

FINAL REPORT

# Niger IMAGINE Long-Term Evaluation 

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The IMAGINE ${ }^{1}$ project was designed to improve educational outcomes of girls in Niger. The Millennium Challenge Corporation (MCC) funded IMAGINE as a component of its threeyear Threshold Program in Niger (NTP) dedicated to reducing corruption, registering more businesses, promoting land titling, and increasing girls’ school enrollment, attendance, and completion rates. In December 2009, MCC suspended the NTP in the midst of implementation due to undemocratic actions undertaken by the government. Although most of the NTP components were not sufficiently implemented to allow for a rigorous evaluation of their intended impacts, the girls’ education project had been substantially implemented by that time and was thus the focus of both a one-year follow-up evaluation (Dumitrescu et al. 2011) and this three-year long-term evaluation.

The girls' education intervention, locally known as IMAGINE, was implemented in 10 departments in Niger with low girls’ enrollment and primary school completion rates. Plan International, a nongovernmental organization, was responsible for implementing IMAGINE under the supervision of the United States Agency for International Development (USAID) from October 2008 to September2010. Plan's implementation partners included Volunteer for Educational Integration (VIE) and Aide et Action (AeA). The project consisted of constructing 68 primary schools and implementing a set of complementary interventions designed to increase girls' enrollment and completion rates. The schools were based on a model that included three classrooms, housing for three female teachers, a preschool, and separate latrines for boys and girls equipped with hand-washing stations. Schools were deliberately located near a water source, and a borehole was installed close by. The complementary interventions included designing and disseminating training modules for teachers, promoting extracurricular activities, providing teacher incentive awards, and conducting a mobilization campaign in support of girls’ education. Due to the suspension of the NTP, the IMAGINE project was only partially implemented. Sixty-two functional schools were constructed, but the majority of the complementary activities were not implemented.

This report documents the main findings from the three-year long-term evaluation of the IMAGINE project. Overall, IMAGINE had an 8.3 percentage point positive impact on primary school enrollment during the 2012-2013 year, a 7.9 percentage point decrease in children being absent more than two consecutive weeks during the same school year, a 0.13 standard deviation impact on math test scores, and no impact on French test scores. The project impacts were larger for girls than for boys. For girls, the project had an 11.8 percentage point positive impact on enrollment and a 10.6 percentage point impact on attendance, whereas for boys the project had a 5.0 percentage point impact on enrollment and a 5.3 percentage point impact on attendance. The difference between the genders is statistically significant for enrollment and attendance. For learning, the impacts on math and French test scores for girls were consistently large and statistically significant, whereas the impacts for boys were smaller and not significant. Girls scored 0.11 standard deviations significantly higher than boys on the math test, whereas

[^0]differences on the French test were not statistically significant. The intervention did not appear to affect children from families with different socioeconomic status differently.

Mathematica Policy Research, an independent research contractor, conducted the evaluation. Centre International d'Etudes et de Recherches sur les Populations Africaines (CIERPA), a professional data collection firm located in Niger, performed the data collection activities.

## A. Overview of the evaluation

Our evaluation focuses on assessing the impacts of the project by seeking answers to four key questions: (1) What is the current level of availability and functionality of the infrastructure constructed under the IMAGINE project? (2) Did the IMAGINE project have any lasting impacts on key educational outcomes including enrollment, attendance, and test scores)? (3) Are the impacts different for girls than for boys? (4) Are the impacts different for children from households of different socioeconomic status?

Impact evaluations estimate the effects of a project by seeking to compare what happened to the beneficiaries of the project relative to what would have happened to them in the absence of the project. In this study, we assessed how children in IMAGINE villages fared relative to how they would have fared had IMAGINE not been implemented. We do not compare children in IMAGINE villages before the project and after the project, because it is likely that observed improvements could have occurred even in the absence of IMAGINE. The Ministry of Education in Niger has been implementing several initiatives aimed at improving girls’ education (including the construction of schools), and primary school enrollment rates in Niger were already increasing prior to the implementation of IMAGINE.

## 1. Evaluation design

The evaluation design selected to estimate the impacts of the IMAGINE project was random assignment. The Government of Niger (GoN) chose 204 villages to take part in the project based on certain eligibility criteria, such as the number of school-aged girls in the village, access to water within the village, and distance to a major road. Sixty-five schools were randomly selected to receive the IMAGINE project; the remaining 136 were randomly selected control villages. ${ }^{2}$ Because the villages were randomly assigned treatment status, villages that received the schools (treatment villages) and villages that did not (control villages) did not systematically differ from each other at the outset of the project. Hence, any subsequent differences in outcomes observed between these two groups of villages can be attributed to the project itself and not to other factors. This design, if properly implemented, is methodologically strong and is seen by many as the gold standard of impact evaluation methods.

[^1]
## 2. Data collection

Outcome data on the IMAGINE project were collected in late 2013 (October and November), approximately five years after random selection occurred and approximately three years after school construction ended. CIERPA, a professional data collection firm located in Niger, collected the data on the treatment and control groups.

The main sources of data were a household survey of randomly selected families with school-aged children, math and French tests administered to children living in households interviewed in the household survey, a village and school infrastructure questionnaire administered to a village leader and with direct observation of school infrastructure of the primary school in the village, and a village-level census.

## B. Sustainability of infrastructure

As we observed in the one-year evaluation, IMAGINE had no effect on the availability or number of schools in a village, as schools were widely available in villages prior to project implementation (Table 1). It did, however, have a sustained positive effect on the presence, quality, and functionality of school infrastructure (Tables 1 and 2). IMAGINE schools had greater numbers of classrooms and greater numbers of finished classrooms than non-IMAGINE schools. In fact, on every measure of school infrastructure quality that was gathered, including water source, toilet facilities, preschools, presence of a playground, and teacher lodging, IMAGINE schools were observed to be of higher quality than non-IMAGINE schools. These findings have important implications for the interpretation of the impact estimates presented next. They suggest that the counterfactual in this evaluation is not the absence of a school in a village, but rather the presence of a lower quality school.

Table 1. Village characteristics

|  | Treatment <br> group | Control <br> group | Difference |
| :--- | :---: | :---: | :---: |
| Number of: |  |  |  |
| Schools per village | 1.14 | 1.16 | -0.02 |
| Classrooms per school | 6.43 | 4.97 | $1.47^{* * *}$ |
| Classrooms made of finished materials per school | 4.93 | 2.37 | $2.37^{* * *}$ |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. The unit of analysis is the village.
***/**/* Statistically significant at the .01/.05/.10 level

## C. Impacts

The IMAGINE project provided positive impacts on primary school enrollment and attendance for children ages 6 to 14 (Table 3). Children living in treatment villages were 8.3 percentage points more likely to report having been enrolled in school during the last school year (2012-2013) and 7.9 percentage points less likely to report being absent more than two consecutive weeks during the last school year (both significant at the 1 percent level). On
average, children in treatment villages scored 0.13 standard deviations higher on the math assessment than children in control villages (significant at the 5 percent level). Test scores in French for children in treatment villages are higher than in control villages, but are not statistically significant.

Table 2. School characteristics

|  | IMAGINE <br> schools | Non-IMAGINE <br> schools | Difference |
| :--- | :---: | :---: | :---: |
| Percentage of schools with: |  |  |  |
| Potable water source present | 79.6 | 19.4 | $60.2^{* * *}$ |
| Potable water source functioning | 50.0 | 9.2 | $40.8^{* * *}$ |
| Toilet facilities present | 100.0 | 40.0 | $60.0^{* * *}$ |
| Toilet facilities functioning | 98.1 | 28.7 | $69.4^{* * *}$ |
| Separate toilets for boys and girls | 98.1 | 29.3 | $68.8^{* * *}$ |
| Preschool facility | 98.1 | 23.2 | $74.9^{* * *}$ |
| Playground | 96.3 | 1.6 | $84.7^{* * *}$ |
| Teacher lodging | 98.1 | 9.4 | $8.7^{* * *}$ |
| Teacher lodging-females only | 94.4 | 1.6 | $92.8^{* * *}$ |
| Sample size (villages) | 54 | $\mathbf{1 2 4}$ |  |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire
Note: Differences between IMAGINE and non-IMAGINE group means were tested using two-tailed t-tests. NonIMAGINE group means are regression adjusted, including commune fixed effects. The IMAGINE schools in this table are those that actually received IMAGINE schools, rather than those that were randomly assigned to receive treatment. Also, the unit of analysis is the school, rather than the village.
***/**/* Statistically significant at the .01/.05/.10 level

Table 3. Long term impacts of IMAGINE on Child Education Outcomes

|  | Treatment group | Control group | Difference |
| :--- | :---: | :---: | :---: |
| Child enrolled during last school year <br> (percentage points) | 73.6 | 65.3 | $8.3^{* * *}$ |
| Child absent more than two consecutive <br> weeks during last school year <br> (percentage points) | 34.3 | 42.2 | $-7.9^{* * *}$ |
| Math score - normalized <br> (standard deviations) | 0.242 | 0.116 | $0.126^{* *}$ |
| French score - normalized <br> (standard deviations) | 0.055 | -0.019 | 0.074 |
| Sample size (children) | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 , 9 7 7}$ |  |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. For non-enrolled children, attendance is unconditional on enrollment, meaning those who are not enrolled are all scored as having been absent. Normalized test scores take child age into account.
***/**/* Statistically significant at the .01/.05/.10 level

IMAGINE had a large and significant impact on girls’ enrollment, attendance, and test scores (Table 4) after three years. When looking at the primary outcomes of interest
disaggregated by gender, we see large and significant impacts of the project for girls, compared to more modest and less significant impacts for boys. The project increased girls’ enrollment from 60.3 percent in control villages to 72.1 percent in treatment villages (an 11.8 percentage point impact, significant at the 1 percent level), whereas it increased boys' enrollment from 70.0 percent in control villages to 75.0 percent in treatment villages (a 5.0 percentage point impact, significant at the 10 percent level). Girls achieved relatively large and statistically significant impacts on test scores, whereas the impacts for boys were smaller and not statistically significant.

Table 4. Long term impacts of IMAGINE disaggregated by gender

|  | Impact on girls | Impact <br> on boys | Difference in <br> impact: girls <br> boys |
| :--- | :---: | :---: | :---: |
| Child enrolled during last school year <br> (percentage points) | $11.8^{* * *}$ | $5.0^{*}$ | $6.8^{* *}$ |
| Child absent more than two consecutive <br> weeks during last school year <br> (percentage points) | $-10.5^{* * *}$ | $-5.2^{*}$ | $-5.3^{* *}$ |
| Math score - normalized <br> (standard deviations) | $0.183^{* * *}$ | 0.071 | $0.112^{* *}$ |
| French score - normalized <br> (standard deviations) | $0.101^{* *}$ | 0.046 | 0.055 |
| Sample size (children) | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 , 9 7 7}$ | $\mathbf{1 2 1}$ |
| Sample Size (villages) | $\mathbf{5 7}$ |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed ttests. Control group means are regression adjusted, including commune fixed effects. For non-enrolled children, attendance is unconditional on enrollment, meaning those who are not enrolled are all scored as absent. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. Normalized scores take child age into account.
***/**/* Statistically significant at the .01/.05/.10 level

The project does not appear to affect children from families with different socioeconomic status differently (numbers not shown).

## D. Conclusion

This report documents the main findings from a three-year follow-up impact evaluation of the IMAGINE project. Overall, impacts are larger and more statistically significant than those found after the one-year impact evaluation, which may be due to several reasons. First, the infrastructure investments have remained present and functional, and few non-IMAGINE schools seem to have adopted similar types of infrastructure. The higher quality schools may drive parents to enroll their children in school at a higher rate, as well as to encourage more consistent attendance. Second, viewed through the lens of the larger impacts for girls, it appears that there is indeed a "girl friendliness" about these schools-such as separate latrines for boys and girls or the presence of female teacher housing (which was shown to lead to more female teachers in the original IMAGINE evaluation) - that may be working. Third, these results also
suggest that it may take more than one year of schooling in Niger for an improvement in learning to manifest. Because children stay in school longer in IMAGINE villages than in non-IMAGINE villages, they have more of a chance to learn, which could explain the improvement in test scores after three years, when there were none after one year.

## I. INTRODUCTION

The Millennium Challenge Corporation (MCC) funded a three-year Threshold Program in Niger (NTP) to reduce corruption, register more businesses, promote land titling, and increase girls’ education outcomes, beginning in March 2008. As part of the NTP, in an effort to address some of the education-related challenges facing Niger, the IMAGINE (IMprove the educAtion of Girls In NigEr) project to improve the educational outcomes of girls in Niger was developed. This project was implemented by Plan International, overseen by the United States Agency for International Development (USAID). Plan's implementation partners included Volunteer for Educational Integration (VIE) and Aide et Action (AeA).

The IMAGINE project consisted of the construction of 68 primary schools with high quality infrastructure, along with implementation of a set of complementary interventions designed to increase girls' enrollment and completion rates. The complementary interventions were intended to include the design and dissemination of training modules for teachers, promotion of extracurricular activities, provision of teacher incentive awards, and implementation of a mobilization campaign in support of girls’ education. Due to a constitutional crisis in Niger, MCC suspended the NTP, including IMAGINE, in December 2009, in the midst of implementation. At the suspension of project activities after nine months of implementation, Plan International had constructed 62 of the 68 IMAGINE schools; however, the majority of the complementary activities had not been implemented.

In January and February of 2011, Mathematica completed an impact assessment of the activities that had been implemented, and found small positive impacts on school enrollment but no impacts on attendance or test scores (Dumitrescu et al. 2011). No baseline study was completed for IMAGINE. The positive impacts were driven entirely by effects of the project on girls. These findings were smaller than expected, given that an evaluation of a similar project in neighboring Burkina Faso found large impacts. Several factors might help to explain the results from the initial study, including the presence of schools in nearly all sample villages prior to the project, selection of villages by the central ministry to receive schools without an application process, incomplete implementation of some project activities, and measurement of outcomes only one year after completion of the project.

This report evaluates the impact of the IMAGINE project three years after completion of the school construction and partial implementation of complementary activities. It is useful to assess the longer-term effects of IMAGINE to ascertain the sustainability of the original infrastructure investments and to assess whether the finding of limited impacts in the initial IMAGINE evaluation remains or has changed over time.

## A. Primary schooling context in Niger

School enrollment and completion rates in Niger are among the lowest in the world, despite a concerted government effort that has produced substantial gains in primary education in the past decade. Niger experienced an increase in gross enrollment from 32 percent in 2000 to 71 percent in 2010; however, this success is tempered by a persistent gender gap in enrollment
and school completion rates (Table I.1). ${ }^{3}$ During the same time period, gross enrollment for boys increased from 38 to 77 percent, whereas girls’ enrollment rose from 26 to 65 percent. More telling, the completion rate of primary education in 2012 was only 49 percent, with a completion rate of 55 percent for boys and 43 percent for girls. Despite improvements, Niger’s primary school enrollment rate is one of the lowest in the West African region (Table I.2). These national figures do not show the large disparities that exist between rural and urban areas.

Table I.1. Evolution of primary education indicators: Niger 1975-2012

|  | Gross enrollment ratio-primary (\%) |  |  | Completion of primary education (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary |  |  | Gross intake ratio to the last grade of primary |  |  |
| Academic year | All | Boys | Girls | All | Boys | Girls |
| 2012 | 71 | 77 | 65 | 49 | 55 | 43 |
| 2005 | 49 | 57 | 41 | 29 | 35 | 23 |
| 2000 | 32 | 38 | 26 | 18 | 21 | 14 |
| 1995 | 28 | 34 | 21 | 13 | 17 | 10 |
| 1990 | 26 | 32 | 19 | 16 | 20 | 11 |
| 1985 | 22 | 28 | 16 | 19 | 25 | 14 |
| 1980 | 22 | 27 | 16 | 14 | 16 | 11 |
| 1975 | 15 | 19 | 11 | 7 | 9 | 5 |

Source: UNESCO Institute for Statistics 2014

Table I.2. Gross enrollment rates in primary education: West Africa 2012

| Country | 2012 gross enrollment rate (\%) |
| :--- | :---: |
| Benin | 123 |
| Burkina Faso | 85 |
| Chad | 95 |
| Mali | 88 |
| Niger | $\mathbf{7 1}$ |

Source: UNESCO Institute for Statistics 2014

Prior to implementation of the IMAGINE project, the Government of Niger (GoN) had already begun several initiatives aimed at improving access to schooling and promoting girls’ education under a program called PDDE (Programme Décennal pour le Développement de l'Éducation). As part of the GoN's push to improve schooling, school construction was widespread in Niger prior to the implementation of IMAGINE. Between 2002 and 2008 (when the NTP began), the number of schools doubled, increasing from 5,975 to 10,162 (Figure I.1). School construction continued to increase after 2008, and the number of schools rose to 14,631 in 2012. During the same period, the percentage of classrooms constructed of durable material

[^2]and in good repair remained relatively stable near 50 percent (Figure I.2). The number of students per textbook decreased significantly in this period as well. For reading, there were 2.5 students per textbook in 2003-2004 compared to 1.5 students per textbook in 2011-2012. For math, there were 3 students per textbook in 2003-2004 compared to 1.6 students per textbook in 2011-2012 (Ministère de l’Éducation Nationale, Annuaire 2011-2012).

