Table 7: Summary of CBMC characteristics

<table>
<thead>
<tr>
<th>For surveyed CBMCs the average...</th>
<th>Of CBMCs...</th>
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</thead>
<tbody>
<tr>
<td>• ... years since CBMC establishment is three years ago; and</td>
<td>• ...37% were established before integration, of which 70% were established the year before integration; and</td>
</tr>
<tr>
<td>• ... membership is 14 members (16 in Bauchi, 13 in Niger), among which: four women, no children, 10 parents and three facilitators; and</td>
<td>• ...55% have the proprietor or head teacher as chair (66% in Bauchi, 45% in Niger);</td>
</tr>
<tr>
<td>• ... attendance rate at last CBMC meeting was 41% (36% in Bauchi, 46% in Niger).*</td>
<td>• ...90% had a meeting during the last school year, with four meetings on average per year (six in Bauchi, three in Niger); and</td>
</tr>
</tbody>
</table>
CBMC members see their roles as broad and covering a range of responsibilities. CBMCs are active in terms of monitoring but there is scope for improvement in school planning and financial management practices. The qualitative research found that CBMC members generally understand their roles and responsibilities but have weak capacity and limited resources to act on them. CBMCs see their role as broad and perceive their main responsibilities to be increasing the awareness of the importance of education for both boys and girls, identifying why children are not enrolled and learning, and to ‘solve’ these problems. While they also perceive promoting facilitator attendance to be part of their responsibilities, monitoring sometimes becomes simply symbolic as CBMC members monitor facilitator performance without prior teaching experience and with a lack of guidance. The quantitative data indicate that CBMCs are active in terms of monitoring. Almost all CBMC chairs indicated having visited the school to monitor its performance during the last term, with the average number of reported visits being seven. Over 80% of CBMC members reportedly monitored pupil and teacher attendance and took action to improve pupil and teacher attendance during the last term. Areas for improvement are school planning and financial management. Only 20% of CBMCs surveyed had completed a WCDP, of which two-thirds could provide evidence about the WCDP. In terms of financial management, only 27% of CBMCs reported using a cash or account book, of which half could present an updated cash book. 70% of CBMCs did report using a bank account to store funds, but only 40% indicated that they kept records of bank deposits and withdrawals.

Resource mobilisation

CBMCs are able to successfully mobilise resources from the communities. The majority of CBMCs surveyed undertake the responsibility of mobilising resources (65% of CBMCs reported cash mobilising efforts in the previous year) and they are reasonably successful in doing so (over 80% of those undertaking these activities reported doing so successfully). In all instances, most of the resources were mobilised from the community, with a small share received from the government, NGOs and other external agencies. 40% of CBMCs in Bauchi and 30% in Niger reported having received a GEP school grant during the last school year. In addition, about 40% of the CBMCs also mobilised non-cash resources, which came exclusively from the community.

Significant resource gaps exist in IQSs and CBMCs’ perceived role is undermined by a lack of funding. The majority of CBMC surveyed had made an effort to mobilise funds during the previous year. Nevertheless, almost half reported that they did not have access to any funds during the last year either because they had not tried to mobilise funds or because their efforts had been unsuccessful, and because they had not received any funds from other sources. Also, the median amount raised was only NGN 20,000, which is small compared to the value of the school grants, which mostly amounted to NGN 120,000 or NGN 150,000. The qualitative research highlights how CBMCs perceive a lack of funds to be hindering their ability to ‘solve’ the problems. At the same time, CBMCs acknowledge that parents have limited capacity to contribute funds. The perception is less that parents are unwilling to contribute funds, but more that parents have limited funds to give. This is underlined by the fact that one of the key reasons why parents send their children to IQSs appears to be due to poverty, and an inability to afford to send children to the public primary school. As IQSs are privately run, either by a proprietor or by a small community, they rely more on resource mobilisation than public schools. By relying on contributions from community members, who may not have funds to give, there is a risk that the work of CBMCs could be diminished as ‘external resources’ run out. CBMC training that focuses on building capacity to mobilise community resources may create unrealistic expectations. Alternative resources will need to be considered, although CBMCs’ capacity to advocate for government resources may be limited as the IQS sector is already under-funded—as evidenced by the lack of facilitator remuneration—and CBMCs (unlike SBMCs) do not have LGA-level and state-level representatives to voice their concerns.
Community involvement

There is good community support for IQSs. As mentioned above, there appears to be considerable community support for integrated schools. This is reflected in many ways, such as community members being part of the CBMC and donating resources. Support by the community is not limited to financial contributions alone but also encompasses moral support and trust, as well as CBMC members being involved in school monitoring. The qualitative case studies indicate that given the IQSs’ embeddedness within the community’s social structures the active support of community and religious leaders seems vital for successful integration and aids tremendously in terms of gaining parents’ support.

However, more community engagement with CBMCs does not always mean community decision-making power. Although parents may be involved in decisions, and actively engage with discussions, that does not necessarily mean that they have decision-making power. Since the Mallam often has a high status, through being the proprietor, the head teacher, a CBMC member and a religious authority, his decision-making authority tends to be strong. Moreover, the involvement of men and women differs significantly in the IQS context. Men make up the majority of CBMC members. When women are members they may not attend, as illustrated by some of the case study schools and the relatively lower CBMC attendance rate.

Roles and responsibilities may be well understood by CBMC members, but they may not always have the capacity to enact them. This could partly explain why increased community involvement does not always correlate with improved activities within schools. Whilst CBMCs generally feel that they are doing a good job, they believe that if faced with fewer capacity constraints—mainly identified as a lack of funds to improve infrastructure and to pay facilitators—they could do better. Whilst CBMC members show a willingness to adopt new skills and knowledge, they face numerous practical challenges when it comes to mobilising resources effectively. Contextual constraints—such as socio-economic factors, their own qualifications, and the challenges of navigating engrained social norms—need to be taken into account when designing capacity building in resource mobilisation for CBMCs. The context in which CBMCs operate also needs to be taken into account when evaluating their efficiency and effectiveness: the case of CBMCs cannot be compared easily to SBMCs in public schools. Moreover, CBMCs tend to be highly embedded in the school structure, dealing with aspects of religious education and general community wellbeing, in addition to aspects of integration. As a result of this broader remit, CBMCs will likely be engaged not only in discussing and managing IQS matters, but also discussing and managing a blend of both Qur’anic and secular learning, as well as community issues external to education matters.

The school environment

IQSs are universally deficient in ‘soft’ and ‘hard’ infrastructure, and provide a poor school environment to the attending children. In terms of ‘soft’ infrastructure, only 3% of IQSs surveyed have a library and only a third have a playground. Only 3% of the schools have some form of mother group, teacher–student association or pupil group where students can come together to share concerns. The qualitative case studies indicate that some corporal punishment is used in all six IQS visited, which pupils perceive to be the main thing they dislike about school, and which deters them from attending school. However, this appears to be also the case in public primary schools, which pupils consider to be less of a safe space. Physical infrastructure is lacking in the majority of schools in both states—with more schools in Bauchi in need of repairs, and children not having access to functional toilets and drinking water at school. 90% of the schools are reported as being ‘in need of major repairs’. Only 40% of the schools have an electricity connection and among those connected to the grid, only 3% actually had electricity on the day of the survey. Only 3% of the schools have access to a water source, 20% of the IQS do not have a physical classroom structure for the students, and only 25% of the schools have a functioning toilet for their pupils. Both facilitators and pupils acknowledge discomfort with the poor school conditions.

Most IQSs do not currently offer a girl-friendly school environment. IQSs have severe shortages of hygiene facilities for girls—among the less than 25% schools with a functioning toilet for pupils, only 8% have
Mobilised resources are invested in the school and girl-friendly investment is considered, but amounts appear insubstantial given the poor conditions of the school environment. CBMCs reported utilising an average of 80% of the total funds raised in the past years on school improvements, although in the majority of cases no evidence could be provided of the investment. Funds are mostly invested in construction works, such as the construction of new buildings, renovation of buildings or construction of toilets and water facilities. Second in order is the procurement of teaching and learning materials. It is interesting to note that despite facilitators receiving little remuneration and, often, few facilitators being available, funds are rarely invested in facilitator recruitment or remuneration. The qualitative case study findings indicate that CBMCs have considered the attendance and retention of girls when allocating resources, with examples of investing in school uniforms (hijabs), toilets and water facilities. However, it is not clear to what extent CBMCs are aware of their role in raising additional resources for girls’ education, or ensuring that GEP3 resources are used for school infrastructure that targets girls’ education specifically. In general, the amount of mobilised resources appears to be insubstantial given the poor conditions of the IQS school environment.

Government monitoring and interaction

There is a variation in the extent of interaction by IQSs with government bodies, although in general it is limited. Respondents in the qualitative study perceive government authorities and ‘externals’ to be the main actors responsible for providing further support to the IQSs. However, IQSs are reportedly rarely visited by LGEA officials or ‘government’, and this was confirmed by LGEA officers. Bauchi IQS appears to have greater interaction. A larger share of surveyed IQSs in Bauchi (44%) reported monitoring visits during the last term, compared to schools in Niger, where only 33% of IQSs reported monitoring visits. This does not seem to be associated with the fact that Bauchi counts more urban IQSs because urban IQSs in the sample are as likely to have received a monitoring visit as rural IQSs. Also, more head teachers in Bauchi reported training conducted by SUBEB and the LGEA. This holds true for training received by CBMC members as well. The two higher performing case study IQSs perceive government officials to be more present.

Government officials cite challenges in reaching all the schools on a regular basis, which undermines their contribution to efficiently monitoring and supporting the IQSs, and negatively affects communities’ perceptions about government support. Officials perceive the challenge of attempting to visit 30 schools...
and more on a regular basis to be unmanageable, given the distances concerned, the lack of transportation in many cases, and their workloads. When visits do occur, local government officers’ engagement with communities occurs through the head teacher/Mallam/proprietor, and they see their role as providing supervision and advice on teaching and management practices, and offering instruction and correction based on their observations. Communities generally view support from the government negatively, considering government actors to be unreliable. Since IQSs look to government for financial support or support of facilitators, the lack of government interaction and support may have implications for community attitudes towards integration.

5.3.3 Contribution Claim 3: More effective teaching of formal subjects and an improved, girl-friendly school environment contribute to improved learning levels, particularly among girls

This section focuses on the baseline data of pupils’ learning outcomes in IQSs, the main final outcome variable in the ToC of GEP3’s IQSS. The IQSS intervention is expected to improve learning outcomes in basic literacy and numeracy, especially for girls. It is also expected to improve retention and, to a lesser extent, enrolment of girls. To start with, we provide background information on pupil characteristics, attitudes and school participation, which corresponds with some of the assumptions underlying Contribution Claim 3. Next, we present the baseline learning levels of pupils in Hausa and English literacy and numeracy. Finally, we discuss qualitative findings about factors that influence retention, a secondary outcome in the ToC.

<table>
<thead>
<tr>
<th>Summary of evidence related to evaluation questions</th>
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</thead>
<tbody>
<tr>
<td>Q7: To what extent have pupil literacy and numeracy skills, especially of girls, improved in GEP3-supported IQSs? How has GEP3 contributed to such improvement?</td>
</tr>
<tr>
<td>To what extent does the IQSS contribute to reducing the gap between learning outcomes and expected learning outcomes, as expressed in the curriculum?</td>
</tr>
<tr>
<td>Pupil performance is very low, particularly in literacy, which may be associated with facilitators’ low teaching competencies and a deficient school environment. Barriers with regards to pupils’ continued participation in the education process, attitudes towards girls’ education, and language diversity are likely to also affect learning. IQS mobility and pupils attending other schools require further investigation.</td>
</tr>
<tr>
<td>Pupils’ literacy levels are very low in both Hausa and English. The vast majority of Grade 2 pupils assessed displayed literacy levels associated with pre-school pupils. Furthermore, most of these pupils are a long way from the cut-off associated with emerging literacy skills (those associated with the P1 curriculum). Numeracy outcomes are better, with 69% of children displaying emerging numeracy skills. However, a small minority (11%) had P2 grade-level numeracy skills. The very low level of learning is generally consistent across groups, although the performance gap between girls and boys widens at the stage in the lifecycle typically associated with puberty.</td>
</tr>
<tr>
<td>Girls and boys appear to be attending IQSs equally. However, both face challenges in regard to attending and remaining fully engaged with the learning process because of out-of-school responsibilities, which are linked to household poverty and the need for children to support the family’s livelihood activities. Although pupils largely reported speaking Hausa at home, and classroom instruction appears to be taking place in Hausa as well, teaching is not always taking place in the mother tongue of the pupils, in particular in Niger where almost of half of pupils report speaking Nupe at home.</td>
</tr>
<tr>
<td>To the extent that IQSs are mobile, girls’ learning is likely to be affected. IQS mobility needs to be verified at midline and monitored regularly, with special attention to Tsangaya IQSs in Bauchi, which have traditionally had a nomadic culture. A large share of children studying in IQSs attend another school as well. This may affect the time that pupils have available to attend the integrated</td>
</tr>
</tbody>
</table>
curriculum classes. It may also constitute an alternative explanation for changes in learning outcomes.