Figure I.1. Number of schools in Niger, 2002-2012


Source: Ministère de l'Éducation Nationale, Annuaire 2011-2012

Figure I.2. Average percent of existing classrooms constructed of durable material in Niger, 2002-2012


Source: Ministère de l'Éducation Nationale, Annuaire 2011-2012

Households in Niger can enroll their children in primary school free of charge, although in practice they are often asked to support some school-related expenditures in addition to the opportunity costs of their children's time. Primary education lasts for six years and leads to the Certificat de fin d`Etudes du premier Degré (CFEPD). It is officially compulsory between the ages of 7 and 12. Due to various factors, including an inadequate number of schools and resistance by parents, this law has not been enforced, especially in rural areas.

## B. Overview of the short-term impacts of IMAGINE

The impact evaluation of IMAGINE was designed to take into account, and control for, improvements in the general environment for education in Niger, so any impacts found reflect the net change in communities compared to what would have happened without the IMAGINE project. The initial impact evaluation one year after construction of the new schools found no effect on the availability of or number of schools in a village; however, the project did have a positive effect on the number of classrooms available to children in villages where it was implemented. It also greatly improved the quality of school infrastructure. In particular, IMAGINE schools had more classrooms, usable classrooms, and classrooms with blackboards than non-IMAGINE schools. IMAGINE schools were also significantly more likely to have a potable water supply, separate latrines for boys and girls, a preschool facility, and teacher housing.

Overall, after one year, IMAGINE had a 4.3 percentage point positive impact on primary school enrollment, no impact on attendance, and no impact on math and French test scores. The project impacts were generally larger for girls than for boys. For girls, the project had an 8.1 percentage point positive impact on enrollment and a 5.4 percentage point impact on attendance. No significant impacts were detected for boys' enrollment or attendance. The project had no impact on girls' math scores, though there is suggestive evidence it may have had a positive impact of 0.09 standard deviations on girls’ French test scores. No significant impacts were detected for boys on test scores. Finally, impacts were larger for younger children (ages 7-10), than for those ages 11 and 12.

The trends in enrollment rates (Table I.1) and school construction (Figures I. 1 and I.2), along with the PDDE, are of particular importance for interpreting these results, since they suggest that even if IMAGINE had not been implemented, some schools would have been constructed and enrollment rates would have increased. Several other possible explanations for the small impacts of the IMAGINE project observed one year after completion of the project activities are detailed in the first evaluation report, however these hypotheses were not tested at the time. First, the project as a whole was not fully implemented. Second, the village selection process by the central Ministry of Education did not require an application process, which may suggest that households in villages where IMAGINE was implemented may not have felt that construction of a new girl-friendly school was an important priority for the village. We do not know whether this is the case, as it is possible the villages did feel it was an important priority but did not have a way to voice their preference. Third, it is possible that a one-year exposure period to the new schools may have been insufficient to change the outcomes of interest.

## C. Long-term impact evaluation of IMAGINE

Following Niger's return to democratic rule, a portion of the NTP was reinstated in July 2012. At the same time, USAID, with its own funds and some funds from the NTP, began funding the Niger Education and Community Strengthening (NECS) project to continue and complement girls’ education activities begun under the NTP. The NECS project’s goal is to improve educational opportunities available to children while strengthening links between local communities and state structures; it includes a variety of activities targeted at raising learning outcomes, engaging the community, and encouraging families to enroll and keep their children in school. Throughout all of these activities, NECS places a special emphasis on girls and earlygrade literacy. NECS activities are being implemented in 150 villages, of which 149 were on the original list of 2012 villages eligible to receive IMAGINE, and started in July 2012. ${ }^{4}$

Mathematica was chosen by MCC to lead a rigorous evaluation to estimate the impact of the NECS project. The evaluation design for the NECS evaluation builds on the random assignment conducted for the IMAGINE evaluation. Specifically, the NECS evaluation design involves two rounds of clustered random assignment. The first round, which was already conducted in 2008 for the IMAGINE evaluation, involved randomly selecting IMAGINE treatment villages from a pool of potential recipient villages identified by the Ministry of Education based on specific criteria (the remaining villages became the IMAGINE control villages). ${ }^{5}$ All IMAGINE villages are receiving the NECS project. The second round of random assignment, which we conducted in November 2012, involved randomly selecting some of the IMAGINE control villages to receive NECS. For the evaluation of the NECS project, we are estimating the impacts of NECS and the combination of NECS and IMAGINE on key educational outcomes. Two rounds of data collection across all villages are being conducted: the NECS project baseline was done in October-November 2013 and before the full implementation of the NECS project and an endline will be done during the 2013/2014 or 2014/2015 school year, near the end of implementation activities.

This approach allows us to use the baseline data collected for the NECS evaluation to assess potential impacts of IMAGINE projects three years after their completion. ${ }^{6}$ This report focuses on this long-term evaluation of IMAGINE and allows us to address the third possible explanation for the small initial impacts outlined in Section B above.

[^3]This page has been left blank for double-sided copying.

## II. OVERVIEW OF IMAGINE

The NTP was signed in March 2008, and USAID selected a consortium led by Plan International to implement the girls’ education component. The IMAGINE project was to be implemented in 20 communes within 11 departments located in every region except Niamey (Figure II.1). Within these communes, 68 villages were to receive a variety of IMAGINE projects for promoting girls’ education.

Figure II.1. Implementation of IMAGINE project by department


Source: Dumitrescu et al. 2011

The villages determined to be eligible for IMAGINE were selected by the GoN, and were clustered within region, department, and commune. Initially, the two regions of Tillabéri and Zinder were selected for participation in the project, after which an additional five regionsAgadez, Diffa, Dosso, Maradi, and Tahoua-were added by the GoN. In each of these five regions, two departments were selected, and within those, two communes. Within each of the 20 communes thus selected, 10 villages were identified as eligible based upon certain criteria, including the number of school-aged girls in the village, access to water within the village, and distance to a major road. Random assignment of villages was then implemented within each commune, with different numbers of villages within each commune assigned to treatment.

The IMAGINE project included two components designed to increase girls’ school enrollment, attendance, and completion rates: girl-friendly school construction and a series of complementary activities to improve the quality of teaching and children's performance and build support for girls' education. The evaluation design relied on school construction (hard interventions) being randomly assigned to a subset of eligible villages and for the public awareness and training activities (soft interventions) to be made available to all treatment villages and other villages near them. ${ }^{7}$ The new schools were based on a design that included three classrooms, housing for three female teachers, a preschool, and separate latrines for boys and girls that were equipped with hand-washing stations. In addition, schools were deliberately located near a water source and included the construction of a borehole for the school. The complementary interventions included:

- Improving the quality of teaching and children's performance. This consisted of design and dissemination of training modules for teachers; supplying schools with stationery kits, student manuals, and guidebooks for teachers; promotion of extracurricular activities such as school government; and incentive awards to encourage good performance of teachers and schools.
- Mobilization campaigns in support of girls' education. This consisted of the development and planned implementation of a communication strategy to advocate for girls' education, advocacy days, local action plans, capacity building through Comité de Gestion des Etablissements Scolaires (or School Management Committee [COGES]), and adult literacy and income-generating projects.


## A. Project logic

The logic model in Figure II. 2 shows how the IMAGINE project activities may lead to improved outcomes and affect population subgroups of interest. The interventions are listed in the left-hand column, followed by columns showing the group targeted by the intervention and outcomes that could be potentially improved. The primary intervention (listed in the first row of the table) was the construction of girl-friendly schools. These schools can directly affect enrollment and attendance of girls, which in turn could improve their academic skills and, in the long run, their employment and incomes. The additional activities-such as designing and disseminating teacher training modules, supplying schools with materials and guidebooks for teachers, developing and implementing a communication strategy to advocate for girls’ education, and adult literacy and income-generating projects-are likely to contribute to improving girls’ enrollment and academic skills, but may also improve other outcomes.

[^4]Figure II.2. IMAGINE project planned interventions and outcomes

|  | Group directly affected | Outcomes |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Activity |  | Short-term | Medium-term | Long-term |
| New girl-friendly schools* | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\prime \prime} \\ & \hline \end{aligned}$ | Enrollment, attendance, learning | Academic performance | Employment and income |
| Textbooks* |  | Access to textbooks | Academic performance | Employment and income |
| Hygiene and sanitation education*** |  | Increased hand washing | Reduced illness, improved attendance and retention | General health, employment, and income |
| Tutoring*** | Some girls | Educational outcomes for girls with difficulties |  |  |
| Merit-based awards for female teachers*** | $\begin{aligned} & \stackrel{\varrho}{0} \\ & \stackrel{\nearrow}{0} \\ & \stackrel{\mathbb{D}}{\mathscr{D}} \end{aligned}$ | Teaching behaviors | Female teacher recruitment and retention, academic performance | Girls' enrollment and attendance |
| Teacher training** |  | Improved teaching techniques | Academic performance | Employment and income |
| Mothers' literacy training** | Mothers | Mothers' literacy | Mothers' involvement in girls education | Girls' employment and income |
| Societal awareness campaign** | Parents | Parent awareness of schooling benefits for girls | Parents' attitudes toward girls' education | Girls' enrollment and attendance |

Note: * mostly or fully implemented; ** partially implemented; *** not implemented

## B. Implementation summary

Selection of the IMAGINE treatment villages via random assignment occurred in December 2008, and the list of villages to receive IMAGINE was finalized in February 2009, after completion of the ground-truthing exercise. Construction of the IMAGINE schools began in March 2009. Despite the suspension of the project in December 2009, Plan International was able to complete most of the intended construction: 62 functional, girl-friendly schools consisting of three classrooms, teacher lodging, and latrines were constructed before all project activities ended in April 2010. ${ }^{8}$ Due to the abrupt end of the project, the majority of the complementary activities were not implemented (project activities ended after 14 months instead of the intended 3 years). A few complementary activities, such as the provision of textbooks and materials for the schools, were fully implemented, whereas teacher training, mothers' literacy training, and societal awareness campaigns were only partially implemented, and merit-based awards for female teachers, student tutoring, and hygiene and sanitation education were not implemented at all. The logic model in Figure II. 2 above summarizes activities that were mostly or fully implemented, partially implemented, and not implemented at the time of the suspension of the NTP. ${ }^{9}$

[^5]Figure II. 3 provides a broad overview of the timing of the key activities related to the implementation and evaluations of the IMAGINE project. Given that only the infrastructure components (hard interventions) were fully completed, the one-year follow-up and three-year long-term evaluations of IMAGINE estimate the impact of school construction activities on key educational outcomes.

Figure II.3. IMAGINE evaluation timeline


## III. EVIDENCE GAPS THAT THE LONG-TERM IMAGINE EVALUATION FILLS

The IMAGINE project constructed high quality schools with features specifically designed to attract girl students in villages across Niger. This report contributes to the literature by showing further evidence of the effects of school characteristics (school quality) on several key education outcomes, including enrollment, attendance, and test scores, and the extent to which these effects vary by gender and over time.

Much of the literature identifying the effects of school infrastructure on child enrollment identifies the effect of improving access to education. The BRIGHT I evaluation, which studied the effects of a project similar to the IMAGINE project, found enrollment impacts on the order of 15-20 percentage points, with girls reporting a 4.6 percentage point effect higher impact than boys (Kazianga et al. 2013). ${ }^{10}$ A literature review examining 115 rigorous evaluations of educational programs in low- and middle-income countries concludes that reducing the costs of attending school, such as through reducing commute times or providing cash transfers or school meals, and having alternatives to traditional public schools, through the provision of vouchers or subsidies to private school, affect attendance and attainment (Murnane and Ganimian 2014).

A key aspect of the IMAGINE project's quality initiative was the girl-friendly nature of the schools, including characteristics such as separate bathrooms for boys and girls, increased presence of female teachers, and gender equality interventions. A study of the role of new latrines in schools in India shows that they improved enrollment through improved hygiene and reduction of anxiety (Adukia 2013). Other studies document the impacts of school characteristics on relative participation of girls. A randomized evaluation in northwestern Afghanistan found that the construction of village-based schools (as compared to regional schools serving a number of villages) increased enrollment for girls by 52 percentage points, a 17 percentage point gain over the enrollment gains for boys (Burde and Linden 2013). A study of publicly funded private primary schools in rural Pakistan found significant increases in child enrollment and a reduction in gender disparities after the introduction of a new school in a village (Barrera-Osorio et al. 2013). The presence of a village-based school virtually eliminates the gender disparity in treatment villages. As noted earlier, the first evaluation of the IMAGINE project in Niger found small across-the-board impacts that for the most part were statistically insignificant. However, IMAGINE did improve girls' enrollment by 7.2 percentage points when compared to boys one year after the project ended (Dumitrescu et al. 2011).

Studies looking at education production have identified additional aspects of school quality that have an effect on school enrollment and test scores. A literature review examining 79 studies published between 1990 and 2010 (43 of which were deemed "high quality") investigated which specific school and teacher characteristics, if any, appear to have strong positive impacts on learning and time in school (Glewwe et al. 2011). The estimated impacts on time in school and learning of most school and teacher characteristics were statistically insignificant, especially when limiting the evidence to high quality studies. The few variables that were found to have significant effects included availability of desks, teacher knowledge of the subjects they teach, and teacher absence. Similarly, the literature review by Murnane and Ganimian (2014) concludes

[^6]that more resources provided to schools results in improved achievement only when children's daily experiences in school are changed, primarily through the quality of instruction received.

## IV. IMPACT EVALUATION DESIGN

To assess the long-term impact of the IMAGINE project, we use random assignment. In this chapter, we describe the evaluation questions and key outcome indicators (Section A), the methodology we use to conduct the impact evaluation (Section B), the data collection strategy (Section C), and the time frame for the implementation of the evaluation (Section D).

## A. Evaluation questions

This impact evaluation seeks to answer four key questions about whether or not the IMAGINE investments have been sustainable:

1. What is the current availability of and functionality of the infrastructure constructed under the IMAGINE project?
2. Did the IMAGINE project have any lasting impacts on key educational outcomes?
a. What is the impact on primary education enrollment?
b. What is the impact on attendance rates?
c. What is the impact on learning as measured by test scores?
d. What is the impact on other measures of education quality?
3. Are the impacts different for girls than for boys?
4. Are the impacts different for children from households of different socioeconomic status?

The first question involves examining the presence, functionality, and use of IMAGINEspecific infrastructure (such as high quality classrooms, toilet facilities, and teacher lodging) in IMAGINE villages after three years, and comparing these elements to those available in nonIMAGINE villages. This provides valuable long-term evidence on the sustainability of the IMAGINE project itself.

The second research question is intended to assess the effects of IMAGINE on key educational outcomes. The outcomes are laid out in the four sub-questions, and include enrollment, learning and attendance. They follow directly from the hypothesis that by improving the educational infrastructure in the targeted communities, the IMAGINE project will affect both the quantity and quality of education experienced by children in these communities.

The third and fourth research questions involve assessing the effects of IMAGINE on the key educational outcomes outlined in the second research question, but for subgroups of particular interest. The third research question assesses effects for boys compared to girls, and the fourth for children in households with varying socioeconomic statuses.

These research questions suggest the following set of primary outcomes for the three-year follow-up IMAGINE evaluation:

Existence of school infrastructure. The enumerators will directly observe the number of classrooms and finished classrooms, the availability of a potable water source, the presence of latrines and whether or not the latrines are separate for boys and girls, and whether the village public school has teacher lodging, a preschool, and a playground.

Functionality of school infrastructure. The enumerators also will observe the functionality of the potable water source and the latrines at the school.

Enrollment. A household self-report for all children in the sample will measure whether or not a child was enrolled during the most recent school year (school year 2012-2013).

Attendance. A measure of absenteeism will be used instead of attendance due to the timing of data collection. The household self-report for all children in the sample will also measure whether or not a child was absent for more than two consecutive weeks during the most recent school year (SY 2012-2013). Children who were not enrolled during SY 2012-2013 are considered to be absent.

Learning. Child-level learning for all children in the sample, regardless of child enrollment status, is measured using scores from a math test and a French test. For each assessment, a summary score is calculated and converted into standard deviations by normalizing by age group. The comprehensive nature of the interventions suggests that learning may improve across multiple subjects; therefore, testing learning in math and French is useful.

Secondary outcomes, including alternative measures similar to those listed above as well as additional educational outcomes, are also explored. Additional characteristics of the children, households, and schools in the sample facilitate the subgroup analyses described in the research questions, for boys compared to girls and for households with different asset levels, as well as for other subgroups of interest.

The primary evaluation questions and their data type and data source are shown in Table IV.1.

Table IV.1. Evaluation questions and data source

| Evaluation questions | Data type | Data source |
| :--- | :--- | :--- |
| Current level of availability and functionality of IMAGINE <br> infrastructure | Quantitative | Village and School Infrastructure <br> Questionnaire |
| Lasting impact of IMAGINE on key educational outcomes |  |  |
| $\quad$ Enrollment | Quantitative | Household Questionnaire |
| Attendance | Quantitative | Household Questionnaire |
| Test Scores | Quantitative | Household Questionnaire |
| Impacts of IMAGINE for girls and for boys | Quantitative | Household Questionnaire |
| Impacts of IMAGINE by household socioeconomic status | Quantitative | Household Questionnaire |

## B. Methodology

Random assignment was used to estimate the impacts of IMAGINE. Schools were assigned randomly to villages, which should ensure that villages that received the schools (treatment villages) and ones that did not (control villages) did not systematically differ from each other at the outset of the project. Hence, any subsequent differences in outcomes observed between these two groups of villages should be attributable to the project and not to other factors. This design, if properly implemented, is methodologically strong and is seen by many as the gold standard of impact evaluation methods. The remainder of this section details how the random assignment design was implemented.

## 1. Random assignment

In December 2008, the GoN agreed with USAID that the implementation of the IMAGINE project would comprise building schools in 68 villages located in 20 communes in Niger. Three of these villages had already been selected prior to Mathematica's involvement in the project. We agreed with MCC, GoN, USAID, and other key stakeholders that selection of the remaining 65 villages would be done randomly among sets of villages deemed eligible to receive the project within each commune. ${ }^{11}$ Table IV. 2 shows the list of communes participating in the project along with the number of villages in each commune that participated in the random assignment process.

Overall, the GoN chose 201 villages, from which 65 were randomly selected to receive the IMAGINE infrastructure project; the remaining 136 were selected as control villages. ${ }^{12}$ The random assignment was conducted in December 2008 in a public ceremony involving representatives from Mathematica, GoN, MCA, USAID, and Plan International. It is important to note that random assignment was conducted within each of the 20 communes and that the fraction of treatment villages varied by commune. ${ }^{13}$

[^7]Table IV.2. Results from random assignment process

| Region | Commune | Total number of villages | Number of treatment villages | Number of control villages |
| :---: | :---: | :---: | :---: | :---: |
| Agadez | 1 | 10 | 2 | 8 |
| Diffa | 2 | 10 | 2 | 8 |
| Dosso | 3 | 10 | 2 | 8 |
|  | 19** | 10 | 2 | 8 |
| Maradi | 4 | 10 | 2 | 8 |
|  | 5 | 12 | 2 | 10 |
|  | 6 | 12 | 2 | 10 |
|  | 7 | 10 | 2 | 8 |
| Tahoua | 8 | 10 | 2 | 8 |
|  | 9 | 10 | 2 | 8 |
|  | 10 | 10 | 2 | 8 |
|  | 11 | 10 | 2 | 8 |
| Tillaberi | 12 | 10 | 6 | 4 |
|  | 13 | 10 | 5 | 5 |
|  | 14* | 7 | 3 | 4 |
|  | 15 | 10 | 5 | 5 |
| Zinder | 20** | 10 | 6 | 4 |
|  | 18 | 10 | 5 | 5 |
|  | 16 | 10 | 6 | 4 |
|  | 17 | 10 | 5 | 5 |
| Total | 20 | 201* | 65 | 136 |
| Note: | * 204 villages were originally identified as eligible to receive the project. Only 201 villages participated in random assignment, because three villages (in commune number 14) were selected to receive treatment prior to random assignment. <br> ** Commune excluded from IMAGINE due to severe deviation from random assignment. |  |  |  |
|  |  |  |  |  |

In practice, the evaluation does not include all of the originally selected villages. After random assignment, USAID and Plan International undertook a "ground truthing" effort in which each selected village was visited to determine eligibility. As a result, in 4 of the 20 communes, project implementation was not fully consistent with the plan that resulted from random assignment. In these communes, one or more villages selected to receive an IMAGINE school was replaced with another village. In each situation, Plan International attempted to replace the ineligible village with the next eligible village that was drawn during the random assignment meeting. Two of the communes (numbers 19 and 20) were dropped from the evaluation because the deviation from random assignment was deemed very severe. ${ }^{14}$ The other

[^8]two communes were kept in the evaluation because the deviation from random assignment was not deemed too severe. ${ }^{15}$

Finally, because of political unrest at the time of the 2011 data collection, the interviewers could not collect data in three villages in commune number 1 for the first evaluation. We therefore use a sample of 178 villages to estimate the impacts of IMAGINE after three years; however, because we have data on these initially excluded villages and communes, we also estimate impacts for the full sample of 201 villages.

The IMAGINE evaluation sample comprises 178 villages ( 57 treatment and 121 control). For this sample, actual school construction was generally consistent with the planned construction. Indeed, as shown in Table IV.3, Plan International built schools in 53 of the 57 treatment villages (for a take-up rate of 93 percent) and only built an IMAGINE school in one of the 121 control villages (for a crossover rate of less than 1 percent).

## Table IV.3. Random assignment versus actual school construction in evaluation sample

|  | Random assignment |  |  |
| :--- | :---: | :---: | :---: |
| Actual school construction | Treatment | Control | Total |
| IMAGINE school was constructed | 53 | 1 | 54 |
| IMAGINE school was not constructed | 4 | 120 | 124 |
| Total number of villages | 57 | 121 | 178 |

Note: 204 villages were originally included in the sample. The sample size decreased from 204 villages to 178 villages in IMAGINE due to the following reasons:

- 3 villages (commune number 14) were excluded because they were selected to receive treatment prior to random assignment.
- 20 villages (from two communes-numbers 19 and 20) were excluded because the deviation from random assignment was too severe within the communes.
- 3 villages (commune number 1) were not surveyed due to civil unrest.


## 2. Estimation strategy

Given the use of random assignment to select the beneficiary sites, the basic method to estimate project impacts consists of comparing mean outcomes for the treatment and control groups. Given that the random assignment occurred within communes, it is important to statistically account for the communes in which the children in the sample live. Hence, a
eligibility requirements, which left no control villages in this commune. In commune number 20, 6 villages were assigned from the 10 identified. Of those, two were determined to be ineligible and were replaced by the seventh and ninth villages on the list. The eighth village on the list was determined to be ineligible as well, leaving only one control village in this commune. The principal reason that villages were determined to be ineligible was that they already had at least three classrooms built with durable materials.
${ }^{15}$ In commune number 15, 5 villages were assigned from the 10 identified. Of those, one was determined to be ineligible. It was replaced with the sixth and next village on the list. That left 4 control villages in this commune. In commune number 18, 5 villages were assigned from the 10 identified. Of those, one was determined to be ineligible and was replaced by the seventh village on the list after determining that the sixth village was also ineligible. That left 3 control villages in this commune.
regression framework is used to estimate project impacts. The dependent variable is the relevant key outcome for the child (enrollment or test scores, for example), the key explanatory variable is an indicator of whether the child lives in a village that was randomly assigned to receive a school, and commune indicators are included as additional control variables. Given that random assignment was used, we did not include other explanatory variables in the regressions for our main impact estimations. We conducted some sensitivity analyses in Chapter V and confirmed that the inclusion of additional explanatory variables does not affect the findings that arise from our main impact estimations.

Model. We estimate the impact of IMAGINE by estimating the following ordinary least squares model (OLS) for the sample of IMAGINE treatment villages and IMAGINE control villages: ${ }^{16}$

$$
\begin{equation*}
\mathrm{Y}_{\mathrm{ihj}, \mathrm{post}}=\alpha+\beta \text { IMAGINE }{ }_{\mathrm{j}}+\delta_{\mathrm{k}}+\lambda \mathrm{X}_{\mathrm{ihj}}+\varepsilon_{\mathrm{ihj}} \tag{1}
\end{equation*}
$$

where $Y_{i h j \text { post }}$ is the outcome for child $i$ in household $h$ in village $j$ at end line; $\operatorname{IMAGINE} E_{j}$ is a binary indicator that is one if $j$ is a treatment village and zero if it is a control village; $\delta_{k}$ is a vector of binary indicators, one for each commune $k$; $X_{i h j}$ is a vector of control variables (which we include in the robustness checks) that could be correlated with outcomes (the controls are at the individual, household, or village level); and $\varepsilon_{i h j}$ is a random error term. The parameter of interest in equation (1) is $\beta$, which gives the estimated average impact of IMAGINE on the outcome of interest. Effectively, equation (1) involves a follow-up comparison of the treatment and control groups that assumes equivalence at the time of the original IMAGINE random assignment (in 2008) and captures the effects of any differences between the groups that have arisen since then. More specifically, the parameter $\beta$ can be interpreted as the impact of three years of IMAGINE.

Our estimates have to account for the fact that outcomes among individuals in the same village-the level of random assignment-are likely to be correlated, because they experience many of the same conditions (such as the same teachers and school environment). We account for the correlation statistically by clustering the regression error terms at the village level to adjust the standard errors.

Subgroups. Key subgroups include those defined by gender (research question 3) and by household asset levels (research question 4). The impacts for a particular subgroup are evaluated simply by including appropriate interaction terms in the equation above.
$Y_{\mathrm{ihj}, \mathrm{post}}=\alpha+\beta_{1}$ IMAGINE $_{j}+\beta_{2}$ SUBGROUP $+\beta_{3}$ SUBGROUP IMAGINE ${ }_{j}+\delta_{\mathrm{k}}+\lambda \mathrm{X}_{\mathrm{ihj}}+\varepsilon_{\mathrm{ihj}}$
To assess whether the impact of the project was different for girls than boys, or for poor households compared to less-poor households, we estimate a similar regression to that which is described in equation (1) above, but add a subgroup indicator variable and an interaction

[^9]between the subgroup and treatment indicators as explanatory variables. The coefficient on the interaction variable ( ${ }^{\beta_{3}}$ ) represents the difference in impacts between one subgroup and another. So, for gender, the coefficient $\beta_{3}$ represents the difference in impacts between girls and boys.

Test scores were normalized by taking the raw score for each age group, subtracting the mean for that age group, and then dividing by the standard deviation. Hence, the primary test score impact estimates we present in this report are measured in standard deviations. Using an alternate measure of test scores where we do not normalize the test scores but rather present the "raw" percentage scores, we account for the fact that older children may do better in these tests than younger children by including age dummy variables as controls in those regressions.

Weights. Given that the fraction of treatment villages varied by commune (Table IV.2), we explored using weights to reflect the fact that some treatment villages had a higher probability of being selected than others. We conducted our primary impact analyses under three different sets of weights:

- Unweighted. Every village received the same weight. Under this scenario, impact estimates approximately represent the average impacts for the average village.
- Weighted at village level. Every village received a weight equivalent to the inverse of the probability of selection into their group (treatment or control). For example, in commune number 2, where two treatment and eight control villages were selected, each treatment village got a weight of 5 and each control village a weight of 1.25 .
- Weighted at village and household levels. Every household received a weight equivalent to the inverse of the proportion that households in a given village contribute to the overall household sample. We have data for 40 households in most villages, but for fewer households in some villages. These weights increase the contribution to the impact estimates of households in villages with fewer than 40 households and decrease the overall contribution to the impact estimates of households in villages with 40 households in the sample. By interacting the village and household weights together, we account for the probability that a village was selected into the research group and also ensure that the villages each contribute equally to the impact estimates; therefore, the estimates allow us to make statements about the average commune.

The results presented in Chapter V assume no weights (scenario 1). We conducted analyses to assess the extent to which the impact findings vary when using weights described under the alternate scenarios in Chapter V, Section B. By and large, the magnitude of the impact estimates does not vary much across the different weighting schemes, although the statistical significance varies somewhat (see details in Chapter V, Section C).

## 3. Assessing the evaluation design

Although the random assignment design is well suited, in principle, to estimate the impact of the IMAGINE project, we performed several statistical analyses to verify its appropriateness. First, the goal of random assignment is to produce two groups (treatment and control) that are identical to each other (in a statistical sense) in everything except exposure to the project. We
therefore look at whether or not the treatment and control groups look similar with regard to village-, school-, and household-level characteristics. Overall, as with the first IMAGINE evaluation, comparison between treatment and control groups based on actual data reveals that the two groups do indeed look similar to each other and that the differences between the groups tend to be small in magnitude and rarely statistically significant. ${ }^{17}$

## Table IV.4. Comparison between treatment and control groups of village characteristics

|  | Treatment group | Control group | Difference |
| :---: | :---: | :---: | :---: |
| Village population and demographics |  |  |  |
| Number of eligible households in village | 114.8 | 105.7 | 9.1 |
| Number of people in village | 706.1 | 626.3 | 79.9 |
| Number of children in village | 326.5 | 281.4 | 45.1* |
| Number of girls | 161.3 | 142.2 | 19.1 |
| Number of boys | 165.2 | 139.2 | 26.0* |
| Percentage of households in village with |  |  |  |
| School-aged children | 73.8 | 73.8 | 0.0 |
| School-aged girls | 56.9 | 56.8 | 0.1 |
| School-aged boys | 56.2 | 57.0 | -0.8 |
| Sample population and demographics |  |  |  |
| Number of households | 39.3 | 38.5 | 0.8 |
| Number of children | 83.4 | 79.5 | 3.9 |
| Number of girls | 40.2 | 38.8 | 1.4 |
| Number of boys | 43.2 | 40.7 | 2.5 |
| Percentage of households with |  |  |  |
| School-aged girls | 66.9 | 67.8 | -0.9 |
| School-aged boys | 69.8 | 69.7 | 0.1 |
| Percentage of households speaking |  |  |  |
| Hausa | 75.0 | 75.4 | -0.4 |
| Zarma | 31.4 | 30.7 | 0.7 |
| Tamasheq | 5.6 | 5.3 | 0.3 |
| Fulfulde | 9.8 | 7.3 | 2.5 |
| Kanuri | 11.3 | 10.8 | 0.5 |
| Sample size (villages) | 57 | 121 |  |

Source: 2013 NECS Wave 1 data collection, Village Census and Household survey
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. The "Village population and demographics" data came from the village census; the "Sample population and demographics" data are from the household survey.
***/**/* Statistically significant at the .01/.05/.10 level.
a. The treatment and control groups tend to be very similar in terms of census and sample village population characteristics such as the number of people, households, school-aged children, school-aged girls, and the percentage of households speaking different local

[^10]languages as shown in Table IV.4. Of the 20 comparisons made, 2 were significant at a 10 percent level or higher, which is what would be expected to arise due to chance.
b. The groups are similar in terms of school-level characteristics that were not affected by IMAGINE, including the year the school was opened, the primary teaching language, and the presence of outside programming in the schools (Table IV.5).

Table IV.5. Comparison between treatment and control groups of school characteristics

|  | IMAGINE schools | Non-IMAGINE schools | Difference |
| :---: | :---: | :---: | :---: |
| School is bilingual (\%) | 11.1 | 15.5 | -4.4 |
| Year school opened | 1991 | 1989 | 1.3 |
| School changed location (\%) | 13.0 | 19.3 | -6.3 |
| Primary teaching language is |  |  |  |
| Hausa (\%) | 1.9 | 1.9 | 0.0 |
| French (\%) | 98.1 | 98.1 | 0.0 |
| Secondary teaching language is |  |  |  |
| Hausa (\%) | 63.5 | 60.4 | 3.1 |
| Zarma (\%) | 26.9 | 28.5 | -1.6 |
| Tamasheq (\%) | 0.0 | 1.8 | -1.8 |
| Fulfulde (\%) | 1.9 | 3.1 | -1.2 |
| Kanuri (\%) | 7.7 | 5.7 | 2.0 |
| French (\%) | 0.0 | 0.5 | -0.5 |
| Outside programs in community (\%) | 22.2 | 20.6 | 1.6 |
| UNICEF (\%) | 11.1 | 7.6 | 3.5 |
| World Vision (\%) | 1.9 | 0.7 | 1.2 |
| Project Luxembourg - Development (\%) | 1.9 | 1.3 | 0.6 |
| French Development Agency (\%) | 3.7 | 2.4 | 1.3 |
| Other - non-MCC Intervention (\%) | 20.0 | 24.2 | -4.2 |
| Outside programming includes |  |  |  |
| Teacher training (\%) | 100.0 | 72.5 | 27.5 |
| Textbooks/materials (\%) | 50.0 | 39.3 | 10.7 |
| Reading (\%) | 25.0 | 3.0 | 22.0 |
| School feeding (\%) | 25.0 | 14.6 | 10.4 |
| Deworming (\%) | 8.3 | 8.3 | 0.0 |
| Other health program (\%) | 16.7 | 33.2 | -16.5 |
| Infrastructure (\%) | 33.3 | 31.6 | 1.7 |
| Other (\%) | 66.7 | 53.7 | 13.0 |
| Community groups (\%) | 42.9 | 26.1 | 16.8 |
| Girls' enrollment (\%) | 0.0 | 20.6 | -20.6 |
| Water and sanitation (\%) | 42.9 | 15.8 | 27.1 |
| Other (\%) | 14.3 | 37.7 | -23.4 |
| Sample Size (Schools) | 54 | 124 |  |

Note: Differences between IMAGINE and non-IMAGINE group means were tested using two-tailed t-tests. NonIMAGINE group means are regression adjusted, including commune fixed effects. The IMAGINE treatment schools in this table are those that actually received IMAGINE schools, rather than those that were randomly assigned to receive treatment. Also, the unit of analysis is the school, rather than the village.
$* * * / * * / *$ Statistically significant at the $.01 / .05 / .10$ level.