Q8: What are the attitudes of, and acceptance by, community members and leaders toward integrating formal subjects in Qur’anic education? How have these attitudes and how has this acceptance changed during the intervention? Why? How have attitudes changed in regard to girls receiving formal education?

The qualitative case studies indicate that integration has gained acceptance but that it needs to happen gradually, without affecting religious education. Attitudes towards girls’ education are perceived to be changing but barriers remain.

The integrated curriculum has largely gained acceptance in the case study communities. Integrated Qur’anic education now seems to be an integral part of the schools in which it is situated, although the depth of integration varies among IQSs. Communities perceive the acceptance of formal education to have increased. This is owing to a combination of ‘outsiders coming and explaining’ (in the form of sensitisation campaigns) and people seeing the positive outcomes of receiving formal education. However, it is seen as important that integration happens gradually, and for the IQSs not to transform into public primary schools, which could negatively affect religious teaching.

Boys and girls view the value of education for their future life differently. However, IQS management and facilitators say that girls’ interest in formal subjects has increased. Barriers related specifically to attitudes towards girls’ education persist, although attitudes towards girls’ education are perceived to be changing, and parents and communities do appear to be willing to reflect on and reconsider the roles, responsibilities and capabilities of girls. Early marriage of girls constitutes an important barrier to continued education for girls over the age of 10.

Q9: What unintended consequences does IQSS have for teachers, head teachers, pupils and proprietors within the IQSs, as well as for the broader school community?

To be answered after IQSS intervention.

Pupil characteristics, attitudes and school participation

Hausa is the most common, but not the only, language of the immediate environment. A majority of the pupils reported speaking Hausa at home (75%), followed by Nupe (22%) and Fulfude (2%), with no student reporting speaking English at home. As depicted in Figure 13, there are considerable cross-state differences in terms of language spoken at home. While almost all pupils have Hausa as their mother tongue in Bauchi, this is the case for only 54% of pupils in Niger. In this state Nupe is also commonly spoken at home.
Teaching within schools is not necessarily taking place in the mother tongue of the pupils. Classroom observations and head teacher interviews indicate that Hausa and English are the two main languages used in the classroom. Therefore, teaching at the IQSs is not necessarily taking place in the pupils’ mother tongue. In particular in Niger, Nupe is under-used relative to the proportion of pupils who speak it at home.

Both boys and girls seem to attend IQSs equally, and girls are on average older than boys. The gender ratio appears quite balanced across both states, although due to the difficulty of not having formal enrolment records, this finding is not representative of the sample as whole. School attendance data corroborate this finding: just as many girls as boys were attending integrated subject classes in IQSs on the day of the survey visit. This finding supports targeting IQSs as a means of educating girls. At any particular level, girls are slightly older than boys, which suggests that they are entering school later or are more likely to repeat a year.

The number of pupils enrolled or attending formal classes varies considerably across IQSs. Among IQSs with enrolment records, enrolment ranges from as little as 20 pupils to as many as 400 pupils, a majority of which are at the P1–P3 (early grade) level. Similarly, at the time of the lesson observations one facilitator taught between four and 147 children, with a median of 40 pupils per facilitator.

A large share of children studying in IQSs attend another school as well. 40% of pupils reported currently attending another school beside the IQS. This did not vary much by gender. However, there were significant cross-state differences, with 72% of pupils in Bauchi as compared to only 13% pupils in Niger reporting attending other schools. In Bauchi, most of these children were attending a public primary school (94%) as compared to 55% in Niger. The qualitative data support the finding of children attending IQSs, along with public schools. Lack of funds is the key factor why children, and in particular girls, may attend only the IQS, although the qualitative research indicates that some girls do not attend public primary schools due to parents not ‘valuing education for girls’. In cases where parents may not wish to send girls to the public primary school (either for cultural or economic reasons) the IQS offers an opportunity for girls to access formal education. However, there is some risk that following the introduction of secular teaching at the IQS, parents may refrain from sending their daughters to public primary schools and send them to the IQS only, in order to save money. It is important to note the fact that pupils are attending other schools,

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40 Only 30% of IQSs surveyed had enrolment records.
particularly in Bauchi, because there is some likelihood of spillover effects of interventions at the local primary schools on outcomes at the IQSs. Furthermore, this ‘double dipping’ may affect the time that pupils have available to attend the integrated curriculum classes.

Boys and girls view the value of education for their future life differently, although girls’ interest in formal subjects is perceived to have increased. In all schools, pupils consider formal subjects to be important for both boys and girls. In several IQS communities, stakeholders (including boys) perceive girls as being too focused on marriage, and they believe that this affects their attendance and interest in school. However, IQS management and facilitators perceive an increased interest in formal subjects among girls. They attribute this to the activities of CBMCs and facilitators encouraging girls.

Pupils’ learning outcomes

Pupils’ literacy levels are very low in both Hausa and English. Only 2.5% of the pupils in Bauchi and Niger were able to complete some of the tasks within the basic Hausa literacy range. A further 1.8% of pupils were able to demonstrate emerging literacy skills, while the vast majority of pupils were found to have only pre-literacy Hausa skills. Figure 14 represents the distribution of performance in Hausa literacy. The axis represents the Hausa scale score derived from the psychometric analysis of pupil performance on the assessment. The peak of the distribution falls well below the cut-off point between pre-literacy and emerging literacy, indicating that making large gains in the percentage of pupils moving from pre-literacy to emerging literacy will require substantial effort. A similar pattern exists for English literacy. Again, a large majority of pupils have yet to acquire any knowledge or skills beyond pre-literacy, while 3.4% of pupils were able to demonstrate some of the knowledge and skills that fall within the emerging literacy range and 2.4% were able to demonstrate some of the skills that fall within the basic literacy range. This suggests that pupil proficiency in English after a year of schooling is slightly higher than pupil proficiency in Hausa.

Many children are on the cusp of achieving emerging numeracy though gains in the percentage of pupils achieving basic numeracy will be more challenging and will require more effort. As can be seen from Figure 15, the cusp of the distribution for numeracy achievement falls just above the cut-off point between pre-numeracy and emerging numeracy. This indicates that large gains in the percentage of pupils falling within the emerging numeracy range could be observed as many children are on the cusp of achieving emerging numeracy. Achieving gains in the percentage of pupils achieving basic numeracy will be more challenging and require more effort.
**Figure 14:** Distribution of Hausa literacy proficiency

<table>
<thead>
<tr>
<th>Score</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>848.81</td>
<td>2.5%</td>
</tr>
<tr>
<td>799.60</td>
<td></td>
</tr>
<tr>
<td>759.89</td>
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<td>668.05</td>
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<td>655.91</td>
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<td>643.14</td>
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<td>612.97</td>
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<td>574.30</td>
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<td></td>
</tr>
<tr>
<td>344.18</td>
<td></td>
</tr>
<tr>
<td>263.23</td>
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</tr>
</tbody>
</table>

2.5% of the pupils demonstrated Grade 2 Hausa literacy skills. This level of proficiency can be described as **basic literacy**.

1.8% of pupils demonstrated knowledge and skills within the range expected by the P1 curriculum. This level of proficiency can be described as **emerging literacy**.

Over 95.7% of pupils demonstrated pre-literacy Hausa skills. Children achieving within the **pre-literacy proficiency range** do not yet have emerging literacy skills.

**Source:** GEP3 Baseline survey 2015
The very low level of learning is generally consistent across groups, although the performance gap between girls and boys widens at the stage in the lifecycle typically associated with puberty. All age groups typically achieve within the Hausa pre-literacy proficiency range, and there are no substantial differences between the achievement of boys and girls within each age level (with the exception of four- and five-year-olds). This trend is somewhat different for English literacy and numeracy. For English literacy, mean scale scores for all age categories are again below the cut-off point between pre-literacy and emerging literacy. However, girls’ performance declines, as compared to boys, around puberty (aged 12 or so). Similarly, the numeracy performance gap between boys and girls widens around puberty, with girls’ performance declining as compared to their male counterparts. It is also noteworthy that across Hausa, English and numeracy assessments, pupils in Bauchi performed slightly better than pupils in Niger, which may be related to the greater language diversity in Niger or more pupils in Bauchi attending public primary schools at the same time as attending the IQS.

**Barriers to attendance and retention**

Continued barriers to girls’ educational access and retention exist – among others related to attitudes towards girls’ education (although attitudes are perceived to be changing). The qualitative research highlights that girls’ attendance and retention in IQSs continues to remain a challenge, with persistent barriers related specifically to attitudes towards girls’ education. Lack of awareness of the importance of education, in particular for girls, was widely cited as a reason for low attendance. However, stakeholders perceived attitudes towards girls’ education to be changing, and parents and communities do appear to be willing to reflect on and reconsider the roles, responsibilities and capabilities of girls.

**Financial capacity constraints have a critical bearing on attendance and retention.** Changing attitudes alone, say through CBMC activities, may not be sufficient to bring about change in behaviour as poverty is often cited as a critical reason why parents do not send any of their children to any school, public primary...
or IQS. While IQSs may not charge a fee or require investment in school uniforms, poverty remains a barrier to access for some children, owing to the opportunity cost of schooling, which is linked to the role that children (and particularly girls) play in supporting the family’s livelihood activities (see below). CBMC and school leaders in all six case study schools, for example, felt that they could not insist on payment from parents as this would turn parents away. They believe that resource constraints of the community limit the capacity of school management to invest in IQSs, which may, in turn, affect the quality of education provided and the capacity to retain girls.

**Out-of-school responsibilities affect children’s school attendance.** Across the six case study schools, boys and girls were all responsible for income-generating activities, or for helping with household chores. Whilst school stakeholders attributed this to a perceived lack of prioritisation of children’s education, parents tended to view this as a financial and practical necessity. Mothers are perceived to be less positive about girls’ education and more often hinder their attending school because girls’ school attendance means the mother cannot generate as much income as is needed. Unmarried daughters fulfil a key role in the running of home-based businesses in northern Nigeria (either by directly engaging in income-generating activities, such as hawking, or taking care of household chores so as to allow the mothers to engage in income-generating activities), where women are key income generators for the family. The gendered political economy of this reality is one that the ToC of GEP3’s IQSS does not address when it comes to ensuring that girls are able to not only access IQSs, but also to remain fully engaged consistently and long enough for learning to occur.

**One of the main reasons stated for low enrolment and retention of girls is early marriage.** Whilst the acquisition of formal education, including for girls, may be gaining acceptance in the six IQS case study schools, early marriage is still prevalent. This is particularly problematic for girls over the age of 10 who are acquiring a basic education for the first time. While provisions are often made for girls to continue education after marriage, this is dependent on the willingness and attitude of the husband in regard to allowing his wife to attend school. Thus, though attitude changes by parents are important in the years before marriage (and in negotiating a marriage), changing the attitudes of men likely to marry girls in the community is likely to be equally essential.

**The nomadic culture of some IQSs could have direct implications for learning outcomes, especially for girls.** If an IQS were to move, there could be direct impacts on learning outcomes as the boys moving with the Mallam may result in them not receiving any formal education for months, unless the Mallam were also teaching formal subjects. For girls, similarly, there would be uncertainty as, if they do not move with the school, their access to formal education would depend on whether formal subject teaching continued in the absence of the Mallam and the male pupils. It is important to explore this further at midline, and, as part of the implementation of GEP3 going forward, it may be necessary to consider how this information can be verified and tracked as part of the monitoring process at the LGA level.
6 Conclusions and recommendations

This report has synthesised a variety of findings from the baseline data collection of the multi-year evaluation of GEP3. It is accompanied by the Baseline Technical Report. The findings—some drawing attention to the weaknesses of, and others supportive of, the key aspects underpinning GEP3’s ToC; an impact evaluation of GEP3’s early learning intervention; and a performance evaluation of GEP3’s IQS—aim to capture the education situation, answer specific evaluation questions and to provide evidence to inform the ToC and project implementation. Here we reiterate and discuss some of the key findings, and offer recommendations for improvements that reflect the implications of the baseline findings for GEP3.