Table IV.6. Comparison between treatment and control groups of household and child characteristics

|  | Treatment group | Control group | Difference |
| :---: | :---: | :---: | :---: |
| Household |  |  |  |
| Household size | 7.4 | 7.2 | 0.1 |
| Floor made mainly out of (\%): |  |  |  |
| Natural material | 92.0 | 93.0 | -1.0 |
| Rudimentary material | 1.5 | 1.9 | -0.4 |
| Finished material | 6.4 | 5.0 | 1.4 |
| Roof made mainly out of (\%): |  |  |  |
| Natural material | 34.3 | 32.0 | 2.3 |
| Rudimentary material | 54.6 | 58.0 | -3.4 |
| Finished material | 10.9 | 9.8 | 1.1 |
| Dwelling walls made mainly out of (\%): |  |  |  |
| Natural material | 63.9 | 64.0 | -0.1 |
| Rudimentary material | 23.1 | 25.2 | -2.1 |
| Finished material | 5.9 | 4.9 | 1.0 |
| Assets (\% of households that own at least 1): |  |  |  |
| Radio | 44.0 | 44.1 | -0.1 |
| Telephone - mobile or fixed | 54.2 | 52.4 | 1.8 |
| Watch | 30.9 | 28.4 | 2.5* |
| Bicycle | 11.0 | 9.7 | 1.3 |
| Animal-drawn cart | 33.1 | 31.1 | 2.0 |
| Cattle | 39.0 | 36.7 | 2.3 |
| Main source of drinking water during rainy season (\%): | 1.7 | 2.5 | -0.8* |
| Piped water | 12.4 | 12.0 | 0.4 |
| Tube well or borehole | 38.1 | 43.3 | -5.2* |
| Covered well | 26.0 | 22.0 | 4.0 |
| Traditional well | 21.6 | 21.5 | 0.1 |
| Principal type of toilet (\%): |  |  |  |
| Modern toilet | 1.2 | 0.7 | 0.5 |
| Improved latrine | 4.1 | 2.7 | 1.4** |
| Traditional latrine | 6.3 | 7.2 | -0.9 |
| Bush/in nature | 88.4 | 89.6 | -1.2 |
| Average number of meals per day | 2.5 | 2.5 | -3.5 |
| Household member gone to bed hungry in previous 7 days (\%) | 14.4 | 13.5 | 0.9 |
| Household head |  |  |  |
| Female (\%) | 7.9 | 8.4 | -0.5 |
| Average age | 46.4 | 45.3 | 1.1** |
| Completed primary school (\%) | 19.5 | 20.6 | -1.1 |
| Completed secondary school (\%) | 6.8 | 6.4 | 0.4 |
| Completed Madrassa school (\%) | 0.5 | 0.3 | 0.2 |
| Speaks |  |  |  |
| Hausa (\%) | 75.8 | 76.2 | -0.4 |
| Zarma (\%) | 32.1 | 31.2 | 0.9 |
| Tamasheq (\%) | 5.7 | 5.1 | 0.6 |
| Fulfulde (\%) | 8.4 | 6.5 | 1.9 |
| Kanuri (\%) | 11.0 | 10.7 | 0.3 |
| Other (\%) | 4.4 | 4.2 | 0.2 |
| Francophone (\%) | 19.1 | 20.4 | -1.3 |
| Literate (\%) | 29.5 | 28.5 | 1.0 |

Table IV. 6 (continued)

|  |  |  |  |
| :--- | :--- | ---: | ---: |
|  | Treatment <br> group | Control <br> group | Difference |
| Children (full sample) |  |  |  |
| Girl (\%) | 48.2 | 48.8 | -0.6 |
| Average age | 8.8 | 8.7 | 0.1 |
| Children (ages 6-14) | 48.2 | 48.7 | -0.5 |
| Girl (\%) | 9.4 | 9.3 | 0.1 |
| Average age | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |
| Number of villages | $\mathbf{2 , 2 3 8}$ | $\mathbf{4 , 6 7 6}$ |  |
| Number of households (full sample) | $\mathbf{2 , 0 4 0}$ | $\mathbf{4 , 3 0 8}$ |  |
| Number of households (with children ages 6-14) | $\mathbf{4 , 7 5 2}$ | $\mathbf{1 0 , 3 4 1}$ |  |
| Number of children (full sample) | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 , 9 7 7}$ |  |
| Number of children (ages 6-14) |  |  |  |

Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages.
***/**/* Statistically significant at the .01/.05/. 10 level

The treatment and control groups look similar on a host of household background characteristics, including household size, construction material of the dwelling, ownership of assets, education and mother language of household head, and age and gender of children (Table IV.6). Of the 44 comparisons made, 5 were significant at a 10 percent level or higher and 2 of these were significant at a 5 percent level or higher. This is approximately the number that would be expected to arise due to chance. Households in treatment groups are more likely to have an improved latrine and an older age of the household head.

We do not have measures at baseline of key evaluation outcomes of interest, because no baseline data collection was conducted. However, during the first follow-up IMAGINE evaluation, we demonstrated equivalence for two key baseline characteristics from prior to the start of the IMAGINE project that we collected during the three-year follow-up survey: school availability and school enrollment for 10- to 12-year-old children (Dumitrescu et al. 2011).

The second verification of the evaluation design has to do with whether or not the random assignment was respected in the implementation of the project. The actual school construction was consistent with the plan set up during random assignment for the evaluation sample. Indeed, as reported earlier, Plan International built schools in 53 of the 57 treatment villages and only built an IMAGINE school in one of the 121 control villages (Table IV.3).

These findings are indicative that random assignment was properly implemented, and strengthens the credibility of the impact findings presented in Chapter V.

## 4. Assessing the generalizability of results

The villages included in the evaluation were purposefully identified by the GoN based on certain criteria, and are not representative of villages in Niger. The criteria used to select the original villages included the number of school-aged girls in the village, access to water within the village, and distance to a major road. Therefore, generalization of the impacts of IMAGINE
to all villages in Niger is not possible since different impacts may be found if a similar project was done in other villages in Niger.

As described in Section B. 1 of this chapter, 2 of the 20 eligible communes (numbers 19 and 20) were excluded from the evaluation due to severe deviation from random assignment.

Villages in these communes were part of the IMAGINE project but are not part of the evaluation. This section assesses the extent to which the results of the evaluation (based on the other 18 communes) can generalize to the communes in which the project was implemented. ${ }^{18}$

We compare the two sets of communes (18 included and 2 excluded) in terms of background characteristics (Table IV.7). These two groups of communes are very different. At the time of the first IMAGINE evaluation report, they were similar on observable measures; however, three years later they look very different from each other on the measures observed. In terms of wealth measures, those in our study were more likely to be literate, francophone, have more high quality assets or households, and live in larger villages. Fewer heads of household reported completing primary school in the excluded communes but more reported completing Madrassa schooling. In terms of ethnicity, households in the excluded communes were more likely to be Zarma or Kanuri, whereas those included in our study were more likely to be Hausa.

The differences may limit the generalizability of our results if schooling, ethnicity, and different measures of household socioeconomic status are correlated with the impacts of the IMAGINE project. We therefore conduct the IMAGINE impact analysis on all communes (all 201 villages) on our primary outcomes of interest to see if impacts of the project change when they are included.

## 5. Sampling strategy and power calculations

Our sampling strategy is to use a representative sample of school-aged children in every village in the sample, including both in-school and out-of-school children. We randomly sample eligible households with children of school age (ages 5-14) in each community and select all school-aged children within those households. Children in Niger typically first enroll in school at age 6 or 7 , and if they complete primary school, they are likely to do so at age 12 or 13 . We include 14 -year-olds since they too were exposed to the IMAGINE project for several years. For the majority of the analyses in the evaluation, we limit the sample to children age 6 or older at the time of data collection, because they are not likely to have been enrolled in school during the most recent school year and are therefore not likely to have been affected by the project. However, we do include 5-year-olds for the prospective enrollment outcome.

[^11]Table IV.7. Participating communes versus excluded communes

|  | 18 communes in evaluation | 2 excluded communes | Difference |  |
| :---: | :---: | :---: | :---: | :---: |
| Village population characteristics |  |  |  |  |
| Number of eligible households | 115.9 | 78.7 | 37.3 | ** |
| Number of households sampled | 37.6 | 37.2 | 0.4 |  |
| Number of people | 704.5 | 522.1 | 182.4 | ** |
| Household |  |  |  |  |
| Household size | 7.524 | 7.788 | -0.263 | * |
| Floor made mainly out of: Natural material (\%) | 94.7 | 96.3 | -1.6 | * |
| Roof made mainly out of: Natural material (\%) | 32.1 | 61.0 | -28.9 | *** |
| Dwelling walls made mainly out of: Natural material (\%) | 69.3 | 24.8 | 44.4 | *** |
| Assets (\% of Households that own at least 1): Telephone - mobile or fixed (\%) | 51.1 | 47.7 | 3.4 | * |
| Main source of drinking water during rainy season: Tube well or borehole (\%) | 34.1 | 36.3 | -2.2 |  |
| Principal type of toilet: Bush/in nature (\%) | 88.8 | 97.8 | -9.0 | *** |
| Average number of meals per day | 2.4 | 2.5 | -0.1 | * |
| Household member gone to bed hungry in previous 7 days (\%) | 15.4 | 2.0 | 13.4 | *** |
| Household Head |  |  |  |  |
| Female (\%) | 7.8 | 11.8 | -3.9 | *** |
| Average age | 45.634 | 45.367 | 0.267 |  |
| Completed primary school (\%) | 20.5 | 9.5 | 11.0 | *** |
| Speaks |  |  |  |  |
| Hausa (\%) | 79.8 | 61.6 | 18.2 | *** |
| Zarma (\%) | 24.7 | 45.1 | -20.3 | *** |
| Tamasheq (\%) | 4.2 | 4.0 | 0.2 |  |
| Fulfulde (\%) | 8.0 | 7.3 | 0.7 |  |
| Kanuri (\%) | 9.6 | 39.5 | -29.8 | *** |
| Other (\%) | 3.1 | 2.4 | 0.7 |  |
| Francophone (\%) | 19.9 | 12.4 | 7.5 | *** |
| Literate (\%) | 29.8 | 14.2 | 15.6 | *** |
| Children (full sample) |  |  |  |  |
| Girl (\%) | 48.5 | 47.4 | 1.1 |  |
| Average age | 8.754 | 8.687 | 0.067 |  |
| Children (ages 6-14) |  |  |  |  |
| Girl (\%) | 48.1 | 46.7 | 1.4 |  |
| Average age | 9.714 | 9.793 | -0.078 |  |
| Number of villages | 178 | 20 |  |  |
| Number of households | 6,914 | 782 |  |  |
| Number of households with children ages 6-14 | 6,348 | 697 |  |  |
| Number of children (full sample) | 15,093 | 1,803 |  |  |

Source: 2013 NECS Wave 1 data collection, Village Census and Household Survey
Note: Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted. Heads of household could report speaking more than one language. All household measures shown in table IV. 5 were compared and had similar results to those presented in this table.
***/**/* Statistically significant at the .01/.05/.10 level.

We also reevaluated the ability of the evaluation to detect effects on key outcomes of interest with the sample that was used for the analysis. To determine the size of the effects that we are able to detect given our sample size, we compute minimum detectable impacts (MDIs)the smallest impacts that our design will be able to statistically distinguish from zero. The MDIs depend critically on the sample size (both the number of villages and the number of respondents within each village), assumptions on key parameters (such as the intracluster correlation coefficient and the regression R-squared), the power with which we would like to detect effects (typically 80 percent), and the variance of the outcome (which, for binary outcomes, depends crucially on the baseline level of the outcome). We update these power calculations with actual values for the above parameters, finding that the MDIs are in line with what we had expected. Table IV. 8 below shows the MDIs we can detect with our data.

The MDIs are 7.5 percentage points (12.1 percent of the mean) for enrollment, and 7.6 percentage points (16.8 percent of the mean) for attendance. For test scores, the MDI is approximately 0.15 standard deviations.

Table IV.8. MDIs for long-term IMAGINE evaluation

|  | Number of villages (number of children) |  | MDIs <br> (as percentage of mean) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Sample | Treatment | Control | Enrollment (percentage points) | Attendance (percentage points) | ```Test scores (standard deviations)``` |
| Full sample | $\begin{gathered} 57 \\ (4,184) \end{gathered}$ | $\begin{gathered} 121 \\ (8,881) \end{gathered}$ | $\begin{gathered} 7.5 \\ (12.1 \%) \end{gathered}$ | $\begin{gathered} 7.6 \\ (16.8 \%) \end{gathered}$ | 0.15 |
| Subgroup (50 percent) | $\begin{gathered} 57 \\ (2,092) \end{gathered}$ | $\begin{gathered} 121 \\ (4,441) \end{gathered}$ | $\begin{gathered} 7.8 \\ (12.7 \%) \end{gathered}$ | $\begin{gathered} 8.0 \\ (17.5 \%) \end{gathered}$ | 0.16 |

Sources: Authors' calculations using 2013 NECS Wave 1 data collection, Household Survey, to estimate key parameters.
Note: MDIs are for a two-tailed test with 80 percent power and a 95 percent level of significance, and were computed using the following formula:
$M D I=2.8 * \sqrt{\rho\left(1-R_{v}^{2}\right) *\left(\frac{1}{N_{T}}+\frac{1}{N_{C}}\right)+(1-\rho)\left(1-R_{i}^{2}\right) *\left(\frac{1}{r n N_{T}}+\frac{1}{r n N_{C}}\right)} * \sqrt{\sigma^{2}}$
where $\rho$ is the intracluster correlation coefficient ( 0.14 for math test scores and 0.17 for French test scores); $R^{2}{ }_{v}$ and $R^{2}{ }_{i}$ are the regression R -squared values that indicate the amount of variation explained by controls at the village level and individual level, respectively (assumed to be 0 ); $N_{T}$ and $N_{c}$ are the village sample sizes for the treatment and control groups; $n$ is the child sample size per village, which is 73.4 on average; and $r$ is the survey response rate (we rounded to 100 percent). The term $\sigma^{2}$ is the variation in the outcome, which is 1 for normalized test scores, 49 percentage points for enrollment, and 50 percentage points for attendance.

## C. Data collection strategy

Mathematica oversaw data collection from rural households and schools in Niger. A professional data collection firm located in Niger, Centre International d’Etudes et de Recherches Sur Les Populations Africaines (CIERPA), carried out data collection activities in the field.

CIERPA interviewers visited all 204 eligible villages for the NECS study during October or November 2013; 178 of these villages are used for the IMAGINE evaluation, as described above. Upon arriving in a village, interviewers conducted a census of all households in the village, after obtaining approval from local leaders. Each data collection team listed all households in the village on the census form, and recorded key information about the household, including the number of adults in the household and number of girls and boys between 5 and 14 years of age. Households with school-age children (ages 5 to 14) were noted as eligible for the survey. Forty households in each village were then randomly selected to participate in the survey from amongst those that were eligible. In order to select the households for the survey, the listing of all eligible households was used. The interviewers took the total number of eligible households, N , and divided it by 40, the number of households to be interviewed in each village, giving the result $P$. A random number between 1 and $P$ was chosen, and the first eligible household on the list matching that number was selected. The interviewers then continued down the list by a factor of P to select the next household. This process was repeated until 40 households were chosen. The process was conducted in each village, and all those interested in the process were able to observe. Households that refused to participate were noted and replaced by another eligible household, so that 40 households per village were in the sample. In those villages with fewer than 40 eligible households, all eligible households were selected for the survey. Enumerators for the survey were selected by the data collection firm CIERPA. The data collection teams were comprised of experienced enumerators with varying backgrounds. See Appendix A for the census.

## 1. Survey instruments

Mathematica developed two questionnaires for the survey: a household questionnaire and a village and school infrastructure questionnaire. The household questionnaire includes questions related to household characteristics, demographics, parents' attitudes toward education, and children's educational outcomes (enrollment and attendance), as well as assessments that were administered directly to the children in sample households, including assessments in math, French, and local languages. The village and school infrastructure questionnaire gathered information about schools in each village, including school characteristics and infrastructure. Full versions of the final questionnaires and assessments are included in Appendices B, C, and D.

The household questionnaire consists of the following modules:

- Household characteristics. This module includes information about the head of household, such as demographics, education, and participation in literacy or parents' groups. It also collects information about the household, including location, construction materials used, available water sources, and proxies for wealth, such as cattle, telephone, or radio.
- Household listing form. In this module, the respondent provides a complete list of all children between the ages of 5 and 14 residing in the household. Basic information collected about these children includes relationship to the head of household, gender, age, school enrollment, and absence information during the 2012-2013 school year. Questions in this section also ask if the child was working, and about parental attitudes toward the education of the child.
- Education module. Interviewers administered this module for all children ages 5 to 14 who attended school at any time during the 2012-2013 school year. Questions address access to textbooks, distance to school, and attendance for both teacher and child. The module also collected specific information about the school attended, including interventions such as separate latrines, participation in feeding interventions, and reasons the parents sent the child to school. In addition, children were asked a few questions about their experiences with school if they were enrolled the previous year, and if they are interested in attending school the following year.
- Local language assessment. Interviewers administered this module to all children ages 5 to 14 , regardless of school enrollment status. Children were given receptive and expressive oral assessments as well as oral reading comprehension based on a short story. The interviewers then showed them preprinted cards and asked them to identify letters, read basic words, and perform simple passage reading and comprehension. The language of the test-Hausa, Zarma, Kanuri, Fulfulde, or Tamasheq-was based on the principal language utilized in the village school. These outcomes are not used in this evaluation; they were collected for the evaluation of the NECS project activities.
- French assessment. Interviewers administered this module to all children ages 5 to 14, regardless of school enrollment. The French assessment is an equivalent test to the local language assessments and includes the same modules. The French assessment was administered after the test in local language.
- Math assessment. The interviewers administered this module to all children ages 5 to 14 , irrespective of school attendance. Children were asked to count, then shown preprinted cards and asked to identify numbers, count items, indicate the greater of a pair of numbers, identify geometric form, and perform simple addition, subtraction, multiplication, and division. The assessment also includes two oral problem-solving questions. The math assessment was administered last.