6.1 Conclusions

Key conclusions: GEP3 ToC

The plausibility of the re-designed GEP3 ToC is backed by its potentially synergetic, coherent logic and stakeholders’ common understanding of its main objectives and overarching strategy. GEP3 seeks to holistically improve education access, quality and governance, with each output having the potential to strengthen the achievement of each other output. There are also synergies across interventions: in particular, SBMC capacity development can reinforce interventions related to girls’ enrolment, girls’ retention and effective teaching. Stakeholders commonly recognise that GEP3 is seeking to improve girls’ educational outcomes, particularly increased girls’ enrolment – represented by its target of getting 1 million additional girls into school. Stakeholders have relatively good knowledge of GEP3’s overall strategy and acknowledge that the re-design has improved the project’s focus.

However, critical assumptions remain highly uncertain. Critical assumptions related to the management and resourcing of the education system are highly uncertain – in particular, the release of government funding, school investment and human resource capacity remaining on a par with increased enrolment, effective monitoring at the school and intervention level, and SBMC’s ability to deliver on its multiple project responsibilities. The fact that some of these assumptions are targeted with strengthened effort as part of the re-design enhances plausibility. However, the effectiveness of such efforts depends on operationalisation and effective delivery, the scope and strategy of which are not always clear to stakeholders, and which are subject to government capacity and contextual constraints (such as security concerns).

SBMCs and MAs have a pivotal role to play in the success of many interventions. SBMC/CBMC/MA functionality and capacity to undertake the multiple roles assigned as part of GEP3 interventions is a critical assumption of GEP3’s ToC and requires close monitoring. The expectations placed on SBMCs are high and the capacity building and empowerment process is starting from a low base, particularly in IQSs. They face greater challenges within IQSs, as their empowerment is based on a larger number of assumptions (such as the assumption that they are actually established, in the first instance, and the assumption that there is acceptance of integration).

Improved capacity of teachers to deliver effective learning for girls is understood to be vital to improving learning outcomes, but stakeholders were not well aware of the training approach and outcomes. Teaching quality is generally considered to be low and a range of factors are likely to play an important role in improving it. These are often not – or only indirectly – under the control of the project, such as teachers’ initial competency level, their deployment and their remuneration. IQSs present greater challenges, which require attention from GEP3 and need to be taken into account in the design of interventions.

The plausibility of GEP3’s scale-up approach is dependent on uncertain government funding and varies across interventions. Scaling up interventions is more plausible where their objectives are well recognised by state partners as being important, a supporting institutional framework is in place and funding sources are relatively well defined. Plausibility of scale-up is undermined by the fact that stakeholders did not have
a clear understanding about how scale-up would happen. The scale-up of the IQSS is particularly uncertain because the institutional mandate over IQSs is unclear, and due to the SAMEs’ limited and uncertain access to resources, the limited number of well-established IQSs available for scale-up, and supply-side constraints—particularly with regards to facilitators.

Whilst the project makes a concerted effort to involve a variety of stakeholders with and through state education partners, their involvement in operational planning remains uneven across interventions. Government involvement remains externally driven and influenced by changes in staffing and other external conditions. Nevertheless, the involvement of a broad range of stakeholders is a perceived strength of GEP’s implementation strategy. Identifying and addressing where government capacity building needs are the highest, especially at the local level, is essential for GEP3’s successful implementation. Monitoring capacity is rightly emphasised in GEP3’s re-design as it is considered a key operational process for project, but its operationalisation has yet to advance. Several GEP3 interventions are designed to be specifically equity enhancing, empirical verification is required as to whether the most vulnerable households and groups are able to benefit and actively participate in GEP3 interventions. GEP3 is no longer operating in LGAs with the highest gender gap in all states.

**Key conclusions: Early learning intervention**

The evidence on learning outcomes points to very low levels of Hausa and English literacy. A large majority of pupils have not acquired the knowledge and skills expected by the Nigerian curriculum in Hausa literacy, nor have they acquired either emerging or basic English literacy skills. Most pupils score well below the cut-off point between pre-literacy and emerging literacy, indicating that achieving large gains in the percentage of pupils moving from pre-literacy to emerging literacy will require substantial effort. Knowledge of phonics in particular is found to be most challenging in regard to both Hausa and English literacy. The early learning intervention will need to take these caveats into account when promoting a phonics approach to teaching.

Learning outcomes are differentiated by age, gender and type of school, with older male students in particular performing better than older girls. Regression analysis indicates that whilst teacher characteristics do not appear to be associated with learning outcomes, pupils’ individual characteristics and socioeconomic background, as well as school type, are associated with pupil achievement. The lack of association between teacher-level factors and learning outcomes could reflect the fact that competency levels are very low across all teachers. It is likely that a stronger correlation would be detected if there were greater variation in competency levels across teachers, and that their ability to influence pupils’ learning outcomes would be higher. The finding that wealthier children may perform better than their poorer counterparts is an indication that poverty could be a critical factor negatively influencing child learning. The finding that students in IQSs perform better than those in public primary schools after controlling for several factors is interesting but difficult to explain.

IQSs and public primary schools offer greatly different contexts. Teacher characteristics vary across the two school types, as do school size, school management, external school monitoring, access to infrastructure, and pupil characteristics. Teacher and head teacher capacity development will need to be appropriate for these different contexts. A considerable number of IQSs only have a single facilitator of the integrated curriculum subjects, which has implications for implementing RANA’s school-based peer mentoring.

Teachers demonstrate very limited knowledge and skills in the majority of the areas required to function effectively as a teacher. Almost none of the teachers display any pedagogical knowledge and skills, and most appear unable to ascertain which activities are best suited to improve pupil performance or support girls in their learning within classrooms. Over 60% of teachers are unable to display competence in Grade 1 and 2-level Hausa. Hardly any teachers are competent in writing and interpreting words and phrases. The low Hausa knowledge is significant for an intervention that focuses on teaching in Hausa because it is likely to negatively affect teachers’ ability to pass their knowledge on to pupils. There are very few differences in the levels of knowledge demonstrated by different groups of teachers. For example, no differences were
noted between teachers in public primary schools versus IQSs, or between teachers that attended previous GEP/UNICEF training and those that did not.

**Hausa is used extensively as the main language in teaching, but the use of Hausa teaching and learning materials is very rare.** All teachers report speaking Hausa and a majority report speaking English. All pupils report speaking Hausa at home. Hausa was used in all classes observed during the survey, while English was also used, particularly in public primary schools. This validates the assumption that Hausa is the language of the immediate environment for the pupils and the most common language used in class. The availability and use of Hausa materials in class was rarely observed. The emphasis on Hausa-based teaching and the distribution of Hausa teaching and learning materials is therefore relevant. A key point of attention is that the teacher training and teaching materials need to be carefully adapted to the low level of Hausa literacy skills among the teachers.

**Overall, teachers consider their role to be important and enjoy working as teachers, whilst being conscious of the fact that they are limited in their ability to contribute to pupils’ learning.** The evidence points to teacher motivation being relatively homogenous across different disaggregations (rural/urban, school type etc.). High teacher-to-teacher interaction scores suggest a relatively high level of collaboration among teachers, which could help the development of spillover effects within schools of any teacher-specific interventions.

**Key conclusions: IQSS**

1. **Contribution Claim 1: GEP3’s IQSS contributes to more effective teaching of formal subjects in IQSs**

GEP3’s contribution to more effective teaching assumes that IQS facilitators’ knowledge and skills and gender-sensitive class practices can be improved through training and mentoring. Baseline evidence suggests that there is a need for further expansion and deepening of facilitator training. Facilitators demonstrate very low levels of pedagogical knowledge, something that will not only hinder effective teaching but that must also be borne in mind in designing effective training programmes. Subject knowledge levels are also low, with 66% of facilitators failing to display competence in Grade 1 and 2-level Hausa. GEP3 also needs to take account of the fact that facilitators themselves, as well as community members, may not perceive their lack of competence to be a cause of low pupil performance.

The modalities of this training can also be improved. For example, it was found that appropriate facilitators do not always get trained. Knowledge and dissemination strategies at school level also need to be considered, to reinforce impact, although it also needs to be considered that a quarter of IQSs only have one facilitator of non-religious subjects, which will constrain a mentoring process that is based on school-based peer interaction.

Moreover, evidence at baseline suggests deeply ingrained gender biases among facilitators, who are mostly male, towards girls’ education. And whilst facilitators display gender-sensitive techniques, the classroom space continues to impose a gender bias. It is, therefore, important to deliver gender-sensitive techniques in the classroom, with the support of increasingly transformed gender-sensitive attitudes amongst the facilitators themselves.

Another assumption underpinning GEP3’s contribution to effective teaching is that mentoring of facilitators can increase their motivation, leading to more effective teaching. This assumption is borne out to some extent—the baseline survey found that pedagogical leadership influences motivation, as facilitators who meet head teachers individually reported being more motivated than others.

Facilitators’ motivation is shaped by issues of remuneration, social status and community roles and relations. Motivation, and its translation into teaching efforts, is influenced by the very basic and practical underpinning of an IQS facilitator’s economic needs and responsibilities, and how, in the absence of adequate remuneration (and the status that this makes more likely), these may conflict with facilitators’
well-intentioned commitment to being engaged in teaching the integrated curriculum. The lack of remuneration is likely to affect facilitators’ motivation to teach, and makes it difficult to attract qualified facilitators and hold them accountable.

Integrated education in IQSs appears to have gained acceptance but it is implemented to varying degrees. A substantial portion of IQSs contacted for the survey were found to be non-integrated and few IQSs provide all core subjects of the integrated curriculum. This may be related to the fact that integration has occurred relatively recent, and that only a limited number of hours are dedicated to non-religious subjects. Also, facilitator attendance seems to be flexible, with non-religious subjects being taught as and when a facilitator is available. A more structured, intensified teaching programme will be hard to enforce because baseline results suggest the need for integration to be gradual and for the school to retain its Qur’anic character. Moreover, it is difficult to hold unremunerated facilitators to account. Nonetheless, the diverse IQS context may offer the opportunity to identify IQSs that positively deviate and can act as role model for others.

GEP3 assumes that the distribution of Hausa teaching and learning materials can support effective teaching. The baseline found that the availability of teaching and learning materials is very low in most IQSs, which suggests that there is a need for such materials. However, these materials will need to be carefully tailored to the very low levels of skills and knowledge amongst both facilitators and pupils, in order for them to play a useful role. Furthermore, it is important to consider that for a considerable share of pupils in Niger Nupe is the language of the immediate environment.

The appointment of a head teacher appears to depend on social status rather than qualifications, which raises challenges related to who to target for head teacher training. This challenge arises because the assigned heads may not be the most qualified to take up the pedagogical leadership, but they may have the social status and clout needed to undertake moral leadership duties. Pedagogical leadership seems to be shared amongst many stakeholders, with CBMC members guiding head teachers, head teachers advising facilitators, and proprietors and community leaders offering their perspective. A lack of clarity about leadership roles makes it difficult to identify whose leadership capacities to build. Furthermore, it may be that there is no clear ‘candidate’ for head teacher/pedagogical leader, as in some cases no one in the community has any formal education beyond secondary school. Head teachers’ record-keeping abilities were notably poor and this could be an area to focus on going forward.

2. Contribution Claim 2: GEP3’s IQSS contributes to an improved, girl-friendly school environment in IQSs

The main pathway to achieve increased community involvement in IQSs and to mobilise greater resources is the strengthening of CBMCs and school management. Baseline evidence suggests that school management in IQSs is seen as a collective effort, without clearly defined and delegated roles. It will, therefore, be important for the CBMC to take into account and incorporate the voices of key community figures, given the influence they may have on the success of integration. The CBMC can only contribute to improvements if it is established and functional, and this is not currently the case for all GEP3 IQSs. It will also be important for women and children’s voices to be heard in CBMCs, to ensure girl-friendly school investments. The baseline findings point to deficiencies on this front at present, partly because gender norms seem to affect women’s participation in CBMCs.

One of the critical roles of CBMCs is in mobilising funds. While CBMCs are able to mobilise resources from the community, significant resource gaps remain in IQSs, and CBMCs’ perceived role is undermined due to a lack of funding. Gaps in resource mobilisation can be traced to parents’ inability, rather than unwillingness, to contribute funds. These limitations in the scope for raising resources from the community need to be taken into account by GEP3 when designing its training module on resource mobilisation for CBMCs.
While CBMC training can be a useful tool to further guide CBMCs in the implementation of their roles and responsibilities, CBMC members may not always have the capacity to fulfil these roles and responsibilities due to resource constraints. Further training of the CBMCs should go beyond their duties in regard to sensitisation, which seem to be well understood, and should develop more their capacity in monitoring, formal school management practices and ensuring that girls’ education is actively supported in the IQSs. This can include the ability to more rigorously engage with the facilitators on their attitudes and teaching behaviours, and a greater sense of accountability on the part of the CBMCs to ensure a girl-friendly learning environment.

IQSs are universally deficient in ‘soft’ and ‘hard’ infrastructure, and provide a poor school environment for the attending children. The school conditions are not always conducive to a girl-friendly environment, despite the fact that girls appear no less likely to be attending an IQS compared to boys. Evidence suggests that school leaders and CBMC members are willing to reflect on ways to improve gender equity in school planning, and this should be noted in any planning going forward. Moreover, the baseline study reveals that the presence of a strong female role model can alter perceptions among mothers and girls. The most important factor improving a girl’s agency, however, appears to be the attitude of the facilitator, and whether he/she is empowered.

Challenges remain in the monitoring of IQSs by local government, with officials indicating that they struggle to regularly visit the large number of schools allocated to them. However, this means that follow-through on CBMC effectiveness is difficult, with each IQS operating in what appear to be largely unstructured and contextually driven circumstances. Community perceptions regarding the role of the government also tend to be negative.

3. Contribution Claim 3: More effective teaching of formal subjects and an improved, girl-friendly learning environment contribute to improved learning levels, particularly among girls

Girls and boys appear to be attending IQSs equally. At any particular level, girls are slightly older than boys, which suggests that they are entering school later or are being held back more than boys. A majority of the pupils have yet to acquire basic literacy in Hausa or the knowledge and skills expected in English literacy. Many children are on the cusp of achieving emerging numeracy though gains in the percentage of pupils achieving basic numeracy will be more challenging and will require greater effort. Girls’ performance in English literacy declines, as compared to boys, around puberty (aged 12 or so), and performance gaps in numeracy also appear to widen around this age group as well.

Girls’ interest in improving their learning outcomes and boys respecting girls being educated are assumptions underlying Contribution Claim 3. The baseline findings suggest that CBMCs’ activities have contributed to an increase in girls’ interest in formal subjects. However, boys and girls continue to perceive the value of education differently. Stakeholders (including boys) perceive girls as being too focused on marriage, and believe that this affects their attendance and interest in school.

A large share of children attend more than one school at the same time, particularly in Bauchi. This means that changes in the quality of education in the other school may form an alternative explanation for improvements in learning outcomes. The research identifies poverty and parental attitudes as key factors relating to why children, and in particular girls, may only attend an IQS. When faced with binding economic or cultural constraints, IQSs offer an opportunity for children’s, particularly girls’, exposure to formal education. However, there is some risk that following the introduction of secular teaching at the IQS, parents may refrain from sending their daughters to a public primary school and send them to the IQS only, in order to save money.

Evidence points to two discrete, albeit interacting, issues that undermine girls’ access and retention in school – the cost of schooling, and some persisting resistance amongst parents to secular schooling for girls. However, attitudes towards girls’ education are perceived to be changing, and parents and communities appear to be willing to reflect on, and reconsider, the roles, responsibilities and capabilities of
girls. Changing attitudes alone, say through CBMC activities, may, however, not be sufficient to bring about behaviour change as the financial constraints of parents are highlighted as having a critical bearing on educational access. Given such constraints, financial constraints will limit the capacity of school management to invest in IQSs, which may ultimately impact the quality of learning, as well as the capacity to retain girls.

The role of women as economic agents and as key income generators for the family, with resultant responsibilities for girls to contribute to running home-based businesses in northern Nigeria, affects girls’ school attendance and learning process. Whilst sensitising women is critical to improving girls’ involvement in education, on its own it is unlikely to be sufficient given the gendered political economy of the context in which GEP3 operates.

Men also play a critical role in girls’ lives, particularly in relation to early marriage. The qualitative case studies indicate that early marriage is prevalent, and is stated as one of the main reasons for low enrolment and retention of girls. When faced with early marriage, provisions may be made for the girl to continue her education post-marriage, but this is heavily dependent on her husband’s discretion. Thus, though attitude changes by parents are important in the years before marriage (and in negotiating a marriage), changing the attitudes of men likely to marry girls in the community is likely to be equally essential.

6.2 Recommendations

GEP3-wide recommendations

1. The project partners should continue their political engagement to ensure government funding is leveraged, with an increased emphasis on the project scale-up and IQSS. In line with the recommendations of the 2015 Annual Review and the EDOREN political economy analysis, the project partners need to put political engagement for effective resource provision for girls’ education at the centre of GEP3’s ToC. The project team should systematically track and report on government project expenditure to facilitate this engagement and accountability. Project partners should come to a common understanding of how project scale-up can happen, plan for agreed targets as part of institutionalised planning processes, and monitor and account for their progress. An agreement on how IQSS can be scaled up and funded is particularly needed. The GESC should be used as a regular platform to coordinate advocacy for government funding and to facilitate the monitoring of key project assumptions. As part of government engagement, learning and retention need to receive stronger attention as core project objectives, together with the critical assumption that supply-side investment needs to respond to increased girls’ enrolment.

2. The project should specify and communicate operational objectives and strategies, strengthen their monitoring and strengthen the monitoring of underlying assumptions, and feedback monitoring information to facilitate learning and accountability. Government and other implementing partners that are involved in, or are supervising, intervention execution should be made more aware of, and need to agree on, who the interventions intend to reach, how, when and with what specific objectives. The monitoring of intervention delivery, of its operational assumptions (e.g. the assumption that the intervention target group will be reached) and of its support supervision, needs to be strengthened. The monitoring data need to be systematically discussed among project partners, to enable learning and accountability. The use of data in general – including ASC data, among other kinds – should not be taken for granted. Activities to promote data use should be embedded in GEP3’s strategy.

3. SBMC/CBMC monitoring and support supervision need comprehensive and systematic emphasis. We support GEP3’s emphasis on SBMC/CBMC capacity building and effectiveness monitoring because of their pivotal role in the project’s ToC. The monitoring and support supervision needs to be comprehensive with regards to the multiple roles that SBMC/CBMCs play in GEP3-supported activities and the school-level results that SBMC/CBMCs are expected to achieve. The monitoring should also
collect feedback about the support supervision itself, particularly in IQSs, since this is an important component of the capacity building approach. CBMC effectiveness monitoring needs to receive particular attention, given their recent institutionalisation and the complex context in which they exist. The monitoring and support supervision needs to be regular, backed by adequate resources and reported on systematically. Monitoring findings need to be discussed with state and responsible local government officers involving SBMC local and state representation structures. The empowerment of these SBMC structures is a promising mechanism by which to facilitate continuous and gradual learning among peers and to provide voice and a sense of self-efficacy to the SBMCs and MAs.

**Recommendations for the early learning intervention**

1. **The teacher training and teaching materials need to be designed taking into account the low competency levels of the teachers and teachers’ subject specialisations.** The baseline findings highlight that teachers’ knowledge and skill levels are very low, including in basic Hausa literacy and in assessing pupils’ performance. The RANA intervention will need to be carefully tailored to existing knowledge and skill levels to ensure that training content and materials are pitched at the right level, and that training is sufficiently intensive to fill the large gaps in teachers’ subject, pedagogical and curriculum knowledge. In addition, the intervention team needs to carefully consider its teacher targeting approach, as it cannot be assumed that all teachers are involved in Hausa literacy teaching. The baseline findings indicate that a large share of teachers only teach one subject, and that mathematics is one of the two main subjects taught.

2. **The RANA team needs to assess whether its approach to pupil literacy improvement is appropriate for the very low pupil learning outcome levels and teacher competency levels, and to adapt teacher training and learning materials if needed.** Pupil learning outcome levels are currently very low and levels fall well below the cut-off point between pre-literacy and emerging literacy. Assessment items that require knowledge of phonics rank as the most difficult items in both the Hausa and English assessments. The intervention team needs to take this into consideration in its approach to pupil literacy improvement.

3. **Teacher capacity development needs to incorporate actions to change teachers’ awareness and perceptions of teachers’ self-efficacy.** Teachers perceive pupil effort to be the cause of low pupil performance, rather than their own competencies and teaching practices. However, it is likely that their own low level of competency contributes to low pupil performance. The capacity building should support teachers’ reflection about the link between their own competencies and pupil performance; and should build teacher motivation and accountability for improving pupil learning outcomes.

4. **The RANA community engagement component and the teacher training should, to the extent possible, address pupil and household factors that influence learning.** The regression model indicates that pupil and household characteristics are associated with learning outcome levels. RANA is well placed to offset some of the effects of socioeconomic background on learning outcomes by promoting a more supportive home learning environment for all children through its community engagement component.

5. **The peer mentoring approach needs to be adapted to schools with only one targeted teacher.** The baseline findings indicate that 40% of IQSs have only a single facilitator of the integrated curriculum subjects. Therefore, the school-level peer mentoring in its current form is not applicable to a large proportion of IQSs. It is recommended that the project identifies alternative ways of ensuring that trained teachers can provide peer support, possibly by engaging with teachers from different but nearby schools.

6. **RANA needs to sufficiently strengthen the capacity of IQS government stakeholders to ensure that they provide effective monitoring and support supervision to IQSs.** The baseline data indicate that
IQSs receive relatively limited external monitoring and supervision visits. Given their complex context, they are likely to need continuous support and feedback even more than public primary schools. RANA should not assume that IQS government stakeholders have the capacity to conduct monitoring and support supervision, and they should actively support this. The roles, responsibilities and process for monitoring and support supervision should be well defined and explained to IQS stakeholders, in order for it to be accepted and accounted for.

7. **RANA should try to attract the most suitable candidates at IQSs for its pedagogical leadership training.** The baseline findings indicate that head teacher supportive pedagogical actions are relatively limited, particularly in IQSs. The complexity of IQS leadership may contribute to this. It will be important for RANA to target the IQS leadership that is most relevant for the changes in teaching practices which are aspired to.

Recommendations for the IQSS

1. **Selection of facilitators, head teachers and CBMC members requires close attention, verification and monitoring.** GEP3 needs to target facilitators for training who regularly teach the integrated subjects, which requires verification and systematic monitoring. Given that, of the five integrated core subjects, mathematics and languages are the most frequently taught, GEP3 may want to target facilitators teaching these subjects in the first instance. Since the roles of pedagogical leadership and school management may be shared among IQS stakeholders, and head teachers may be chosen for reasons other than technical qualifications, the selection of head teachers for training needs to be based on an explanation of the expectation of the role in terms of technical capacity, in order to attract the appropriate candidate for training. Simply asking the IQS to nominate and send someone based on the title of head teacher/Mallam may not yield positive results. In the case of CBMCs, there is a case for GEP3 to target members who can most effectively fulfil the responsibilities required from the CBMCs, while balancing this with equity considerations. These members may not necessarily be those CBMC members who hold key positions, as roles are not always clearly defined and delegated. CBMCs appear to need further training that goes beyond their duties in sensitisation, and develops more capacities in monitoring, formal school management practices and ensuring that girls’ education is actively supported in the IQS. This can include training on how to engage with facilitators on their attitudes and teaching behaviours, and a greater sense of accountability on the part of the CBMC to ensure a girl-friendly learning environment.

2. **Monitoring and support supervision, particularly in the case of IQSs, needs close follow-up and capacity support.** The IQS context is diverse, flexible and still under development. In order to adapt the IQSS intervention to such a context, quick learning and feedback based on monitoring data is needed. However, external monitoring and support supervision of IQSs has been limited in the past. Hence, this needs close follow-up and capacity support by GEP3. Special attention is required, to monitor school mobility, facilitator transfer and remuneration, pupil enrolment records, pupil attendance in other schools, investment in a girl-friendly school environment and the scheduling of integrated subjects within the IQS class schedule.

3. **Facilitator training and mentoring needs to be well adapted to the very low levels of facilitator competency and to the IQS context.** Facilitator training will need to address both the low levels of pedagogical knowledge as well as the lack of subject knowledge, particularly in regard to Hausa literacy, required to effectively use pedagogical techniques and materials. While generally low, facilitator qualifications vary across IQSs, which will require the training programme to be able to deal with this variation. It is worth increasing facilitators’ awareness about the link between teacher competencies (or lack thereof) and pupil performance in order for facilitators to be able to better self-assess their required competencies. Peer mentoring will require supporting peer-to-peer interaction between schools since a quarter of IQSs only have one facilitator. Knowledge dissemination strategies
need to be considered to reinforce impact, because facilitators within the same IQS are not necessarily aware of each other’s participation in training. Since the IQS teaching context is diverse—with adequate infrastructure often lacking, different class organisations, and varying pupil–teacher ratios—the training needs to be contextually sensitive, to take into account this teaching reality.

4. **Training and mentoring on gender-sensitive class practices needs to go beyond the display of gender-sensitive techniques**, and needs to address entrenched gendered attitudes about girls’ ability to learn and the importance of education in their future life.