The village and school infrastructure questionnaire (which was administered to the village chief or other village leader and included direct observation) consists of the following modules:

- Village school. This module includes general information about the schools in the village, such as name, region, commune, respondent, number of schools in the village, and languages spoken in the village and school.
- School general information. In this module, interviewers collected information about the school director, type of school (public or private), languages of instruction, interventions at the school, and teacher housing for the main public school in the village.
- School physical structure. This module includes information about the main public school's infrastructure that was directly observable by the enumerator, such as number of classrooms, construction material type, presence of water supply, type of latrines, existence of a preschool, and existence of a playground.

The survey instruments were written in French; however, French is rarely spoken in rural villages. Therefore, local interviewers representing the diverse ethnic and linguistic backgrounds in Niger who were fluent in both French and local dialects used the French instrument to pose
the survey questions in the proper dialect of the local language (using the correct idioms and words for the village) as the interviews were conducted.

Table IV. 9 lists the data sources used for this study, including the primary data collection described above as well as additional resources.

## Table IV.9. Data sources

1. Plan International IMAGINE Final Report (2010)
2. Plan International Final Performance Evaluation of the IMAGINE Project (2010)
3. Mathematica One Year Follow-Up IMAGINE Report (Dumitrescu et al. 2011)
4. Village Census (Mathematica 2013)
5. Household Survey (Mathematica 2013)
6. Village and School Infrastructure Questionnaire (Mathematica 2013)

## 2. Description of the sample

We completed surveys in 204 villages, of which 178 are included in the IMAGINE evaluation. In these 178 villages, a total of 6,914 households were interviewed. The response rates are 99.9 percent for the household survey, 94.3 percent for children in the household survey, and 99.4 percent for the village and school infrastructure questionnaire. ${ }^{19}$ Table IV. 10 provides an overview of the sample household and child characteristics.

Overall, household characteristics are consistent with the households in our first follow-up IMAGINE 2011 data collection. The average household size was seven persons. Almost all of the households had floors made of natural material (usually dirt) and basic roofing material (thatch). In terms of asset ownership, 46 percent of households owned a radio, 51 percent had a phone, 11 percent owned a bicycle, 31 percent had a cart, and 36 percent of households owned livestock (cattle/camels). Although the number of phones, bicycles, and carts are similar to the initial IMAGINE evaluation, there is a slight decrease in the number of radios and livestock, which were previously reported as 60 percent of households owning a radio and 50 percent owning cattle.

The heads of household were 92 percent male. This is a slight decrease from the first IMAGINE evaluation, in which 97 percent of the household heads were male. The average age of the head of household was 46; 20 percent of the heads of household had completed primary schooling and 70.2 percent could not read a simple sentence in any language. Of the children in our sample, the average age was 9.3 years. Just under half of the children were girls (48 percent).

[^12]Table IV.10. Summary of sample household and child characteristics

|  | Overall average |
| :---: | :---: |
| Household |  |
| Household size | 7.5 |
| Floor made mainly out of: |  |
| Natural material (\%) | 94.7 |
| Roof made mainly out of Natural material (\%) | 32.1 |
| Dwelling walls made mainly out of: Natural material (\%) | 69.3 |
| Assets |  |
| Telephone - mobile or fixed (\%) | 51.1 |
| Main source of drinking water during rainy season: Tube well or borehole (\%) | 34.1 |
| Principal type of toilet: |  |
| Bush/in nature (\%) | 88.8 |
| Average number of meals per day | 2.4 |
| Household member gone to bed hungry in previous 7 days (\%) | 15.4 |
| Household Head |  |
| Female (\%) | 7.8 |
| Average age | 45.6 |
| Completed primary school (\%) | 20.5 |
| Speaks |  |
| Hausa (\%) | 79.8 |
| Zarma (\%) | 24.7 |
| Tamasheq (\%) | 4.2 |
| Fulfulde (\%) | 8.0 |
| Kanuri (\%) | 9.6 |
| Other (\%) | 3.1 |
| Francophone (\%) | 19.9 |
| Literate (\%) | 29.8 |
| Children (full sample) |  |
| Girl (\%) | 48.5 |
| Average age | 8.8 |
| Children (ages 6-14) |  |
| Girl (\%) | 48.4 |
| Average age | 9.3 |
| Number of villages | 178 |
| Number of households | 6,914 |
| Number of households with children ages 6-14 | 6,348 |
| Number of children (full sample) | 15,093 |
| Number of children (ages 6-14) | 13,069 |

Source: 2013 NECS Wave 1 data collection, Household Survey

## V. IMPACT FINDINGS

In this chapter, we present our estimates of the impact of the Niger IMAGINE project three years after completion of project activities, and pathways through which these effects might be explained. We report the extent to which IMAGINE affected both the availability and the quality of school infrastructure; describe the impact of the IMAGINE project on school enrollment, attendance, and test scores; and then present impact estimates separately for boys and girls and for households based on their socioeconomic status (Section A). Next, we present findings for other impact-related questions, such as whether impacts vary by age, whether the project changed parental attitudes toward schooling, and whether the project had impacts on other outcomes related to child education (Section B). We then present the results of various sensitivity analyses conducted to verify the extent to which our results are robust to different sets of specifications (Section C). Finally, we look for alternative explanations for our findings (Section D).

## A. Estimated impact on key outcomes and pathways through which effects (or lack thereof) are explained

## 1. Impacts on school availability and functionality of school infrastructure

As we observed in the previous follow-up, IMAGINE had no effect on the availability or number of schools in a village, as shown in Table V.1. All but one of the villages included in the study had at least one school, and there was no significant difference in the number of schools per village between villages that received schools and those that did not. As explained in Chapter I and the first IMAGINE report, schools were widely available prior to project implementation. Similarly, as shown in Chapter IV.B, IMAGINE and non-IMAGINE schools are comparable to one another in terms of characteristics not affected by the project. For example, IMAGINE and non-IMAGINE schools reported similar rates of being bilingual, had the same likelihood of having moved locations, and reported similar patterns with regard to primary and secondary teaching languages. Similarly, IMAGINE and non-IMAGINE villages report having a school open in the village in approximately the same year.

Table V.1. Impact of IMAGINE on school and classroom availability

|  | Treatment <br> group | Control <br> group | Difference | p-value of <br> difference | Statistically <br> significant |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of schools per village <br> Number of: <br> Classrooms per school <br> Classrooms made of finished <br> materials per school | 6.140 | 1.158 | -0.018 | 0.845 |  |
| Sample size | 4.930 | 4.968 | 1.471 | 0.000 | $* * *$ |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire.
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. The unit of analysis is the village.
***/**/* Statistically significant at the .01/.05/.10 level.

The IMAGINE project did have an effect on the number of classrooms and the number of classrooms made of durable material (Table V.1). Treatment group villages had on average 6.4 classrooms per village, of which 4.9 were made of durable materials. This is significantly larger than in control group villages, where 5.0 classrooms were available, of which 2.6 were made of durable material.


Pictured above is a typical IMAGINE classroom, as compared to a standard classroom in the control villages (top right) and a classroom made of natural materials (bottom right). Source: Mathematica


Table V. 2 shows that the impacts of IMAGINE on the presence, quality, and functionality of school infrastructure are large and statistically significant. IMAGINE schools averaged 6.5 classrooms per school and non-IMAGINE schools averaged 5.2 (significant at the 1 percent level). More telling, however, is the fact that IMAGINE schools had 2.3 more classrooms made out of finished materials than non-IMAGINE schools (significant at the 1 percent level). On every measure of school infrastructure quality that was gathered, including water source, toilet facilities, preschools, presence of a playground, and teacher lodging, IMAGINE schools were reported to be of higher quality, and the impacts were significant at the 1 percent level. Similarly, IMAGINE schools were 40 percentage points more likely than non-IMAGINE schools to have a functioning potable water source, 69 percentage points more likely to have functioning toilet facilities, and 69 percentage points more likely to have separate latrines for boys and for girls.

Table V.2. Impact of IMAGINE on school infrastructure

|  | IMAGINE schools | NonIMAGINE schools | Difference | $p$-value of difference | Statistically significant |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of: |  |  |  |  |  |
| Classrooms | 6.481 | 5.185 | 1.296 | 0.001 | *** |
| Classrooms made of finished materials | 4.963 | 2.705 | 2.258 | 0.000 | *** |
| Percentage of schools with: |  |  |  |  |  |
| Potable water source present | 79.6 | 19.4 | 60.2 | 0.000 | *** |
| Potable water source functioning | 50.0 | 9.2 | 40.8 | 0.000 | *** |
| Toilet facilities present | 100.0 | 40.0 | 60.0 | 0.000 | *** |
| Toilet facilities functioning | 98.1 | 28.7 | 69.4 | 0.000 | *** |
| Separate toilets for boys and girls | 98.1 | 29.3 | 68.8 | 0.000 | *** |
| Preschool facility | 98.1 | 23.2 | 74.9 | 0.000 | *** |
| Playground | 96.3 | 11.6 | 84.7 | 0.000 | *** |
| Teacher lodging | 98.1 | 9.4 | 88.7 | 0.000 | *** |
| Teacher lodging - females only | 94.4 | 1.6 | 92.8 | 0.000 | *** |
| Sample Size | 54 | 124 |  |  |  |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire.
Note: Differences between IMAGINE and non-IMAGINE group means were tested using two-tailed t-tests. NonIMAGINE group means are regression adjusted, including commune fixed effects. The IMAGINE schools in this table are those that actually received IMAGINE schools, rather than those that were randomly assigned to receive treatment. Also, the unit of analysis is the school, rather than the village.
***/**/* Statistically significant at the .01/.05/.10 level.

Since all but one of the villages included in the sample have a school, the effects observed in the current analysis are primarily driven by differences in the characteristics of the schools, rather than the actual presence of a school. Three years after the IMAGINE project implementation was completed, IMAGINE schools continue to have significantly better educational infrastructure and resources than non-IMAGINE schools. The infrastructure investments have remained present and functional, and few non-IMAGINE schools seem to have adopted similar types of infrastructure.

## 2. Impacts on school enrollment and absenteeism

The IMAGINE project provided sustained positive impacts on school enrollment for children ages 6 to 14 (Table V.3). Children living in treatment villages were 7.8 percentage points more likely to report having ever been enrolled in school than their control village counterparts, significant at the 1 percent level. Further, children in treatment villages were 7.3 percentage points more likely to report having been enrolled during the 2011-2012 school year and 8.3 percentage points more likely to report having been enrolled in school during the 2012-2013 (the most recent) school year (both significant at the 1 percent level). ${ }^{20}$ These results imply that IMAGINE was responsible for increasing enrollment during the most recent school year from 65.2 percent to 73.6 percent. IMAGINE had a smaller impact ( 4.7 percentage points, significant at the 5 percent level) on the likelihood of parents saying they intended to enroll their

[^13]child in school during the 2013-2014 (the upcoming) school year (measured to include 5- to 14-year-olds, since 5-year-olds would be eligible to begin school during the upcoming school year).

IMAGINE also had positive impacts on absenteeism (unconditional on enrollment) of children ages 6 to $14 .{ }^{21}$ Children in the treatment group were 7.9 percentage points less likely to report being absent more than two consecutive weeks during the last school year, significant at the 1 percent level. ${ }^{22}$ Long absences are still quite common in treatment villages, however, with 34.3 percent of children in treatment villages reporting having been absent for more than two consecutive weeks. IMAGINE also impacted the number of days children reported being absent in the last month of school (nearly three fewer days absent, significant at the 1 percent level) as well as the likelihood of the child being absent for more than 14 days (an impact of 8.9 percentage points, significant at the 1 percent level). ${ }^{23}$

Because the IMAGINE project did not affect the presence or number of schools available in villages, the impacts on enrollment and attendance are most likely based solely on the school infrastructure and the complementary educational interventions that were implemented during IMAGINE. Schools in IMAGINE villages are shown to be of higher quality, which may be driving parents to enroll their kids in school at a higher rate, as well as to encourage more consistent attendance.

[^14]Table V.3. Impact of IMAGINE on school enrollment and absenteeism

|  | Treatment group | Control group | Difference |  |
| :---: | :---: | :---: | :---: | :---: |
| Enrollment |  |  |  |  |
| Child ever enrolled in school (percentage points) | 77.0 | 69.2 | 7.8 | *** |
| Child enrolled during SY 2011/2012 (percentage points) | 61.9 | 54.6 | 7.3 | *** |
| Child enrolled during SY 2012/2013 (percentage points) | 73.6 | 65.3 | 8.3 | *** |
| Child will be enrolled during SY 2013/2014 (percentage points) | 82.6 | 78.5 | 4.1 | ** |
| Child will be enrolled during SY 2013/2014 (ages 5-14) (percentage points) | 82.6 | 77.9 | 4.7 | *** |
| Absenteeism |  |  |  |  |
| Child absent more than 2 consecutive weeks during last school year (SY 2012/2013) (percentage points) | 34.3 | 42.2 | -7.9 | *** |
| Number of days child absent in last month of last school year (SY 2012/2013) | 8.79 | 11.52 | -2.72 | *** |
| Child absent greater than 14 days in the last month school was open of last school year (SY 2012/2013) (percentage points) | 28.8 | 37.7 | -8.9 | *** |
| Sample size (children) | 4,092 | 8,977 |  |  |
| Sample size (villages) | 57 | 121 |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample, except where noted. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Absenteeism is unconditional on enrollment, meaning those who are not enrolled are considered to be absent. The indicator variable showing if a child was absent more than 14 days was created from the number of days the child was absent during the last month the school was open. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/.10 level.

## 3. Impacts on test scores

The IMAGINE project had a significant long-term impact on math scores, but no statistically significant long-term impact on French test scores (Table V.4). These estimates are consistent regardless of the measure used to estimate impacts. We present results for math and French test scores using two measures for each. The first measure is the "raw" summary score on the overall math test, or a percentage summary score on the overall French test. ${ }^{24}$ The second measure takes the summary score and converts it into standard deviations by normalizing by age group. On average, children in treatment villages answered 0.5 more math questions correctly than those in control villages (out of a possible 18 questions) and scored 0.127 standard deviations higher on the math assessment than children in control villages, both significant at the 5 percent level. Test scores in French, measured as both the percentage correct and as an agenormalized score, are higher for children in treatment villages than in control villages but are not statistically significant.

[^15]Table V.4. Impact of IMAGINE on test scores

|  | Treatment <br> group | Control <br> group | Difference |
| :--- | :---: | :---: | :---: |
| Math score - raw number | 5.583 | 5.054 | $0.529^{* *}$ |
| French score - percent correct | 9.167 | 8.093 | 1.074 |
| Math score - normalized (standard deviations) | 0.242 | 0.116 | $0.126^{* *}$ |
| French score - normalized (standard deviations) | 0.055 | -0.019 | 0.074 |
| Sample size (children) | $\mathbf{3 , 8 5 0}$ | $\mathbf{8 , 4 8 8}$ |  |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |

Source: Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Note: Children ages 6 to 14 who took each of the tests are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed $t$-tests. Control group means are regression adjusted, including commune fixed effects. "Math score - raw number" is the total number of questions a child got correct on the math test (out of a possible 18 questions). "French score - percent correct" is the percentage correct (out of a possible 100). Regressions for "math score - raw number" and "French score - percent correct" control for child age. Normalized scores take child age into account. Sample sizes shown are for the largest sample (French); some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/.10 level.

The IMAGINE project that was implemented did not directly target student learning, although an improvement in the learning environment could be expected to have a positive impact on test scores. The higher quality of schools in treatment villages may have spurred parents to send their children to school at greater rates (and with fewer long-term absences), which may have provided more time for learning effects to manifest and thus result in improved test scores. In addition to the elevated enrollment rates, IMAGINE schools have greater numbers of classrooms, particularly classrooms made of finished materials, which increased the amount of instruction time students in treatment villages receive, thereby potentially boosting children's test scores. It could be that a longer period of time is required for learning effects to manifest in French than in math. On the other hand, the French scores in treatment villages were higher than those in control villages, though not statistically significant. This may suggest that IMAGINE had an effect on French scores, but that it is smaller than can be detected given the sample size in this study.