5. **GEP3 needs to advocate for adequate facilitator remuneration and to promote the mobilisation of resources beyond the community.** A very small share of IQS facilitators are remunerated, which is against the recommendation of policy documents such as the IQTE Benchmark. The lack of remuneration is likely to affect facilitators’ motivation to teach, and makes it difficult to attract qualified facilitators and hold them accountable. While CBMCs are able to mobilise resources from the community, significant resource gaps remain in IQSs and CBMCs’ perceived role is undermined due to a lack of funding. The project should not assume that CBMCs will be able to mobilise considerable resources from within the community, and therefore it should look into, and promote access to, other resources.

6. **Female and girls’ participation in shaping education and the school environment needs further investigation.** CBMCs struggle to attract women and ensure women participate in the CBMC. Girls’ voices are hardly represented. Increasing women’s involvement may prove a challenge since their absence seems to be related to entrenched gender roles and responsibilities rather than a lack of recognition about their potential contribution to school management. Therefore, GEP3 will need to further investigate mechanisms for ensuring women’s and girls’ engagement in school management that are sensitive to such roles and responsibilities.

7. **Learning and teaching materials need to be adapted to the very low levels of skills and knowledge amongst both facilitators and pupils, and to the language of the users.** While almost all facilitators surveyed reported speaking Hausa, Hausa literacy levels among facilitators are generally low. Pupils’ Hausa literacy proficiency is extremely low and in Niger 43% of pupils speak Nupe at home. Learning and teaching materials need to be adapted to this language and literacy reality.
Bibliography


DFID. (2011) DFID Ethics Principles for Research and Evaluation. DFID.


Annex A  ToC of the early learning intervention

Figure 16 visualises the ToC of the early learning intervention. The main causal assumption underlying the ToC is that literacy learning outcomes of girls and boys, particularly in Hausa as a mother tongue, will improve in early grades if teaching practice improves through the use of improved teaching and learning materials (use of the RANA Literacy Package) and the presence of more knowledgeable, skilled and gender-sensitive teachers. Numeracy is also expected to improve, but to a lesser degree. Numeracy will be influenced indirectly by incorporating numeracy themes into the reading content, exercises and materials.

The above central assumption is conditional on school stakeholders (such as parents, community leaders, IQS proprietors, head teachers, teachers and government staff) being supportive of an increased emphasis on mother tongue instruction and literacy acquisition; and on teachers adhering to the mother tongue during instruction. To this end, the project will engage the community, champion literacy in the communities, train head teachers and advocate for government to implement enabling public policies. Other factors that will influence improved Hausa-based teaching practice are regular pupil attendance and the class and school environments being conducive to learning. The focus on Hausa assumes it is the mother tongue and the language that pupils know and understand best.

Improvement of teacher knowledge and skills through in-service teacher development is assumed to be central to more effective teaching in the early grades. This assumes that the improved Hausa literacy curriculum, the materials, the pedagogical methodology and the in-service training and mentoring approach are well targeted to the needs and capacity levels of teachers, as well as to their teaching environment in public schools and IQSs. To optimise teacher learning, the project envisions a teacher development approach based on progressive professional development and school-based peer mentoring complemented by supportive supervision and monitoring by Master Trainers and government staff. The success of this approach depends on teachers being literate in Hausa, on weekly peer meetings being feasible given the context of the school (for example, teachers being able to meet regularly with other teachers given the size of the school or its location), Lead Teachers having the capacity, motivation and availability to lead the meetings, and Master Trainers and government staff having the resources, competencies and incentives to conduct effective supportive supervision. Through gender-sensitive training that addresses equity in the classroom, teachers are expected to target girls more specifically in class, which is meant to increase the likelihood of girls benefiting from the education provided.

In order for teacher training to result in improved knowledge, skills and teaching practices teachers are assumed to be motivated to learn and to translate new knowledge and skills into practice. Peer-to-peer interaction, supportive supervision and other incentives (e.g. training certificates) are meant to contribute to this. The extent to which teacher motivation translates into improved teaching may also be influenced by teachers’ remuneration and their working conditions. Furthermore, actual improved teacher efficacy and learning outcomes may improve teachers’ perceived efficacy, which in turn may increase their motivation.

Improved teaching and learning is assumed to be facilitated by the distribution and usage of relevant teaching and learning materials in Hausa. This requires that the teachers have the pedagogical knowledge and skills needed to effectively use the materials during teaching practice. Furthermore, it assumes that the materials are well aligned with the curriculum and with the competency levels of the teachers and pupils.

While the central objective of the early learning intervention is to improve pupils’ literacy and, to a lesser degree, numeracy skills, it is assumed that this will facilitate the acquisition of English as a second language, and the transition to English in later grades. Furthermore, improved learning in the early grades is expected to contribute to higher retention rates because children who perform well early on are assumed to be more

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41. We distinguish between three types of knowledge: subject knowledge, curriculum knowledge and pedagogical knowledge. See Section 3.2.9.2 in the Baseline Technical Report.
motivated and supported by their parents to remain in school longer, a link that may be particularly important for girls, who face a higher risk of dropping out (UNICEF, 2014d). A potential feedback loop exists between increased retention and teaching quality in early grades. This feedback loop can be negative or positive. If higher retention is not accompanied by increased teaching and school resources, it can lead to higher pupil–teacher ratios, which may negatively affect teaching quality. On the other hand, teachers may be increasingly motivated by the higher retention of their students, which may positively influence teaching quality.
Figure 16: Diagram depicting ToC of the early learning intervention

Output assumptions
- The training is well targeted, reaches appropriate teachers/HY/SBMC members and is relevant for the ICBS context.
- School-based peer mentoring is feasible given the school context.
- Lead teachers and head teachers are capable, motivated and available to respectively lead peer mentoring or support teachers.
- The materials are aligned with curriculum and with competency levels of teachers and pupils.
- Gender and numeracy themes are well integrated in the different materials, training and mentoring.
- Master trainers and government staff have the resources, competencies and incentives to conduct effective supportive supervision.
- SBMCs are functional.

Intermediary outcome assumptions
- Trained teachers attend school/class and allocate time for Hausa-based literacy.
- Teachers are literate in Hausa and adhere to the use of Hausa during instruction.
- Teachers are motivated to improve their knowledge and skills, and translate them in improved in teaching practice.
- The teaching and learning materials are accessible for use by teachers and pupils.

Final outcome assumptions
- Pupils attend classes regularly.
- The class and school environment is conducive to learning.
- School stakeholders are supportive of increased emphasis on Hausa-based teaching in early grades.
- Hausa is the pupils’ mother tongue.

Outputs
- Lead teachers and teachers are trained and mentored
- RANA Literacy Pack is distributed
- SBMC Literacy champion trained and provided with CLAG
- Community is informed about RANA

Intermediary outcomes
- Teachers’ knowledge in literacy and language acquisition in early grades improves
- Teachers’ instruction skills in early grades improve, including the use of gender-sensitive teaching practices
- Use of Hausa-based teaching and learning materials increases
- Community support for and engagement in literacy actions increases

Final outcomes
- Pupils’ Hausa literacy improves in early grades
- Girls’ and boys’ numeracy improves in early grades
- Pupils’ ability to use English in later grades improves
- Higher retention, especially for girls

State advocacy and LG(E)A capacity support
State and LG(E)A conduct supportive supervision and implement enabling policies

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Annex B    Evaluation questions

B.1    Evaluation questions for the early learning intervention evaluation

Box 6. Evaluation questions for GEP3’s early learning intervention

1. To what extent does the early learning intervention improve Hausa literacy and English language learning outcomes among girls and boys in the early grades in primary schools and IQSs?
   To what extent does the early learning intervention reduce the gap between the learning outcomes of the lowest performing pupils and the expected learning outcomes, as expressed in the curriculum?
2. To what extent does teachers’ knowledge in literacy and language acquisition in early grades improve as a result of the intervention?
3. To what extent do teacher skills in early grade, gender-sensitive instruction improve as a result of the intervention?
4. To what extent and how do teachers adjust and change their classroom practices as a result of the intervention?
5. Are more reading and learning materials in Hausa used in the classroom due to the intervention? Do they contribute to more effective teaching and learning?
6. To what extent does the early learning intervention improve pupil retention, especially retention of girls?

B.2    Evaluation questions for the IQSS evaluation

Box 7. Evaluation questions for GEP3’s IQSS

1. How well has GEP3’s teacher capacity development (training and mentoring) contributed to improved teacher knowledge and skills, and more effective teaching in the classroom?
2. How well has GEP3’s teacher capacity development contributed to an improvement in gender-sensitive teaching?
3. How well has GEP3’s head teacher capacity development (training and mentoring) contributed to improved pedagogical leadership and school management?
4. How well has GEP3’s CBMC capacity development contributed to improved school management and increased mobilisation of resources for school investment?
5. How well have CBMCs been able to adequately manage mini-grants and to invest these resources in the improvement of a girl-friendly school environment?
6. How well have teaching and learning materials supplied through the intervention been perceived by teachers and head teachers as appropriate and well targeted? Have they been used for more effective teaching?
7. To what extent have pupil literacy and numeracy skills, especially of girls, improved in GEP3-supported IQSs? How has GEP3 contributed to such improvement?
   To what extent does the IQSS intervention contribute to reducing the gap between learning outcomes and expected learning outcomes, as expressed in the curriculum?
8. What are the attitudes of, and what is the level of acceptance by, community members and
leaders in regard to integrating formal subjects in Qur’anic education? How have these attitudes and how has this acceptance changed during the intervention? Why? How have attitudes changed in regard to girls receiving formal education?

9. What unintended consequences does IQS have for teachers, head teachers, pupils and proprietors within the IQSs, as well as for the broader school community?
Annex C  Sample size of baseline survey

C.1  Sample size of early learning intervention baseline

Table 8 presents the targeted and final sample sizes of the baseline survey of the early learning intervention evaluation. In total, 240 schools were targeted and surveyed across the two school types and the two states. The sample was stratified according to state and school type, with equal sample sizes of 60 schools in each stratum (60 public primary schools and 60 IQSs in each state).

In each school, the target sample size for pupils is six girls and six boys, resulting in a total targeted sample size of 2,880 pupils (1,440 girls and 1,440 boys). The targeted sample size for teachers is three teachers per public primary schools and two teachers in IQSs. The number of teachers is lower in IQSs because we anticipated only two facilitators on average per IQS. Hence, the total targeted teacher sample size is 360 primary school teachers and 240 IQS facilitators. The final pupil sample size is 96% and 88% of the target in public primary schools and IQSs, respectively, while the final teacher sample size equals 83% and 74% in public primary schools and IQSs, respectively. The relatively lower percentage of teachers surveyed compared to the targeted sample size was due to the fact that some schools did not have the targeted number of teachers, which was particularly the case in the IQSs in Katsina.

Table 8: Targeted and final sample sizes of the early learning intervention baseline survey

<table>
<thead>
<tr>
<th>Population</th>
<th>Public primary schools</th>
<th>IQSs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target sample</td>
<td>Final sample</td>
</tr>
<tr>
<td>Schools</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Pupils</td>
<td>1,440</td>
<td>1,389</td>
</tr>
<tr>
<td>Teachers</td>
<td>360</td>
<td>299</td>
</tr>
</tbody>
</table>

C.2  Sample size of IQSS baseline

Table 9 presents the targeted and final sample sizes of the baseline survey of the IQSS evaluation. In total, 60 schools were targeted and surveyed across the two school types and the two states. The sample was stratified according to LGAs, with equal sample sizes of five schools in each LGA, and therefore 30 per state.

In each IQS, the target sample size for pupils is six girls and six boys, resulting in a total targeted sample size of 720 pupils (360 girls and 360 boys). The targeted sample size for facilitators is two facilitators per IQS. Hence, the total targeted facilitator sample size is 120 IQS facilitators. The final pupil and facilitator sample sizes both equal 80% of the target. In around 20% of the IQSs only half or less of the target number of 12 pupils could be surveyed because only a limited number of pupils was eligible for the survey. The below target achievement of facilitators surveyed was due to the fact that the school did not have the targeted number of facilitators.
### Table 9: Targeted and final sample sizes of the IQSS baseline survey

<table>
<thead>
<tr>
<th>Population</th>
<th>Target sample</th>
<th>Final sample</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schools</td>
<td>60</td>
<td>60</td>
<td>100%</td>
</tr>
<tr>
<td>Pupils</td>
<td>720</td>
<td>576</td>
<td>80%</td>
</tr>
<tr>
<td>Facilitators</td>
<td>120</td>
<td>96</td>
<td>80%</td>
</tr>
<tr>
<td>CBMCs</td>
<td>60</td>
<td>52</td>
<td>87%</td>
</tr>
</tbody>
</table>
## Annex D  Randomisation checks for treatment and control group

Table 10:  School-level balance (all head teachers in public primary schools and IQSs)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatmen t mean</th>
<th>Control mean</th>
<th>Total mean</th>
<th>Total N</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head teacher is female</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>240</td>
<td>0.653</td>
</tr>
<tr>
<td>Whether head teacher had been absent in the last term?</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>225</td>
<td>0.114</td>
</tr>
<tr>
<td>Number of days the head teacher was absent in the last term</td>
<td>7.7</td>
<td>8.0</td>
<td>7.9</td>
<td>137</td>
<td>0.911</td>
</tr>
<tr>
<td>Share of schools that have separate functioning toilet for girls</td>
<td>0.3</td>
<td>0.2</td>
<td>0.3</td>
<td>239</td>
<td>0.583</td>
</tr>
<tr>
<td>Number of years since integration</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
<td>119</td>
<td>0.652</td>
</tr>
<tr>
<td>Total number of boys enrolled in integrated subjects from P1 to P6</td>
<td>173.8</td>
<td>201.1</td>
<td>187.6</td>
<td>115</td>
<td>0.522</td>
</tr>
<tr>
<td>Total number of girls enrolled in integrated subjects from P1 to P6</td>
<td>121.4</td>
<td>145.2</td>
<td>133.4</td>
<td>115</td>
<td>0.487</td>
</tr>
<tr>
<td>Ratio of total number of children studying integrated subjects to teachers</td>
<td>42.4</td>
<td>42.2</td>
<td>42.3</td>
<td>114</td>
<td>0.978</td>
</tr>
<tr>
<td>Ratio of total number of children studying integrated subjects to teachers in P1–P3</td>
<td>39.6</td>
<td>42.2</td>
<td>40.9</td>
<td>115</td>
<td>0.694</td>
</tr>
<tr>
<td>Ratio of girls to boys enrolled in total</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>111</td>
<td>0.347</td>
</tr>
<tr>
<td>Head teacher sat in on any lesson for the entire duration</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>225</td>
<td>0.846</td>
</tr>
<tr>
<td>School repairs</td>
<td>0.9**</td>
<td>1.0</td>
<td>0.95</td>
<td>239</td>
<td>0.047</td>
</tr>
<tr>
<td>Ratio of girls to boys in Zamfara in P1–P3</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>55</td>
<td>0.841</td>
</tr>
<tr>
<td>Ratio of girls to boys in Katsina in P1–P3</td>
<td>0.8</td>
<td>0.9</td>
<td>0.8</td>
<td>56</td>
<td>0.354</td>
</tr>
<tr>
<td>Ratio of total pupils enrolled to total rooms used for teaching on the day</td>
<td>49.9</td>
<td>77.7</td>
<td>64.4</td>
<td>107</td>
<td>0.182</td>
</tr>
<tr>
<td>Fraction of female teachers of integrated subjects</td>
<td>0.1</td>
<td>0.1</td>
<td>0.09</td>
<td>240</td>
<td>0.172</td>
</tr>
<tr>
<td><strong>Overall F-test, F-stat</strong></td>
<td><strong>1.875</strong></td>
<td><strong>P-Value: 0.1722</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Statistical significance of mean differences identified as * at the 10%, ** at the 5% and *** at the 1% level. This is based on the p-value measures reported in the table.
### Table 11: Teacher-level balance (all teachers in public primary schools and IQSs)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatment mean</th>
<th>Control mean</th>
<th>Total mean</th>
<th>Total N</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher is female</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>477</td>
<td>0.613</td>
</tr>
<tr>
<td>Does the teacher have an SSCE?</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>477</td>
<td>0.515</td>
</tr>
<tr>
<td>Does the teacher have an NCE?</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
<td>477</td>
<td>0.330</td>
</tr>
<tr>
<td>Does the teacher have a Grade 2 Certificate?</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>477</td>
<td>0.344</td>
</tr>
<tr>
<td>Has the teacher been absent in the last term?</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>450</td>
<td>0.862</td>
</tr>
<tr>
<td>Number of days the teacher was absent in the last term</td>
<td>6.1</td>
<td>5.0</td>
<td>5.5</td>
<td>449</td>
<td>0.341</td>
</tr>
<tr>
<td>Does the teacher speak Hausa?</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>356</td>
<td></td>
</tr>
<tr>
<td>Has the teacher attended training in the last two years?</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>473</td>
<td>0.238</td>
</tr>
<tr>
<td>Is the teacher able to identify low performers?</td>
<td>0.4</td>
<td>0.5</td>
<td>0.5</td>
<td>463</td>
<td>0.430</td>
</tr>
<tr>
<td>Is the teacher able to give evidence for judgements and diagnose?</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>463</td>
<td>0.556</td>
</tr>
<tr>
<td>Does the teacher have writing skills?</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>463</td>
<td>0.578</td>
</tr>
<tr>
<td>Does the teacher have Hausa knowledge?</td>
<td>2.9</td>
<td>2.8</td>
<td>2.9</td>
<td>463</td>
<td>0.763</td>
</tr>
<tr>
<td>Does the teacher have comprehension skills?</td>
<td>2.1*</td>
<td>2.3</td>
<td>2.2</td>
<td>463</td>
<td>0.091</td>
</tr>
<tr>
<td>Is the teacher able to interpret words and phrases?</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>463</td>
<td>0.652</td>
</tr>
</tbody>
</table>

**Overall F-test, F-stat** | **0.2037** | P-Value: **0.6519**

Note: Statistical significance of mean differences identified as * at the 10%, ** at the 5% and *** at the 1% level. This is based on the p-value measures reported in the table.
**Table 12:** Pupil-level balance (all pupils in public primary schools and IQSs)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Treatment mean</th>
<th>Control mean</th>
<th>Total mean</th>
<th>Total N</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total score in English assessment</td>
<td>354.47</td>
<td>356.95</td>
<td>355.66</td>
<td>2649</td>
<td>0.429</td>
</tr>
<tr>
<td>Total score in Hausa assessment</td>
<td>507.34</td>
<td>509.67</td>
<td>508.46</td>
<td>2649</td>
<td>0.600</td>
</tr>
<tr>
<td>Speaks Hausa at home</td>
<td>0.99</td>
<td>0.99</td>
<td>0.99</td>
<td>2623</td>
<td>0.381</td>
</tr>
<tr>
<td>Female pupil</td>
<td>0.46</td>
<td>0.44</td>
<td>0.45</td>
<td>2651</td>
<td>0.498</td>
</tr>
<tr>
<td>Age of pupil</td>
<td>9.61*</td>
<td>9.35</td>
<td>9.48</td>
<td>1677</td>
<td>0.077</td>
</tr>
<tr>
<td>Has a chair</td>
<td>0.9***</td>
<td>0.90</td>
<td>0.88</td>
<td>2578</td>
<td>0.001</td>
</tr>
<tr>
<td>Has a motorcycle</td>
<td>0.67</td>
<td>0.66</td>
<td>0.66</td>
<td>2581</td>
<td>0.352</td>
</tr>
<tr>
<td>Has a car</td>
<td>0.18</td>
<td>0.19</td>
<td>0.19</td>
<td>2578</td>
<td>0.256</td>
</tr>
<tr>
<td>Has a TV</td>
<td>0.38</td>
<td>0.39</td>
<td>0.38</td>
<td>2579</td>
<td>0.587</td>
</tr>
<tr>
<td>Has a computer</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
<td>2574</td>
<td>0.92</td>
</tr>
<tr>
<td>Has a camera</td>
<td>0.05</td>
<td>0.04</td>
<td>0.05</td>
<td>2576</td>
<td>0.194</td>
</tr>
<tr>
<td>Has a mobile phone</td>
<td>0.9**</td>
<td>0.95</td>
<td>0.94</td>
<td>2580</td>
<td>0.025</td>
</tr>
<tr>
<td>Has cattle</td>
<td>0.56</td>
<td>0.53</td>
<td>0.54</td>
<td>2579</td>
<td>0.187</td>
</tr>
<tr>
<td>Has a goat</td>
<td>0.87</td>
<td>0.87</td>
<td>0.87</td>
<td>2579</td>
<td>0.973</td>
</tr>
<tr>
<td>Has a horse, donkey or mule</td>
<td>0.18</td>
<td>0.16</td>
<td>0.17</td>
<td>2579</td>
<td>0.352</td>
</tr>
<tr>
<td>Has a sheep</td>
<td>0.7**</td>
<td>0.68</td>
<td>0.70</td>
<td>2580</td>
<td>0.018</td>
</tr>
<tr>
<td>Has a chicken</td>
<td>0.92</td>
<td>0.91</td>
<td>0.92</td>
<td>2581</td>
<td>0.356</td>
</tr>
<tr>
<td><strong>Overall F-test, F-stat</strong></td>
<td><strong>0.8539</strong></td>
<td><strong>P-Value:</strong></td>
<td><strong>0.3555</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Statistical significance of mean differences identified as * at the 10%, ** at the 5% and *** at the 1% level. This is based on the p-value measures reported in the table.
Annex E  Regression of learning outcomes on key influencing factors

The tables below report the results obtained with our main regression models on factors influencing Hausa scaled scores and English scaled scores, respectively, in the early learning pupil sample. The tables report the coefficient estimated for each explanatory variable, their associated standard error, t-statistics and p-values, which provide an indication of the level of significance in the correlation between each explanatory variable and the outcome variable of interest, either Hausa or English scaled scores.

Table 13:  Regression coefficients and their statistical significance for the main factors influencing Hausa scaled scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (pupil is female)</td>
<td>-9.212</td>
<td>6.294</td>
<td>-1.464</td>
<td>0.145</td>
</tr>
<tr>
<td>Aged from 7 to 10</td>
<td>23.376</td>
<td>6.828</td>
<td>3.423</td>
<td>0.001***</td>
</tr>
<tr>
<td>Aged from 11 to 15</td>
<td>114.695</td>
<td>8.856</td>
<td>12.951</td>
<td>0.000***</td>
</tr>
<tr>
<td>Aged over 16</td>
<td>178.553</td>
<td>20.394</td>
<td>8.755</td>
<td>0.000***</td>
</tr>
<tr>
<td>Pupil in second HWI tertile</td>
<td>13.769</td>
<td>7.181</td>
<td>1.917</td>
<td>0.056*</td>
</tr>
<tr>
<td>Pupil in third (top) HWI tertile</td>
<td>37.849</td>
<td>6.713</td>
<td>5.638</td>
<td>0.000***</td>
</tr>
<tr>
<td>Public primary school (not IQS)</td>
<td>-57.353</td>
<td>11.026</td>
<td>-5.201</td>
<td>0.000***</td>
</tr>
<tr>
<td>School has girls’ toilets</td>
<td>8.479</td>
<td>7.486</td>
<td>1.133</td>
<td>0.259</td>
</tr>
<tr>
<td>School has water</td>
<td>8.971</td>
<td>7.026</td>
<td>1.277</td>
<td>0.203</td>
</tr>
<tr>
<td>Pupil attends other school</td>
<td>-5.628</td>
<td>6.903</td>
<td>-0.815</td>
<td>0.416</td>
</tr>
<tr>
<td>School in rural areas</td>
<td>-32.710</td>
<td>11.559</td>
<td>-2.830</td>
<td>0.005**</td>
</tr>
<tr>
<td>School in Katsina</td>
<td>3.438</td>
<td>6.683</td>
<td>0.514</td>
<td>0.607</td>
</tr>
<tr>
<td>Teacher motivation</td>
<td>12.749</td>
<td>16.729</td>
<td>0.762</td>
<td>0.447</td>
</tr>
<tr>
<td>Teacher knowledge 1</td>
<td>25.998</td>
<td>14.323</td>
<td>1.815</td>
<td>0.071*</td>
</tr>
<tr>
<td>Teacher knowledge 2</td>
<td>2.246</td>
<td>4.721</td>
<td>0.476</td>
<td>0.635</td>
</tr>
<tr>
<td>Teacher pedagogy 1</td>
<td>-3.103</td>
<td>24.650</td>
<td>-0.126</td>
<td>0.900</td>
</tr>
<tr>
<td>Teacher pedagogy 2</td>
<td>0.414</td>
<td>0.364</td>
<td>1.137</td>
<td>0.257</td>
</tr>
<tr>
<td>constant</td>
<td>446.139</td>
<td>57.053</td>
<td>7.820</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