## 4. Subgroup analysis by gender

IMAGINE had a large and significant impact on girls’ enrollment, attendance, and test scores (Table V.5). When looking at two primary enrollment and attendance outcomes of interest (child enrolled in 2012-2013 and child absent more than two consecutive weeks during the previous school year), disaggregated by gender, we see large and significant impacts of the project for girls, compared to more modest and less significant impacts for boys. The project increased girls' enrollment from 60.3 percent in control villages to 72.1 percent in treatment villages (an 11.8 percentage point impact, significant at the 1 percent level), whereas it increased boys' enrollment from 70.0 percent in control villages to 75.0 percent in treatment villages (a 5.0 percentage point impact, significant at the 10 percent level). In other words, when comparing the impacts between genders, girls realized a 6.8 percentage point greater impact than boys on
enrollment, with the difference between genders significant at the 5 percent level. Similarly, girls in treatment villages were 10.6 percentage points less likely to have reported being absent more than two consecutive weeks during the last school year (significant at the 1 percent level), whereas boys in treatment villages were 5.3 percentage points less likely to report having been absent. The impact on girls was 5.3 percentage points greater, significant at the 5 percent level.

Table V.5. Impact of IMAGINE on enrollment, attendance, and test scores, by gender

|  | Girls |  |  | Boys |  |  | Difference in impact: girls - boys |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Treatment group | Control group | Impact | Treatment group | Control group | Impact | Difference in impact | $p$-value | Statistically significant |
| Child enrolled during last school year (SY12/13) (percentage points) | 72.1 | 60.3 | $11.8{ }^{* * *}$ | 75.0 | 70.0 | 5.0* | 6.8 | 0.012 | ** |
| Child absent more than 2 consecutive weeks during last school year (SY12/13) (percentage points) | 35.8 | 46.3 | $-10.5^{* * *}$ | 32.9 | 38.1 | -5.2* | -5.3 | 0.048 | ** |
| Math score - normalized (standard deviations) | 0.206 | 0.023 | $0.183^{* * *}$ | 0.276 | 0.205 | 0.071 | 0.112 | 0.023 | ** |
| French score - normalized (standard deviations) | 0.000 | -0.101 | 0.101** | 0.106 | 0.060 | 0.046 | 0.055 | 0.246 |  |
| Sample size (children) | 1,973 | 4,352 |  | 2,119 | 4,625 |  |  |  |  |
| Sample size (villages) | 57 | 121 |  | 57 | 121 |  |  |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed $t$-tests. Control group means are regression adjusted, including commune fixed effects. Absenteeism is unconditional on enrollment, meaning those who are not enrolled are considered to be absent. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. Normalized scores take child age into account.
***/**/* Statistically significant at the .01/.05/.10 level.

Regarding normalized test scores, the impacts for girls were consistently large and statistically significant, whereas the impacts for boys were smaller and not significant. Differences between boys and girls are significant for math scores only (impacts were 0.112 standard deviations higher for girls than for boys, significant at the 5 percent level).

Historically, boys have a much higher rate of school enrollment than girls, potentially because parents may be reluctant to enroll their girl children in school due to cultural values or because of the large role girls often play in household chores. Part of IMAGINE's mission was to make schools more accessible for girls by constructing gender-segregated latrines and housing specifically designated for female teachers. The IMAGINE project has successfully diminished the difference between boys' and girls' enrollment, attendance, and math test scores. We do not know which specific components of the project were most successful in driving such distinct impacts for girls, but we can hypothesize that the elements that were specifically designed to attract girl students (such as the gender-segregated latrines and female teacher housing), as well as the complementary activities in support of girls education that were implemented prior to the suspension of the NTP, were responsible for the differentiated impacts.

## 5. Subgroup analysis by socioeconomic status

Next, we look at whether the project had different impacts on children from families with different socioeconomic statuses. ${ }^{25}$ The project does not appear to have affected children across different levels of wealth differently, as shown in Table V.6, column 5, where the treatment coefficient is interacted with the household index value. The only outcome on which socioeconomic status appears to have a small but significant effect (at the 10 percent level) is on child attendance. In wealthier households, as defined by the index, ${ }^{26}$ a child may be up to 2.9 percentage points more likely to have been absent more than two weeks during the last school year than in poorer households.

[^16]Table V.6. Impact of IMAGINE on enrollment, attendance, and test scores, by household quality index

|  | Coefficient on treatment indicator | Standard error | $p$-value | Significance | Coefficient on treatment indicator * HH quality index | Standard error | $p$-value | Significance | Sample <br> size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Child enrolled during last school year (SY12/13) | 0.086 | (0.024) | 0.000 | *** | -0.029 | (0.017) | 0.103 |  | 12,952 |
| Child absent more than 2 consecutive weeks during last school year (SY12/13) | -0.081 | (0.025) | 0.001 | *** | 0.029 | (0.016) | 0.077 | * | 12,757 |
| Math score - normalized (standard deviations) | 0.124 | (0.058) | 0.033 | ** | 0.009 | (0.046) | 0.846 |  | 12,197 |
| French score - normalized (standard deviations) | 0.071 | (0.044) | 0.106 |  | 0.037 | (0.045) | 0.420 |  | 12,229 |
| Sample size | Children | Villages |  |  |  |  |  |  |  |
| Treatment group | 4,092 | 57 |  |  |  |  |  |  |  |
| Control group | 8,977 | 121 |  |  |  |  |  |  |  |

## Source: 2013 NECS Wave 1 data collection, Household Survey

Note: $\quad$ Children ages 6 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Absenteeism is unconditional on enrollment, meaning those who are not enrolled are considered to be absent. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. Normalized scores take child age into account. The household quality index is a normalized measure of the type of floor, roof, walls, water source, and toilet available to a household.
***/**/* Statistically significant at the .01/.05/.10 level.

## B. Other impact-related questions

In addition to the key questions already addressed, we also explored the following four questions: (1) Did impacts of the project vary by age? (2) Did parental attitudes toward education change as a result of IMAGINE? (3) What are the main factors affecting a parent's decision to send his or her child to school in Niger? (4) Did the project impact other child outcomes related to education?

## 1. Did impacts of the project vary by age?

We estimated the main impacts of the project broken down separately for children ages 5-14 (Table V.7). We see consistent significant impacts on the younger end of the age spectrum for enrollment and attendance (ages 5-7). We also see consistent significant impacts on children slightly older (ages 10-12) for enrollment and attendance, as well as for math and French test scores.

These results imply that the enrollment and attendance impact of the IMAGINE project was larger and significant for the youngest children as well as for children in the middle portion of the age range of interest. Children ages $10-12$ at the time of data collection are among the first cohort of children likely affected by the IMAGINE schools, which were built three to four years ago. The small impacts on enrollment that were shown in IMAGINE appear to have been sustained for this cohort of children and have translated into impacts on test scores in both math and French after a longer period of exposure to the project. Indeed, the learning effects are driven entirely by this age group, which makes up approximately one-fourth of the overall sample. The project appears to not have had an effect on children in what might be considered the next cohort (ages 8-9), but its enrollment and attendance impacts are picking up again for the youngest children. These youngest children had not realized test score impacts yet, but may be expected to do so after a longer exposure to the project.

## 2. Did parental attitudes toward education change as a result of IMAGINE?

Parental attitudes toward education were measured by asking survey respondents the highest level of schooling they would like their child to complete and the highest level of schooling they think their child will complete. Significant differences between treatment and control villages were found for both measures, with parents in treatment villages both desiring and expecting higher educational outcomes for their children (Table V.8). The likelihood of parents reporting that they would like their child to attend secondary or advanced schooling was 5.0 percentage points higher in treatment villages and the likelihood of parents reporting that they think their child will attend secondary or advanced schooling was 5.2 percentage points higher, both significant at the 10 percent level.

Parents continue to desire and expect higher levels of schooling for boy children than for girl children, but the gap is narrowing. IMAGINE did not have a significant impact on parental attitudes toward schooling for boy children; however, for girl children it did significantly impact both parental desires ( 6.3 percentage point increase, significant at the 5 percent level) and expectations ( 6.9 percentage point increase, significant at the 5 percent level). These findings are consistent with the first IMAGINE evaluation.

Table V.7. Impact of IMAGINE on enrollment, attendance, and test scores, by age

|  | Age | Treatment group | Control group | Difference |  | Sample size |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Enrolled during last school year | 5 | 29.7 | 14.5 | 15.2 | *** | 2,021 |
| (SY12/13) (percentage points) | 6 | 53.8 | 30.6 | 23.2 | *** | 1,714 |
|  | 7 | 67.7 | 58.9 | 8.8 | ** | 2,040 |
|  | 8 | 78.1 | 74.8 | 3.3 |  | 1,939 |
|  | 9 | 82.6 | 79.0 | 3.6 |  | 1,490 |
|  | 10 | 81.0 | 74.8 | 6.2 | * | 1,805 |
|  | 11 | 85.8 | 80.1 | 5.7 | ** | 962 |
|  | 12 | 78.7 | 73.2 | 5.5 | * | 1,407 |
|  | 13 | 73.1 | 68.9 | 4.2 |  | 920 |
|  | 14 | 64.0 | 55.4 | 8.6 | * | 780 |
| Child absent more than 2 consecutive | 5 | 75.0 | 87.8 | -12.8 | *** | 2,007 |
| weeks during last school year | 6 | 54.6 | 74.1 | -19.5 | *** | 1,698 |
| (SY12/13) (percentage points) | 7 | 41.4 | 48.2 | -6.8 | * | 2,017 |
|  | 8 | 29.0 | 34.1 | -5.1 | * | 1,912 |
|  | 9 | 26.6 | 28.9 | -2.3 |  | 1,459 |
|  | 10 | 25.9 | 33.1 | -7.2 | ** | 1,788 |
|  | 11 | 21.0 | 27.0 | -6.0 | ** | 949 |
|  | 12 | 27.4 | 36.1 | -8.7 | *** | 1,384 |
|  | 13 | 35.8 | 36.9 | -1.1 |  | 899 |
|  | 14 | 45.4 | 52.4 | -7.0 |  | 756 |
| Math score - normalized (standard | 5 | 0.064 | 0.041 | 0.023 |  | 1,891 |
| deviations) | 6 | 0.148 | 0.127 | 0.021 |  | 1,626 |
|  | 7 | 0.201 | 0.082 | 0.119 |  | 1,931 |
|  | 8 | 0.222 | 0.102 | 0.120 |  | 1,841 |
|  | 9 | 0.242 | 0.137 | 0.105 |  | 1,407 |
|  | 10 | 0.312 | 0.086 | 0.226 | *** | 1,709 |
|  | 11 | 0.258 | 0.123 | 0.135 | * | 911 |
|  | 12 | 0.300 | 0.127 | 0.173 | ** | 1,321 |
|  | $13$ | 0.208 | 0.153 | 0.055 |  | 858 |
|  | 14 | 0.353 | 0.179 | 0.174 | * | 697 |
|  |  | $-0.034$ | $-0.037$ | 0.003 |  | $1,897$ |
| deviations) | 6 | $0.004$ | $-0.015$ | 0.019 |  | $1,629$ |
|  | 7 | -0.021 | -0.028 | 0.007 |  | 1,939 |
|  | 8 | 0.021 | -0.016 | 0.037 |  | 1,844 |
|  | 9 | 0.062 | -0.008 | 0.070 |  | 1,412 |
|  | 10 | 0.115 | -0.052 | 0.167 | ** | 1,711 |
|  | 11 | 0.141 | -0.024 | 0.165 | ** | 916 |
|  | 12 | 0.123 | $-0.034$ | $0.157$ | * | 1,323 |
|  | 13 | 0.001 | 0.043 | -0.042 |  | 860 |
|  | 14 | 0.115 | -0.045 | 0.160 |  | 699 |
| Sample size (children) |  | 4,092 | 8,977 |  |  |  |
| Sample size (villages) |  | 57 | 121 |  |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 5 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed t tests. Control group means are regression adjusted, including commune fixed effects.
$* * / * * / *$ Statistically significant at the .01/.05/.10 level.

Table V.8. Impact of IMAGINE on parental attitudes toward schooling

|  | Treatment group | Control group | Difference | Sample size |
| :---: | :---: | :---: | :---: | :---: |
| Attitudes toward schooling |  |  |  |  |
| Like child to attend secondary or advanced (\%) | 88.6 | 83.6 | 5.0* | 12,174 |
| Think child will attend secondary or advanced (\%) | 79.3 | 74.1 | 5.2* | 11,122 |
| Attitudes towards schooling - girls |  |  |  |  |
| Like child to attend secondary or advanced (\%) | 87.1 | 80.8 | 6.3** | 5,861 |
| Think child will attend secondary or advanced (\%) | 77.9 | 71.0 | 6.9** | 5,363 |
| Attitudes towards schooling - boys |  |  |  |  |
| Like child to attend secondary or advanced (\%) | 90.0 | 86.3 | 3.7 | 6,313 |
| Think child will attend secondary or advanced (\%) | 80.6 | 77.0 | 3.6 | 5,759 |
| Attitude gap |  |  |  |  |
| Wants child to achieve more school than expects (\%) | 26.7 | 27.0 | -0.3 | 10,952 |
| Sample size (children) | 4,092 | 8,977 |  |  |
| Sample size (villages) | 57 | 121 |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. The analysis accounts for clustering of households within villages or of children within households.
***/**/* Statistically significant at the .01/.05/.10 level.

As noted in the first IMAGINE evaluation report, many of the soft interventions that were not implemented included strategies to change parents' attitudes toward girls' schooling. None of the implemented components of the project were specifically dedicated to attitudes toward girls’ schooling, however, making the source of this impact unclear. Perhaps the construction of new schools with girl-friendly features and any communication around such construction, or the greater presence of female teachers found during the initial IMAGINE evaluation, were enough to change the attitude of parents toward girls' schooling. ${ }^{27}$

## 3. What are the main factors affecting a parent's decision to send his or her child to school?

Distance to school was far and away the most important factor affecting a parent's decision to enroll his or her child in school, with over 90 percent of parents in treatment and control villages citing it as among the two most important factors affecting enrollment decisions (Table V.9). Dry rations and separate bathrooms for boys and girls were more often cited as the most important or among the two most important reasons in treatment villages than in control villages; the difference between the two groups, although significant, is small. Reading materials in local language were significantly more likely to be cited as the most important reason for sending children to school in control villages (potentially reflecting the fact that the NECS project had begun rollout to treatment villages, to be described in more detail in a separate report); again, however, the difference between the two groups, though significant, is practically very small.

[^17]Many more parents pointed to reading materials in local language as among the two most important reasons for sending their child to school, with no significant differences between treatment and control groups.

Among parents whose children were not enrolled in school during SY 2012-2013, the main reasons cited for not being enrolled were those involving age and family circumstances, including the child being too young or taking care of siblings (both more common in the control group) and the child refusing to go to school or working for income (both more common in the treatment group), as shown in Table V.10. For 2013-2014 intended enrollment, child refusal was again more prevalent in treatment villages, whereas a child being too old and taking care of siblings was more prevalent in control groups.

When we break down the reasons for not enrolling children in school by gender, we find the patterns to be broadly similar. For both girls and boys, the most common reasons for not enrolling children during SY 2012-2013 were the fact that the child was too young and the child him or herself refused (both more prevalent in the control group), as shown in Table V.10. Girls in this sample had higher rates of reporting not enrolling during either school year due to taking care of siblings, and this result is statistically significant.

Table V.9. Parents' reasons for enrolling children in school

|  | Most important (\%) |  |  |  |  | Among two most important (\%) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Treatment group | Control group | Difference | $p$-value <br> of <br> differ- <br> ence | Statistically significant | Treatment group | Control group | Difference | $p$-value of difference | Statistically significant |
| Distance to school | 87.55 | 87.94 | -0.39 | 0.603 |  | 93.73 | 93.01 | 0.72 | 0.206 |  |
| Textbooks | 3.34 | 3.16 | 0.18 | 0.660 |  | 17.05 | 16.53 | 0.52 | 0.537 |  |
| School canteen | 0.97 | 0.73 | 0.24 | 0.236 |  | 2.64 | 2.02 | 0.62 | 0.065 | * |
| Dry rations | 0.63 | 0.13 | 0.51 | 0.000 | *** | 0.87 | 0.25 | 0.61 | 0.000 | *** |
| Separate bathrooms for boys and girls | 1.10 | 0.22 | 0.88 | 0.000 | *** | 2.44 | 0.82 | 1.62 | 0.000 | *** |
| Reading materials in local language | 6.41 | 7.81 | -1.40 | 0.018 | ** | 19.81 | 19.79 | 0.02 | 0.982 |  |
| Other | 0.00 | 0.02 | -0.02 | 0.461 |  | 0.03 | 0.02 | 0.02 | 0.662 |  |
| Sample size (children) | 3,010 | 5,526 |  |  |  | 3,010 | 5,526 |  |  |  |
| Sample size (villages) | 57 | 121 |  |  |  | 57 | 121 |  |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/. 10 level.