Number of observations: 1,613; R-squared 0.339

Note: Statistical significance of mean differences identified as * at the 10 %, ** at the 5 % and *** at the 1 % level. This is based on the p-value measures reported in the table.
### Table 14: Regression coefficients and their statistical significance for the main factors influencing English scaled scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (pupil is female)</td>
<td>-6.752</td>
<td>5.706</td>
<td>-1.183</td>
<td>0.238</td>
</tr>
<tr>
<td>Aged from 7 to 10</td>
<td>18.687</td>
<td>6.733</td>
<td>2.775</td>
<td>0.006**</td>
</tr>
<tr>
<td>Aged from 11 to 15</td>
<td>82.448</td>
<td>9.185</td>
<td>8.977</td>
<td>0.000***</td>
</tr>
<tr>
<td>Aged over 16</td>
<td>126.046</td>
<td>14.208</td>
<td>8.871</td>
<td>0.000***</td>
</tr>
<tr>
<td>Pupil in second HWI tertile</td>
<td>16.665</td>
<td>5.759</td>
<td>2.894</td>
<td>0.004**</td>
</tr>
<tr>
<td>Pupil in third (top) HWI tertile</td>
<td>27.566</td>
<td>5.902</td>
<td>4.671</td>
<td>0.000***</td>
</tr>
<tr>
<td>Public primary school (not IQS)</td>
<td>-45.609</td>
<td>8.715</td>
<td>-5.234</td>
<td>0.000***</td>
</tr>
<tr>
<td>School has girls’ toilets</td>
<td>13.246</td>
<td>6.512</td>
<td>2.034</td>
<td>0.043**</td>
</tr>
<tr>
<td>School has water</td>
<td>7.182</td>
<td>5.873</td>
<td>1.223</td>
<td>0.223</td>
</tr>
<tr>
<td>Pupil attends other school</td>
<td>3.371</td>
<td>6.704</td>
<td>0.503</td>
<td>0.616</td>
</tr>
<tr>
<td>School in rural areas</td>
<td>-28.869</td>
<td>9.372</td>
<td>-3.080</td>
<td>0.002**</td>
</tr>
<tr>
<td>School in Katsina</td>
<td>4.834</td>
<td>5.710</td>
<td>0.847</td>
<td>0.398</td>
</tr>
<tr>
<td>Teacher motivation</td>
<td>21.505</td>
<td>15.426</td>
<td>1.394</td>
<td>0.165</td>
</tr>
<tr>
<td>Teacher knowledge 1</td>
<td>15.479</td>
<td>12.668</td>
<td>1.222</td>
<td>0.223</td>
</tr>
<tr>
<td>Teacher knowledge 2</td>
<td>-0.142</td>
<td>3.710</td>
<td>-0.038</td>
<td>0.970</td>
</tr>
<tr>
<td>Teacher pedagogy 1</td>
<td>-18.557</td>
<td>20.066</td>
<td>-0.925</td>
<td>0.356</td>
</tr>
<tr>
<td>Teacher pedagogy 2</td>
<td>0.192</td>
<td>0.350</td>
<td>0.550</td>
<td>0.583</td>
</tr>
<tr>
<td>constant</td>
<td>278.692</td>
<td>53.062</td>
<td>5.252</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

Number of observations: 1,613; R-squared: 0.332

Note: Statistical significance of mean differences identified as * at the 10 %, ** at the 5 % and *** at the 1 % level. This is based on the p-value measures reported in the table.

In addition to the main regression model, the analysis was extended by using a cluster fixed effects model, with the school being the cluster. This enables us to control for all school-level influencing factors at once.
### Table 15: Hausa school fixed effects model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (pupil is female)</td>
<td>-13.161</td>
<td>6.266</td>
<td>-2.100</td>
<td>0.037**</td>
</tr>
<tr>
<td>Aged from 7 to 10</td>
<td>15.989</td>
<td>5.891</td>
<td>2.714</td>
<td>0.007**</td>
</tr>
<tr>
<td>Aged from 11 to 15</td>
<td>83.130</td>
<td>10.829</td>
<td>7.677</td>
<td>0.000***</td>
</tr>
<tr>
<td>Aged over 16</td>
<td>133.901</td>
<td>23.743</td>
<td>5.640</td>
<td>0.000***</td>
</tr>
<tr>
<td>Pupil in HWI tertile</td>
<td>-0.598</td>
<td>7.513</td>
<td>-0.080</td>
<td>0.937</td>
</tr>
<tr>
<td>Pupil in third HWI tertile</td>
<td>20.247</td>
<td>6.027</td>
<td>3.360</td>
<td>0.001***</td>
</tr>
<tr>
<td>Pupil attends other school</td>
<td>3.783</td>
<td>7.179</td>
<td>0.527</td>
<td>0.599</td>
</tr>
</tbody>
</table>

Number of observations: 1,639; R-squared: 0.606

Note: Statistical significance of mean differences identified as * at the 10%, ** at the 5% and *** at the 1% level. This is based on the p-value measures reported in the table.

### Table 16: English school fixed effects model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. error</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (pupil is female)</td>
<td>-10.366</td>
<td>5.698</td>
<td>-1.819</td>
<td>0.070*</td>
</tr>
<tr>
<td>Aged from 7 to 10</td>
<td>15.998</td>
<td>7.250</td>
<td>2.207</td>
<td>0.028**</td>
</tr>
<tr>
<td>Aged from 11 to 15</td>
<td>61.565</td>
<td>10.618</td>
<td>5.798</td>
<td>0.000***</td>
</tr>
<tr>
<td>Aged over 16</td>
<td>96.922</td>
<td>17.944</td>
<td>5.401</td>
<td>0.000***</td>
</tr>
<tr>
<td>Pupil in HWI tertile</td>
<td>9.296</td>
<td>5.917</td>
<td>1.571</td>
<td>0.118</td>
</tr>
<tr>
<td>Pupil in third HWI tertile</td>
<td>14.186</td>
<td>5.770</td>
<td>2.458</td>
<td>0.015**</td>
</tr>
<tr>
<td>Pupil attends other school</td>
<td>11.474</td>
<td>7.783</td>
<td>1.474</td>
<td>0.142</td>
</tr>
</tbody>
</table>

Number of observations: 1,639; R-squared: 0.606

Note: Statistical significance of mean differences identified as * at the 10%, ** at the 5% and *** at the 1% level. This is based on the p-value measures reported in the table.
Annex F  Updated ToC of IQSS intervention

The intervention ToC has an important methodological role in the evaluation of GEP3’s IQSS. While causal inference in the case of the evaluation of the early learning intervention is derived from counterfactual comparison using a control group, contribution analysis infers causality from a reasoned ToC. Therefore, in this section we present an in-depth discussion of the ToC of the IQSS, starting from the ToC included in the GEP3 Evaluation Framework and updated based on insights from the baseline data collection. Since the overall ToC result chain presented in the Evaluation Framework was well-founded, little updating in this regard has been required. The review mostly focuses on further explaining the mechanism and assumptions underpinning the result chain.

Error! Reference source not found. visualises the ToC of GEP3’s IQSS. In the following subsections we will discuss the ToC according to three causal packages that make up this ToC. Each causal package consists of causal factors interlinked via causal mechanisms, plus their underlying assumptions. A causal package is assumed to be sufficient for generating key intermediary or final outcomes on the condition that the causal chain and assumptions hold. For each causal package related to GEP3’s IQSS there may be alternative, non-GEP3 related explanations for the outcome occurring, which will require examination as part of the evaluation.

Each causal package presented below corresponds to the contribution claims presented in the methodological section.42

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42 (Mayne, 2012). The causal package is defined as being sufficient to cause an outcome, while its individual elements, in particular the intervention elements, are necessary parts for the package to make a difference to the outcome.
Figure 17: Diagram depicting ToC of the IQSS
Contribution Claim 1 GEP3’s IQSS contributes to more effective teaching of formal subjects in IQSs

Causal linkages and mechanisms

GEP3’s strategy for integrated Qur’anic education aims to provide access to quality education in IQSs, particularly for girls, by improving effective, gender-sensitive teaching of the formal subjects included in the harmonised integrated curriculum. More effective teaching is considered a key intermediary outcome of the IQSS. We conceptualise effective teaching as a combination of the following attributes: 1) demonstrated teaching competency, drawing on three types of knowledge (subject knowledge, pedagogical knowledge and curriculum knowledge); 2) use of a pupil-centred learning approach; 3) time on task; 4) effective use of teaching and learning materials; and 5) no observable gender bias during teaching practice.

The core causal pathway to achieve more effective teaching is by improving IQS facilitators’ knowledge and skills through training and mentoring. The training is meant to improve their knowledge and skills in terms of the core subjects of the harmonised integrated curriculum, pedagogy, and the integration process in Qur’anic education. The training is also meant to impart a better understanding of gender, equity and gender-sensitive teaching methods. The mentoring process is assumed to play an important role in facilitators effectively acquiring this knowledge and skills, and putting it into practice, by activating the following mechanisms:

- **peer interaction** that encourages facilitators to discuss acquired knowledge and skills, share experiences and provide feedback based on a collaborative relationship among peers;
- **school-based support** that allows facilitators to access and refresh their knowledge and understanding at any time whilst using the provided materials; and
- **continuous face-to-face, practical support by an experienced mentor** based on a long-term, personal relationship that reinforces the learning and delivery of newly acquired knowledge and skills with confidence.

**Mentoring is also assumed to increase teacher motivation.** While increased teacher motivation is not a direct intended objective of the intervention, it is assumed to be a key contributing factor to more effective teaching. The underlying theory is that peer interaction and ongoing support increase the facilitators’ perceived teaching efficacy, self-confidence and self-esteem, which results in increased motivation, as expressed in (i) more interest and enjoyment in their work, (ii) more effort being made, (iii) more importance attached to their work, and (iv) less pressure and tension experienced in relation to their work. This in turns enhances the likelihood of facilitators actually applying their improved knowledge and skills, and spending increased time on task on activities that benefit student learning.

**The distribution of Hausa teaching and learning materials contributes to more effective teaching** as materials provide guidance for the teacher during the teaching process and facilitate the knowledge transfer between teachers and pupils. This requires teachers to have the pedagogical knowledge and skills to effectively use the materials during teaching practice. Pupil workbooks and notebooks also allow pupils to practice and allow teachers to assess pupils in writing. The provision of learning materials may also ensure the inclusiveness of integrated Qur’anic education. However, it must be noted that poverty has been identified as one of the key barriers to accessing public primary school

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43 This theory is based on the theory of motivation used by the TDP in Nigeria.
and to the extent that the integration process forces parents to invest in learning materials, compared to the situation without integration, parents’ inability to do so may cause pupils to drop out.

**Head teacher training seeks to support a more effective teaching process** in several ways. First, the training is assumed to increase pedagogical leadership in the IQS by providing the head teacher with knowledge and skills in terms of pedagogy and leadership. This, in turn, will provide the facilitators with school-based, continuous guidance in how to better delivery instruction. Second, leadership can inspire and motivate the facilitator, which contributes to improved attendance and demonstrates itself in increased effort and enjoyment of work. Third, the training also aims to improve the head teacher’s school management practices, such as teacher attendance monitoring and class scheduling, which in turn can contribute to increased facilitator attendance and time on task. Improved school management can also increase the resources available for facilitator remuneration, which can affect their attendance, and can subsequently contribute to more effective teaching.

**An improved, more girl-friendly school environment and improved monitoring and support supervision by local government education staff is assumed to contribute to more effective teaching.** A better school environment, in terms of infrastructure, classroom conditions, safety and relationships between different actors in the school, can improve teachers’ and pupils’ comfort and feeling of wellbeing in the school. It can also lead to increased instructional time by creating the physical conditions required for teaching (e.g. light). Girl-friendly school features, such as the presence of female teachers or female participation in school management, can contribute to an increase in gender-sensitive teaching practices by creating a climate that is more supportive of girls. Improved government monitoring and support supervision can contribute to better school management and can motivate facilitators and proprietors to continue providing the integrated curriculum as it signals government support for integration. Furthermore, sustained financial government support can support facilitator remuneration, which will contribute to facilitators’ motivation and attendance.

While more effective teaching is assumed to contribute to improved learning outcomes, **improvement in learning outcomes can in turn contribute to an increase in facilitators’ perceived teaching efficacy**, which is expected to strengthen their motivation. An **increase in girls’ enrolment and retention may also affect teaching practices**: first, it may contribute positively by creating a more girl-friendly school environment, which in turn can support gender-sensitive teaching practices; second, it may have a negative effect by increasing pupil–classroom and pupil–teacher ratios.

**Assumptions**

Assumptions are defined here as influencing conditions that might enable causal linkages and mechanisms to work, or may impede those linkages and mechanism. Key assumptions underlying the causal chain of Contribution Claim 1 are presented in Figure 18.