Table V.10. Parents' reasons for not enrolling children in school

|  | $\begin{aligned} & \text { Reasons for SY 2012-2013 } \\ & \text { (ages } 6 \text { to } 14 \text { only) } \end{aligned}$ <br> Difference between Treatment and Control (\%) |  |  | $\begin{gathered} \text { Reasons for SY 2013-2014 } \\ \text { (all ages) } \end{gathered}$Difference between Treatment and Control (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Genders | Girls | Boys | Both Genders | Girls | Boys |
| Child too young | -5.39*** | -4.57** | -6.89*** | -2.22 | -1.64 | -3.42 |
| Family refused | -2.43* | -3.83** | -0.69 | -0.91 | -1.87 | 0.06 |
| Household work | 1.43 | 2.94* | 0.15 | 0.08 | 2.10 | -1.67 |
| Child refused | 4.04*** | 3.18*** | 4.82*** | 5.72*** | $4.28^{* * *}$ | 6.99*** |
| Child too old | 0.08 | 2.24* | -2.03* | -3.79** | -3.29 | -3.48* |
| Expelled/failed | 0.25 | -0.33 | 0.71 | 1.04 | 1.22 | 0.47 |
| Child has health problems | 0.37 | 0.82 | -0.07 | 0.69 | 1.16 | 0.12 |
| School fees | 0.62 | 0.30 | 0.91 | 0.12 | -0.33 | 0.60 |
| Taking care of siblings | -1.12** | -1.52* | -0.46 | -1.96*** | -3.00*** | -0.58 |
| No certificate of birth | 0.54 * | 0.85* | 0.24 | 0.08 | -0.11 | 0.30 |
| Work for income | 0.52** | $0.57 * *$ | 0.42 | 0.04 | -0.04 | 0.10 |
| Other | 1.08 | -0.67 | 2.90 | 1.15 | 1.57 | 0.52 |
| Sample size (children) | 4,526 | 2,445 | 2,081 | 3,503 | 1,921 | 1,582 |
| Sample size (villages) | 178 | 178 | 178 | 178 | 178 | 178 |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 that reported not being enrolled in 2012-2013 are included in the analysis sample for 2012-2013; all children ages 5 to 14 who reported not intending to enroll in 2013-2014 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. The reasons parents gave for not enrolling their children in school were not open-ended and were developed based on open-ended questions asked previously and the key elements of the program.
***/**/* Statistically significant at the .01/.05/.10 level.

## 4. What are project impacts on other child outcomes related to education?

In addition to the outcomes above, we also explored additional impacts on children in the sample related to education and other outcomes, and present the results in Table V.11. IMAGINE increased the attainment of children and the likelihood that children report wanting to go to school. It had very small effects on the age at which children entered primary school (significant at the 5 percent level), and on a child being on age for grade and completing school during SY 2012-2013 (significant at the 10 percent level). It had no effects on the number of years a child is off grade or was completing school during SY 2011-2012, or on reported child labor.

Table V.11. Impacts on additional education outcomes

|  | Treatment <br> group | Control <br> group | Difference | Sample <br> size |
| :--- | :---: | :---: | :---: | ---: |
| Age entered primary school | 6.406 | 6.498 | $-0.092^{* *}$ | 8,199 |
| Highest grade child achieved | 3.055 | 2.824 | $0.231^{* *}$ | 13,018 |
| Child is on-age for grade (\%) | 79.8 | 77.5 | $2.3^{*}$ | 8,536 |
| Child is old for grade (\%) | 18.0 | 20.0 | -2.0 | 8,536 |
| Child is young for grade (\%) | 2.2 | 2.6 | -0.4 | 8,536 |
| Number of years child is off-grade | 0.292 | 0.316 | -0.024 | 8,525 |
| Child failed to complete 2011-2012 school year (\%) | 1.1 | 1.5 | -0.4 | 7,083 |
| Child failed to complete 2012-2013 school year (\%) | 1.4 | 2.0 | $-0.6^{*}$ | 8,480 |
| Enrolled 2012-2013, according to child (\%) | 74.3 | 65.6 | $8.7^{* * *}$ | 12,309 |
| Child wants to go to school (\%) | 87.5 | 84.4 | $3.1^{* *}$ | 12,288 |
| Child labor: any (\%) | 10.3 | 10.8 | -0.5 | 13,068 |
| Child labor: paid (\%) | 4.0 | 3.0 | 1.0 | 13,068 |
| Sample size (children) | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 , 9 7 7}$ |  |  |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. The analysis accounts for clustering of households within villages or of children within households. Enrollment in this table is based on the child's (rather than parent's) recollection, which is an alternate method for measuring enrollment.
***/**/* Statistically significant at the .01/.05/.10 level.

## C. Robustness of results

## 1. Sensitivity of results to different regression specifications

The regression estimates presented in this report are robust to an extensive set of alternative specifications. Tables V.12-V. 13 present impact estimates on the primary enrollment and attendance outcome measures using alternative regression specifications to assess the robustness of the results. The main results shown throughout the report use the preferred regression specifications with standard errors clustered at the village level and no socio-demographic or village-level controls; this is repeated for each outcome in the first column in the following tables. The first row of these tables provides estimates of the impact of IMAGINE; each column represents a different set of regression specifications. Given that the coefficients reported in the first row in each table do not show much variation, the estimated impacts of the IMAGINE project are not very sensitive to which of the regression specifications are used.

Column 2 of each table incorporates the same regression as column 1, but also includes socio-demographic controls such as the number of household members, the construction materials for the household's dwelling, whether the household owns a variety of assets, the level of education the head of household has achieved, and the head of household's language. The addition of these control variables improves the precision of the estimate slightly. Column 3 is the same regression as column 2, but with the addition of village-level controls taken from the census data, such as the number of people in the village, the percentage of households that have school-aged boys and girls, and the percentage of households that have children. Including these controls does not improve the precision of the impact estimate beyond column 2.

Column 4 in both tables presents the same regression as column 1, except it uses standard errors clustered at the household level rather than the village level. This greatly improves the precision of the impact estimates and does not affect the magnitude of the coefficient. Likewise, column 5 reports the same regression as column 2 , and column 6 reports the same as column 3 , but with standard errors clustered at the household rather than the village level. As expected, changing the level in which standard errors are clustered does not result in any changes in the impact estimates, but tends to reduce the standard errors by almost half.

Table V.12. Impact of IMAGINE on previous year enrollment (SY 2012-2013): sensitivity analysis

|  | (1) | (2) | $(3)$ | (4) | (5) | (6) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Impact (percentage points) | $8.3^{* * *}$ | $8.4^{* * *}$ | $8.9^{* * *}$ | $8.3^{* * *}$ | $8.4^{* * *}$ | $8.9^{* * *}$ |
|  | $(2.3)$ | $(2.1)$ | $(2.1)$ | $(1.1)$ | $(1.1)$ | $(1.1)$ |
| Socio-demographic controls | No | Yes | Yes | No | Yes | Yes |
| Village-level controls | No | No | Yes | No | No | Yes |
| Standard errors clustered by village | Yes | Yes | Yes | No | No | No |
| Standard errors clustered by household | No | No | No | Yes | Yes | Yes |
| Sample size | 13,062 | 13,062 | 13,062 | 13,062 | 13,062 | 13,062 |
| R-squared (adjusted) | 0.058 | 0.080 | 0.083 | 0.058 | 0.080 | 0.083 |

Source: 2013 NECS Wave 1 data collection, Household Survey and Village Census
Note: Children ages 6 to 14 are included in the analysis sample. The outcome used in this table is enrollment during the last school year (2012-2013). Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects and the controls presented in the table. Socio-demographic controls include number of household members; main material of the household's dwelling floor, roof, and walls; whether the household owns a radio, telephone/cell phone, watch, bicycle, animal drawn-cart, cattle, or camel; main source of water; type of toilet; number of meals per day; whether anyone in the household has gone to bed hungry; and head of household characteristics (age, education level, languages spoken, and literacy). Village-level controls from the census include number of people in the village, the percentage of households that have school-aged boys and girls, and the percentage of households that have children. The analysis accounts for clustering of households within villages or of children within households.
***/**/* Statistically significant at the .01/.05/.10 level.

Table V.13. Impact of IMAGINE on absenteeism: sensitivity analysis

|  | (1) | (2) | $(3)$ | $(4)$ | (5) | (6) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Impact (percentage points) | $-7.9^{* * *}$ | $-7.8^{* * *}$ | $-8.5^{* * *}$ | $-7.9^{* * *}$ | $-7.8^{* * *}$ | $-8.5^{* * *}$ |
| Socio-demographic controls | $(2.5)$ | $(2.3)$ | $(2.0)$ | $(1.2)$ | $(1.2)$ | $(1.2)$ |
| Village-level controls | No | Yes | Yes | No | Yes | Yes |
| Standard errors clustered by village | No | No | Yes | No | No | Yes |
| Standard errors clustered by household | Yes | Yo | No | Yes | No | No |
| Sample size | 12,866 | 12,866 | 12,866 | 12,866 | 12,866 | No |
| R-squared (adjusted) | 0.055 | 0.075 | 0.081 | 0.055 | 0.075 | 0.081 |

Source: 2013 NECS Wave 1 data collection, Household Survey and Village Census
Note: Children ages 6 to 14 are included in the analysis sample. The outcome used in this table is whether or not a child was absent for 2 or more weeks during the previous school year. Non-enrolled children are considered absent. Differences between treatment and control group means were tested using two-tailed ttests. Control group means are regression adjusted, including commune fixed effects and the controls presented in the table. Socio-demographic controls include number of household members; main material of the household's dwelling floor, roof, and walls; whether the household owns a radio, telephone/cell phone, watch, bicycle, animal drawn-cart, cattle, or camel; main source of water; type of toilet; number of meals per day; whether anyone in the household has gone to bed hungry; and head of household characteristics (age, education level, languages spoken, and literacy). Village-level controls from the census include number of people in the village, the percentage of households that have school-aged boys and girls, and the percentage of households that have children. The analysis accounts for clustering of households within villages or of children within households.
***/**/* Statistically significant at the .01/.05/.10 level.

We performed the same robustness checks for math test scores (Table V.14). As with enrollment and absenteeism, the model specification does not affect our conclusions regarding the effect of the project on math test scores. Adding additional village and household controls increases the magnitude of the estimate somewhat, whereas clustering at the household level improves precision.

Table V.14. Impact of IMAGINE on math test scores: sensitivity analysis

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Impact (standard deviations) | $\begin{aligned} & 0.126^{\star *} \\ & (0.058) \end{aligned}$ | $\begin{aligned} & 0.119^{* *} \\ & (0.053) \end{aligned}$ | $\begin{aligned} & 0.137^{* * *} \\ & (0.048) \end{aligned}$ | $\begin{aligned} & 0.126^{* * *} \\ & (0.025) \end{aligned}$ | $\begin{aligned} & 0.119^{* * *} \\ & (0.023) \end{aligned}$ | $\begin{aligned} & 0.137^{* * *} \\ & (0.023) \end{aligned}$ |
| Socio-demographic controls | No | Yes | Yes | No | Yes | Yes |
| Village-level controls | No | No | Yes | No | No | Yes |
| Standard errors clustered by village | Yes | Yes | Yes | No | No | No |
| Standard errors clustered by household | No | No | No | Yes | Yes | Yes |
| Sample size | 12,306 | 12,306 | 12,306 | 12,306 | 12,306 | 12,306 |
| R-squared (adjusted) | 0.084 | 0.117 | 0.126 | 0.084 | 0.117 | 0.126 |

Source: 2013 NECS Wave 1 data collection, Household Survey and Village Census
Note: Children ages 6 to 14 are included in the analysis sample. The outcome used in this table is the math test score normalized by child age. Differences between treatment and control group means were tested using two-tailed $t$-tests. Control group means are regression adjusted, including commune fixed effects and the controls presented in the table. Socio-demographic controls include number of household members; main material of the household's dwelling floor, roof, and walls; whether the household owns a radio, telephone/cell phone, watch, bicycle, animal drawn-cart, cattle, or camel; main source of water; type of toilet; number of meals per day; whether anyone in the household has gone to bed hungry; and head of household characteristics (age, education level, languages spoken, and literacy). Village-level controls from the census include number of people in the village, the percentage of households that have school-aged boys and girls, and the percentage of households that have children. The analysis accounts for clustering of households within villages or of children within households.
***/**/* Statistically significant at the .01/.05/.10 level.

We performed the same robustness checks for French test scores (Table V.15). The inclusion of additional controls increases the magnitude of the impact estimate slightly. Clustering standard errors by household instead of by village improves the precision of the impact estimate significantly, reducing the standard errors by almost half. The fully specified model with all household- and village-level controls suggests that children in treatment villages score 0.08 standard deviations better on the French test than those in control villages, at a 5 percent significance level when clustering by village and at a 1 percent significance level when clustering by household.

Table V.15. Impact of IMAGINE on French test scores: sensitivity analysis

|  | (1) | (2) | (3) | (4) | (5) | (6) |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
| Impact (standard deviations) | 0.074 | 0.061 | $0.080^{* *}$ | $0.074^{* * *}$ | $0.061^{* * *}$ | $0.080^{* * *}$ |
|  | $(0.046)$ | $(0.041)$ | $(0.040)$ | $(0.024)$ | $(0.023)$ | $(0.024)$ |
| Socio-demographic controls | No | Yes | Yes | No | Yes | Yes |
| Village-level controls | No | No | Yes | No | No | Yes |
| Standard errors clustered by village | Yes | Yes | Yes | No | No | No |
| Standard errors clustered by | No | No | No | Yes | Yes | Yes |
| household |  |  |  |  |  |  |
| Sample size | 12,338 | 12,338 | 12,338 | 12,338 | 12,338 | 12,338 |
| R-squared (adjusted) | 0.104 | 0.135 | 0.141 | 0.104 | 0.135 | 0.141 |

Source: 2013 NECS Wave 1 data collection, Household Survey and Village Census
Note: Children ages 6 to 14 are included in the analysis sample. The outcome used in this table is the French test score normalized by child age. Differences between treatment and control group means were tested using two-tailed $t$-tests. Control group means are regression adjusted, including commune fixed effects and the controls presented in the table. Socio-demographic controls include number of household members; main material of the household's dwelling floor, roof, and walls; whether the household owns a radio, telephone/cell phone, watch, bicycle, animal drawn-cart, cattle, or camel; main source of water; type of toilet; number of meals per day; whether anyone in the household has gone to bed hungry; and head of household characteristics (age, education level, languages spoken, and literacy). Village-level controls from the census include number of people in the village, the percentage of households that have school-aged boys and girls, and the percentage of households that have children. The analysis accounts for clustering of households within villages or of children within households.
***/**/* Statistically significant at the .01/.05/.10 level.

## 2. Sensitivity of results to weights

The impact estimates presented do not utilize any type of weighting scheme, but the impacts are robust to two types of weights to adjust for design effects. Table V. 16 presents a sensitivity analysis of three different weight specifications described in Section IV.B.2: no weights (as presented earlier in the chapter), weights at the village level, and an interaction of weights at the household and village levels. The third specification with household- and village-level weights is not valid for village-level outcomes. In addition, a full model with household- and village-level weights and village- and household-level controls is estimated for key child education outcomes.

For school infrastructure outcomes, neither the magnitude of the impact estimates nor the statistical significance varies much across the different weighting schemes. Similarly, the magnitude of the impact estimates on key child education outcomes does not vary much across the different weighting schemes, although the statistical significance varies somewhat. Estimates produced with village- and household/village-level weights produce slightly smaller overall impacts. ${ }^{28}$

[^18]Table V.16. Impact of IMAGINE on key outcomes: sensitivity analysis with weights


Source: 2013 NECS Wave 1 data collection, Household Survey and Village and School Infrastructure Questionnaire
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted. The IMAGINE treatment schools in this table are those that actually received IMAGINE schools, rather than those that were randomly assigned to receive treatment. Household weights are not defined for school infrastructure outcomes (which are measured at the village level). For child outcomes, children ages 6 to 14 are included in the analysis sample and the analysis accounts for clustering of households within villages. Household level weights are not applicable (N/A) for columns (3) and (4). In column (4), socio-demographic controls include number of household members; main material of the household's dwelling floor, roof, and walls; whether the household owns a radio, telephone/cell phone, watch, bicycle, animal drawn-cart, cattle, or camel; main source of water; type of toilet; number of meals per day; whether anyone in the household has gone to bed hungry; and head of household characteristics (age, education level, languages spoken, and literacy); and village-level controls from the census include number of people in the village, the percentage of households that have schoolaged boys and girls, and the percentage of households that have children.
***/**/* Statistically significant at the .01/.05/.10 level.

## 3. Sensitivity of results to the sample specification

The results presented thus far use the same evaluation sample that was used for the one-year impact evaluation. We now verify the robustness of the findings to alternative sample specifications.

## a. Impact estimates when excluding communes that violated random assignment

Four communes in the evaluation sample did not implement random assignment properly. We excluded two of them from the evaluation sample due to severe deviation from random assignment and retained the other two in the evaluation. ${ }^{29}$ To verify that the latter two communes do not drive the findings, we show the impact estimates excluding these two communes from the analysis. Excluding them reduces the number of villages in the sample to 151 from 178.

Excluding all communes that violated random assignment reduces the magnitude of the main impact estimates by a small amount, decreases the significance shown on child absences and local language test scores, and eliminates the significance of the math test score (Table V.17). When separated out by gender, it has virtually no impact on the magnitude of the estimates and increases the significance of the attendance outcome. Estimates show minimal changes when looking at impacts by socioeconomic status.