Implementation assumptions are not included in the diagram. It is assumed that the training and mentoring are implemented as planned and cover all the components of the training curriculum in a quality manner, and that the teaching and learning materials are distributed. These are important assumptions, in particular with regards to the mentoring since GEP3’s capacity development approach for facilitators strongly emphasises continuous, school-based follow-up by experienced mentors complemented with peer interaction.
Figure 18: Causal package and underlying assumptions of ‘more effective teaching’

State and LG(E)A monitoring and support supervision improves

Motivation of facilitators increases
Subject, curriculum and pedagogical knowledge of facilitators improve
Skills in gender-sensitive class practices of facilitators improve
Facilitators’ teaching is more effective
Facilitator attendance improves
School environment improves and becomes more girl-friendly
Pupil learning outcomes improve, particularly for girls
Retention of girls improves
Girls’ enrolment increases

Assumptions
- Government staff has the means to monitor the IQS.
- The trained head teachers regularly attend.
- The facilitators teaches when in school.

Assumptions
- The training is well targeted to the needs of the head teachers.
- The trained head teacher is mandated and qualified to implement pedagogical leadership.
- School stakeholders are supportive of integrated Qur’anic education and girls’ education.
- Facilitators are adequately remunerated.
- Sufficient time is allotted to the instruction of the integrated curriculum.
- The trained facilitators remains teaching in the IQS.
- School and community informal rules allow the use of gender-sensitive class practices.

Assumptions
- The training is well targeted to the needs of the facilitators and reaches the appropriate facilitators.
- School-based, peer interaction is feasible in the context of IQS and supported by the head teacher/proprietor.
- Mentors have the capacity to provide ongoing support and feedback.
- Facilitators are amenable to helping improve girls’ education.
- Materials are fit for purpose.
- Materials are available for use by facilitators and pupils.
Alternative explanations

We consider two alternative, non-GEP3-related explanations that could also be sufficient for the intended change in teaching in the IQSs to be observed:

- **Facilitators build capacity in other ways.** If facilitators in the GEP3 IQSs participate in other training or capacity building processes during the GEP3 project period, teaching could become more effective regardless of GEP3. Such capacity building may take place when facilitators are also teachers in public primary schools. Furthermore, if new facilitators who have a higher teaching competency level are employed, teaching may also become more effective.

- **Facilitators are motivated in other ways.** If facilitator remuneration or working conditions improve without any influence by GEP3 interventions, facilitators may become more motivated and teach more effectively regardless of GEP3.

Contribution Claim 2: GEP3’s IQSS contributes to an improved, girl-friendly school environment in IQSs

Causal linkages and mechanisms

Mainly through its support to CBMCs GEP3 seeks to improve the school environment of the IQS and make it more girl-friendly. We consider the school environment to encompass the physical environment, in terms of infrastructure and classroom conditions, its security and perceived safety, and the school’s organisation and institutional culture, in terms of leadership, organisational processes, relationships between school stakeholders, and traditions. The school environment affects the learning experience of the pupils, as well as the teaching experience of the facilitators. GEP3 seeks to contribute to the girl-friendliness of the school environment in the IQS, promoting investment in infrastructure and resources that improve the school experience of girls and a school organisation that supports gender equity.

The core causal pathway to improving the school environment is by improving school management and supporting the mobilisation of more resources. Additional resources that are mobilised can be invested in critical inputs that address barriers to girls’ education and that are prioritised in school development plans. Better school management is assumed to improve the school environment because, through the development of WCDPs, strengths and weaknesses in the school environment are assessed, priorities for improvement identified, and resource mobilisation actions outlined. Through the active participation of the CBMC—which is meant to represent the different school stakeholders—the priorities and preferences of various stakeholders are taken into account: in particular the preferences of women and girls. It is assumed that women and girls’ participation in the school management better signals girls’ needs and strengthens the demand for girl-friendly school inputs. Furthermore, better school management entails more adequate financial management and record-keeping, which supports planning and transparency, and hence more effective use of resources provided by the community or other external donors. Given the often low-resource setting of the IQSs resource mobilisation is a necessary condition to translate development plans into investments.

Through a functional CBMC community representatives are involved in the IQS. This is assumed to increase community support for integrated Qur’anic education, particularly for girls, because it makes community members more conscious of the integration and empowers them to have a say in its implementation. This contributes to increased demand for girls’ education. In addition, if the community becomes more involved in the management and decision-making of the IQS then it is assumed that they will be more likely to support it financially or with other resources because there
will be community ownership, or a perception of ownership, over the IQS. Finally, community members are able to better hold school leaders and teachers accountable for the quality of the school environment and attendance since, through their involvement, they are more aware of what occurs in the school, and again because of their stronger sense of school ownership.

The main means to achieve the above intermediary outcomes is the training, mentoring and monitoring of the CBMC members. The training aims to improve their understanding of their roles and responsibilities, which can enable school management and resource mobilisation because management and supervisory tasks and functions will be better defined (e.g. teacher attendance monitoring, planning, and fundraising). By training CBMC members on whole centre development planning their skills in school planning are meant to improve. The inclusion of gender in the training curriculum aims to create awareness of the issue, which is subsequently assumed to result in more gender-responsive whole centre development planning. Training on resource mobilisation and financial management is meant to make CBMC members more able to mobilise and manage resources. The periodic mentoring visits can reinforce and refresh the learning from the training workshops, providing practical feedback tailored to the context of each IQS. It is less clear to what extent the mentoring visits will re-enforce gender sensitisation to ensure that CBMC members follow up on and monitor the girl-friendliness of the school environment. Monitoring can signal deficiencies, based on which action can be taken, and can increase accountability by directing attention to the achievement of results. GEP3 will support government staff to carry out termly CBMC effectiveness monitoring, providing a tool that is meant to improve CBMCs’ monitoring capacity.

Beyond the role of the CBMC, the head teacher training seeks to increase the head teachers’ skills in school management, which is also assumed to contribute to more effective school management.

The mini-grants directly contribute to an increase in school resources and, given that they are targeted at girl-friendly investments, can improve the girl-friendliness of the school environment. The grants can also work as an incentive for CBMC members to develop their capacity, as mini-grants are provided on the condition that CBMC members have participated in the training. Furthermore, the management of the grant can improve overall community-based school management through a ‘learning-by-doing’ capacity building approach for the CBMC, which is meant to manage the resources.

Gender-sensitive class practices and the increased presence of girls in the IQS, due to increased enrolment and retention, can strengthen a school climate that signals an openness to girl pupils and can create a social environment where girls feel welcome among their peers.

Assumptions

Figure 19 presents the assumptions about the conditions that need to be in place for IQSS interventions to actually result in an improved, more girl-friendly school environment.
Figure 19: Causal package and underlying assumptions of ‘improved, girl-friendly school environment’

Assumptions
- The CBMC is functional, represents the community, and is supported by community leaders.
- The proprietor accepts CBMC involvement in school management.
- The training is well targeted to the needs of the CBMC members and reaches the appropriate members.
- Community members have the capacity to support the IQS with the necessary resources.
- IQS is stationary; it remains located in the community.

Assumptions
- The head teacher is trained.
- Skills in gender-sensitive class practices of facilitators improve.

Assumptions
- More resources are mobilized for IQS.
- Community involvement in and support for IQS increases.

Assumptions
- School management improves.
- School environment improves and becomes more girl-friendly.
- Girls’ enrolment increases.

Assumptions
- Girls’ voice and needs are represented in CBMCs and decision-making about resource investments.
- The school leadership, CBMC, and parents are supportive of gender equity in school planning and investments.
- School stakeholders are in agreement about school improvement activities and investments.

Assumptions
- Government staff has the means to monitor the IQS.
- Government funds are budgeted and released.
- Government provides sustained financial support.

Assumptions
- State and LG(E)A monitoring and support supervision improves.
Alternative explanations

We consider the following alternative, non-GEP3-related explanations that could improve the school environment and make it more girl-friendly:

• **CBMC members and school leadership improve their capacity through other means.** School management and resource mobilisation can improve by new stakeholders becoming involved in the IQS, regardless of GEP3 support. For example, a philanthropist may take an interest in the IQS or the IQS may start benefitting from the influence or competencies of a highly educated or/and respected community member. It is not only difficult to identify all such influences but it will be also hard to separate out GEP3’s influence in such instances since CBMC training promotes such involvement. Some CBMC members may also be members of the SBMC in the neighbouring public primary school, and may build their capacity through their participation in public primary school management.

**Contribution Claim 3: More effective teaching of formal subjects and an improved, girl-friendly learning environment contribute to improved learning levels, particularly among girls**

Causal linkages and mechanisms

The principal final outcome that GEP3 aims to achieve with its IQSS is for pupils learning outcomes to improve, particularly for girls. More effective teaching is considered a critical contributing factor, which will be supported by an improved, more girl-friendly school environment. As these two factors improve and result in better quality education girls’ retention is also assumed to increase. In addition, girls’ enrolment is expected to increase because of an increased demand for girls’ education as a result of more community involvement and support for IQSs. Girls’ retention and enrolment are not further discussed below, as they are not the focus of this evaluation. However, it is important to note that increased retention and enrolment can in turn influence effective teaching and the school environment, as was discussed in the previous sections.

International studies indicate that what teachers know, what they do and how much they care accounts for more variance in pupil achievement than any other policy-amenable variable (Hattie 2003). **Several mechanisms are at play that may cause more effective teaching to lead to improved learning outcomes for girls.** First, the combination of improved subject knowledge and pedagogical skills, supported by fit-for-purpose teaching and learning materials, can enable more competent and equipped facilitators to better support pupils’ learning achievement in the classroom. By teaching in a more gender-sensitive manner the teacher’s interaction with the girl pupil improves, which can improve the quality of the girl’s education in particular and provide additional motivation for her to learn. Second, student-centred teaching methods—a competency that GEP3 training intends to strengthen—encourages children, especially girls, to attend schools, which increases the pupil’s actual instructional time and can, therefore, increase learning. Third, effective teaching also entails facilitators attending and teaching when in school (as a result of better school management). This, again, can increase the actual instructional time, and hence positively influence learning outcomes.

**To the extent that the school environment is more conducive to girls learning, learning achievement is further strengthened. Again, the causal mechanisms here are several.** First, improved physical conditions under which teaching and learning take place (e.g. less overcrowded classrooms or teaching in a shaded location) enhance the degree of support that teachers can provide and the attention that pupils can give to learning. Second, the physical conditions influence the instructional time as protection against rain, or light during evening classes, enable classes to take place. Third, a safe, comfortable and enjoyable school environment affects pupils’ experience of schooling, which is likely to lead to more frequent attendance and greater engagement in the schooling environment. To the extent that the school environment is more girl-friendly, girls’ school experience is particularly enhanced.
Assumptions

Figure 20 presents the assumptions with regards to the conditions that need to be in place for more effective teaching and an improved, girl-friendly school environment to actually result in improved learning outcomes, particularly for girls. We do not focus here on assumptions related to retention but many of the presented assumptions are relevant to achieving the retention of girls.

There are many factors that, in turn, influence whether the conditions hold. The different assumptions are also interdependent. Pupils – in particular, girls – actually attending class is influenced by external factors, such as their outside school activities and responsibilities, public primary school attendance, economic constraints, school accessibility, and the attitudes of the pupils and their social environment. Girls are assumed to be interested in acquiring a formal education, which will depend on their aspirations and the value they see in formal education – given, in particular, the expectation of early marriage, which is an important barrier to girls’ retention.

Figure 20: Causal package and underlying assumptions of ‘improved learning outcomes’

Alternative explanations

We consider the following alternative, non-GEP3-related explanations that could also be sufficient to explain improved learning outcomes:

• **Improved access and quality education in other schools.** The baseline data demonstrate that IQSs are not the only alternative to accessing formal education. Pupils are enrolled in both IQSs and public primary schools. The extent that pupils attend the two schools depends on many interacting factors, such as accessibility of the public primary school, the relative cost of attending public primary schools and poverty of the parents, as well as cultural beliefs and social norms with regards to formal education and girls’ access to this. If these underlying factors change public primary school attendance may
increase and learning outcomes may improve, regardless of the integration of formal education in the Qur’anic schools. The quality of education also plays a role. Access to public primary school does not necessarily result in improved learning outcomes. To the extent that the quality of education in the public primary schools that IQS pupils are attending becomes better, their learning outcomes can improve. Furthermore, in less remote areas pupils may attend vocational or other training, which may provide some form of basic education or motivate pupils to learn. Finally, in more urban areas formal private schools may also attract pupils, which can affect their learning outcomes.

• **Changes in the composition of the pupil population.** Over time, the IQS may attract a different pupil population: for example, younger pupils start the integrated curriculum or more pupils with previous education experience are attracted to the IQS. To the extent that their learning outcome levels are different from the learning levels of the baseline population changes in the average learning outcome in the IQS may be observed, regardless of improved teaching or an improved school environment.
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