## Table V.17. Excluding all communes that violated random assignment

|  | Impact |  |  |
| :--- | :---: | :---: | :---: |
| Child enrolled during last school year (SY12/13) (percentage <br> points) | $7.9^{* * *}$ |  |  |
| Child absent more than 2 consecutive weeks during last school | $-7.4^{* *}$ |  |  |
| year (SY12/13) (percentage points) | 0.110 |  |  |
| Math score - normalized (standard deviations) | 0.066 |  |  |
| French score - normalized (standard deviations) | Children | Households | Villages |
| Sample size | $\mathbf{3 , 2 4 6}$ | $\mathbf{1 , 7 8 6}$ | $\mathbf{4 5}$ |
| Treatment group | $\mathbf{8 , 0 0 8}$ | $\mathbf{4 , 1 6 6}$ | $\mathbf{1 0 6}$ |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. This sample excludes two communes in the evaluation sample that did not implement random assignment properly and the one commune where villages were not visited due to security concerns, bringing the total number of communes in the analysis sample to 15.
***/**/* Statistically significant at the .01/.05/.10 level.

[^19]
## b. Impact estimates when including villages not surveyed during first follow-up

As described previously, three villages were excluded from the first follow-up evaluation due to security concerns that precluded the collection of data in those villages. Including these villages increases the number of villages in the sample from 178 to 181 . We first look at impacts on school infrastructure, continuing to exclude the two communes that violated random assignment but including the three control villages that were not surveyed during the first followup evaluation (Table V.18). The magnitude of the impacts increases on all measures when comparing the base sample to the sample that includes the three villages not surveyed in the original data collection effort. The significance of the impacts remains the same.

Table V.18. Impacts on school infrastructure including the three villages that were not surveyed during original evaluation

|  | Treatment | Control | Difference |
| :--- | :---: | :---: | :---: |
| Classrooms | 6.439 | 4.905 | $1.534^{* * *}$ |
| Classrooms made of finished materials | 4.930 | 2.509 | $2.41^{* * *}$ |
| Percentage of schools with: | 73.7 | 20.8 | $52.9^{* * *}$ |
| Potable water source present | 45.6 | 10.6 | $35.0^{* * *}$ |
| Potable water source functioning | 96.5 | 39.5 | $57.0^{* * *}$ |
| Toilet facilities present | 94.7 | 28.1 | $66.6^{* * *}$ |
| Toilet facilities functioning | 92.9 | 29.4 | $63.5^{* * *}$ |
| Separate toilets for boys and girls | 94.7 | 25.0 | $69.7^{* * *}$ |
| Preschool facility | 91.2 | 12.1 | $79.1^{* * *}$ |
| Playground | 91.2 | 9.4 | $81.8^{8^{* *}}$ |
| Teacher lodging | 87.7 | 2.0 | $85.7^{* * *}$ |
| Teacher lodging - females only | 57 | $\mathbf{1 2 4}$ |  |
| Sample size (schools) |  |  |  |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. This includes three villages that were not visited during the first IMAGINE data collection (but continues to exclude the two communes which severely deviated from random assignment as well as the three villages that were selected to receive the treatment outside of the random assignment process).
***/**/* Statistically significant at the .01/.05/.10 level.

With regard to child outcomes, the magnitude of the impacts decreases on all measures when comparing the base sample to the sample that includes the three villages not surveyed in the original data collection effort, except for the enrollment variable, which remains the same (Table V.19). The significance of the impacts remains the same.

Table V.19. Impacts on child education including the three villages that were
not surveyed during original evaluation not surveyed during original evaluation

|  | Treatment | Control | Difference |
| :--- | :---: | :---: | :---: |
| Child enrolled during last school year (SY2012/2013) (\%) | 73.6 | 65.3 | $8.3^{* * *}$ |
| Child absent more than 2 consecutive weeks during last school | 34.3 | 42.1 | $-7.8^{* * *}$ |
| year (SY2012/2013) (\%) |  |  |  |
| Math score - normalized (standard deviations) | 0.242 | 0.121 | $0.121^{* *}$ |
| French score - normalized (standard deviations) | 0.055 | -0.005 | 0.060 |
| Sample size (children) | $\mathbf{4 , 0 9 2}$ | $\mathbf{9 , 0 8 1}$ |  |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 4}$ |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. This includes all possible communes, bringing the total number of communes in the analysis sample to 20 (although the three villages that were selected to receive schools outside of random assignment remain excluded).
***/**/* Statistically significant at the .01/.05/.10 level.

## c. Impact estimates when including the excluded villages and communes

As described previously, we excluded two communes (out of a total of 10 communes) from the analysis due to severe deviation from random assignment, and also excluded three villages because the security situation did not allow interviewers to visit them during the IMAGINE data collection effort. To verify that the communes we excluded from the sample are similar to those included in the study and that the results have validity within the full implementation sample, we show the impact estimates including these communes in the analysis. ${ }^{30}$ Including the excluded communes from the analysis increases the number of villages in the sample from 181 to 201.

The magnitude of the impacts on the number and type of classrooms are larger than those reported without the excluded communes, and remain significant at the 1 percent level (Table V.20). For example, the impact on number of classrooms increases from 1.3 to 1.4 when including the excluded communes. For other infrastructure-related measures, such as the percentage of schools with a potable water source present, toilet facilities present, and so on, the magnitudes of the impacts are smaller than those reported without the excluded communes, but the direction and significance of the impacts remain the same.

[^20]Table V.20. Impacts on school infrastructure including communes that severely violated random assignment or were not surveyed during original evaluation

|  | Treatment | Control | Difference |  |
| :---: | :---: | :---: | :---: | :---: |
| Number of: |  |  |  |  |
| Classrooms | 6.25 | 4.80 | 1.45 | *** |
| Classrooms made of finished materials | 4.69 | 2.41 | 2.28 | *** |
| Percentage of schools with: |  |  |  |  |
| Potable water source present | 70.8 | 19.2 | 51.6 | *** |
| Potable water source functioning | 46.2 | 10.1 | 36.1 | *** |
| Toilet facilities present | 93.8 | 38.6 | 55.2 | *** |
| Toilet facilities functioning | 90.8 | 28.0 | 62.8 | *** |
| Separate toilets for boys and girls | 88.9 | 29.5 | 59.4 | *** |
| Preschool facility | 90.8 | 24.2 | 66.6 | *** |
| Playground | 87.7 | 11.7 | 76.0 | *** |
| Teacher lodging | 86.2 | 8.3 | 77.9 | *** |
| Teacher lodging - females only | 83.1 | 1.7 | 81.4 | *** |
| Sample size (schools) | 65 | 136 |  |  |

Source: 2013 NECS Wave 1 data collection, Village and School Infrastructure Questionnaire
Note: Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. This includes all 20 communes in the sample (although the three villages that were selected to receive schools outside of random assignment remain excluded).
***/**/* Statistically significant at the .01/.05/.10 level.

With regard to child outcomes, the magnitude of the impacts on enrollment in the 20122013 school year and whether the child was absent more than two consecutive weeks during the last school year decrease slightly and remain significant at the 1 percent level (Table V.21). The magnitude of the impacts on math and French scores also decreases, and the impacts are no longer significant.

Because these communes violated random assignment severely, we would expect the impacts on the villages in the communes to be somewhat different; in these communes, villages that were randomly assigned to receive a school did not end up receiving one and villages that were not randomly assigned to receive a school did receive them. If anything, the changes in the magnitude and significance of the impacts are smaller than might be expected, given the extent of the deviation from random assignment. This suggests that the results from this report are generalizable to the villages selected for the IMAGINE project, which are not necessarily representative of all villages in Niger.

Table V.21. Impacts on child education including communes that severely violated random assignment or were not surveyed during original evaluation

|  | Treatment group | Control group | Difference |
| :--- | :---: | :---: | :---: | :---: |
| Child enrolled during last school year <br> (SY 2012/2013) (percentage points) | 72.5 | 64.8 | $7.7^{* * *}$ |
| Child absent more than 2 consecutive weeks <br> during last school year (SY 2012/2013) <br> (percentage points) | 35.5 | 42.9 | $-7.4^{* * *}$ |
| Math score - normalized (standard deviations) | 0.173 |  |  |
| French score - normalized (standard deviations) | 0.040 | 0.080 | 0.093 |
| Sample size (children) | $\mathbf{4 , 7 4 2}$ | $\mathbf{- 0 . 0 1 7}$ | 0.057 |
| Sample size (villages) | $\mathbf{6 5}$ | $\mathbf{9 , 9 4 0}$ |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: $\quad$ Children ages 6 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed ttests. Control group means are regression adjusted, including commune fixed effects. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. This includes all 20 communes in the sample (although the three villages that were selected to receive schools outside of random assignment remain excluded).
***/**/* Statistically significant at the .01/.05/.10 level.

## 4. Estimates of treatment effect on the treated villages

The impact estimates presented thus far are intent-to-treat estimates, meaning they are estimates based on random assignment and measure the impact of the offer to participate in the project on a group of children. Next, we look at treatment-on-the-treated (ToT) estimates of the project impacts on primary child education outcomes to account for non-compliance with random assignment at the village level.

We show the impact of the project on children in villages that actually received the IMAGINE project schools. In Table V.22, we use an instrumental variables approach to estimate the impacts for those actually receiving IMAGINE schools. ${ }^{31}$ On all child education outcome variables, the magnitude of the impacts for those in villages receiving IMAGINE schools is slightly larger than the intent-to-treat impacts and the significance does not change. Because random assignment was generally followed with only a few exceptions, we would not expect a major shift when running this specification.

[^21]
## Table V.22. Impacts on child education outcomes for those receiving IMAGINE schools (treatment on the treated)

|  | Intent to treat <br> impact <br> estimates | Treatment on the <br> treated impact <br> estimates |
| :--- | :---: | :---: |
| Child enrolled during last school year (SY 2012/2013) <br> (percentage points) <br> Child absent more than 2 consecutive weeks during last school <br> year (SY 2012/2013) (percentage points) | $7.8^{* * *}$ | $8.9^{* * *}$ |
| Math score - normalized (standard deviations) | $7.9^{* * *}$ | $-8.4^{* * *}$ |
| French score - normalized (standard deviations) | $0.126^{* *}$ | $0.134^{* *}$ |
| Sample size (children) | -0.074 | 0.078 |
| Sample size (villages) | $\mathbf{1 3 , 0 6 9}$ | $\mathbf{1 3 , 0 6 9}$ |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Analysis accounts for clustering of households within villages. Differences between treatment and control group means were tested using two-tailed ttests. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data. Control group means are regression adjusted, including commune fixed effects.
***/**/* Statistically significant at the .01/.05/.10 level.

## 5. Estimates of treatment effect on in-school children

Next, we use alternate estimation strategies to estimate the effects of the project on attendance and learning outcomes for children that have ever been enrolled in school. One might expect most of the impacts of IMAGINE on learning to be concentrated on in-school children. Indeed, this is the case for attendance. One strategy for doing this would be to restrict the sample to only those children who have reported ever having been enrolled in school. This is what we present in column 2 in Table V. 23 for attendance and learning outcomes. They show no significant effects of the IMAGINE project on absenteeism or on learning. Similarly, in column 3 we show estimates for a sample restricted to only those children enrolled in school during school year 2012/2013, finding similar results to those in column 2. However, these estimates based on restricting the sample to only children that have ever been enrolled in school (or were enrolled in school during the last school year) are problematic because of selection bias. Specifically, they may result in underestimates of the true effect of the project on attendance and learning because other aspects of the project may induce systematic differences across research groups in the characteristics of children who enroll in or stay in school. Indeed, we showed earlier in Table V. 2 that the project did affect enrollment in school. Children in treatment villages are more likely to enroll than those in control villages. This results in estimates that are smaller than with the benchmark model shown in column 1.

Therefore, we use an alternate approach to obtain unbiased estimates of the effect of the project on attendance and learning for children that have ever been enrolled in school by inflating the unbiased estimates from the full evaluation sample (from column 1 in Table V.23) based on the enrollment rate in treatment villages. These results are presented in column 4 of Table V.23. Because the enrollment rate in IMAGINE treatment villages is 77 percent, we divide the impact estimates by 0.77 , effectively inflating them by almost 30 percent. This is known as a

Bloom adjustment (Bloom 1984). ${ }^{32}$ The key assumption underlying this adjustment is that the impact on learning for out-of-school children in treatment communities is zero. This may be plausible given the lack of project activities occurring out of school for the IMAGINE project. ${ }^{33}$ If this assumption holds, these "treatment on the treated" estimates can be interpreted as the impact of being enrolled in an IMAGINE school on attendance and learning for all children who experienced the IMAGINE project in schools.

Table V.23. Impacts on child education outcomes for in-school children

|  | Impact estimate for evaluation sample | Impact estimate with restriction to sample of children that have ever been enrolled | Impact estimate with restriction to sample of children that were enrolled during the last school year (SY 2012/2013) | Treatment on the treated impact <br> estimate using Bloom adjustment |
| :---: | :---: | :---: | :---: | :---: |
| Child absent more than 2 consecutive weeks during last school year (SY 2012/2013) (percentage points) | $-7.9^{* * *}$ | -1.6 | -0.04 | $-10.3^{* * *}$ |
| Math score - normalized (standard deviations) | 0.126** | 0.073 | 0.070 | $0.164^{* *}$ |
| French score - normalized (standard deviations) | 0.074 | 0.037 | 0.028 | 0.096 |
| Sample size (children) | 13,069 | 9,014 | 8,536 | 13,069 |
| Sample size (villages) | 178 | 178 | 178 | 178 |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Absenteeism is unconditional on enrollment, meaning those who are not enrolled are considered to be absent. The indicator variable showing if a child was absent more than 14 days was created from the number of days the child was absent during the last month the school was open. Estimates in column (1) are those presented earlier in tables V. 2 and V.3. The sample for the estimates in column (2) is limited to those children that have reported ever being enrolled in school. The sample for the estimates in column (3) is limited to those children that reported having been enrolled in school during the 2012/2013 school year. The Bloom adjustment is used to estimate the treatment on the treated impact in column (4). It takes the impact estimate in column (1) and divides by the mean enrollment in treatment villages, which is 0.770 .
***/**/* Statistically significant at the .01/.05/.10 level.

[^22]
## D. Alternative explanations

Although we believe that random assignment is the best evaluation design, was implemented properly, and provided the basis for evaluation findings that are very credible, in this section we explore two possible threats to the evaluation, including the design and the timing of measurement of outcomes, and assess the extent to which these might have affected the results presented in Sections A and B.

## 1. Threats to the design

The evaluation design may be threatened because IMAGINE may have had an effect on the enrollment of children living outside the village. If children living in neighboring villages come to IMAGINE schools at a greater rate than to schools located in the control villages, this would not be reflected in our impact estimates, since our sampling design is based on children who live in the IMAGINE and control villages. This would result in an underestimate of the effects of the project on child outcomes. Although we cannot fully discard this explanation, the analyses presented next suggest that this is unlikely to be the case.

We consider three cases:
First, households from neighboring villages move to IMAGINE villages to be able to send their children to IMAGINE schools. If this were the case, we should see treatment villages having a larger number of households with school-aged children than control villages. As shown in Table IV.3, the difference in the number of households between treatment and control villages is small (a difference of one in the household sample and nine in the census) and not statistically significant. Also, there is no difference in the percentage of households in treatment villages with school-aged children compared to control villages.

Second, households from neighboring villages do not move but send their children to live with other households in IMAGINE villages. This would affect the proportion of children in IMAGINE villages enrolled in school and would be accounted for in our impact estimates. If it were the case, we should see treatment group households having a greater number of children than households in the control group. This was not the case, as the number of children ages 5-14 is similar in the two groups, as shown in Table IV.3, and the average number of children under age 18 is similar in the two groups, as shown in Table V.23. Finally, children in the treatment group should be less likely to be the son or daughter of the head of the household. The two groups are almost identical in this dimension as well (Table V.24).

Table V.24. Difference between the number of children in IMAGINE and nonIMAGINE households and the proportion of those who are son or daughter to head of household

|  | Treatment group | Control group | Difference | Sample size |
| :--- | :---: | :---: | :---: | :---: |
| Number of children under age <br> 18 in household | 4.241 |  |  |  |
| Child is son/daughter of head of <br> household (\%) | 86.8 | 8.215 | 0.026 | 6,888 |
| Sample size (households) | $\mathbf{2 , 2 3 8}$ | $\mathbf{8 7 . 7}$ | -0.9 | 13,067 |
| Sample size (children) | $\mathbf{4 , 0 9 2}$ | $\mathbf{8 , 9 7 7}$ |  |  |
| Sample size (villages) | $\mathbf{5 7}$ | $\mathbf{1 2 1}$ |  |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children and households of children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Sample sizes shown are for the full sample (as shown in far right column); some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/.10 level.

Finally, households from neighboring villages send their children to school, but children continue living in their villages. Since we have no data from households in neighboring villages, this case is harder to discard. Yet qualitative evidence suggests that children are not likely to walk long distances to go to school. In the case of our evaluation sample, less than 4 percent of children ages 5-14 go to school in a neighboring village. Although this may not be representative of all children in Niger who live in rural villages, we believe it unlikely that large numbers of children from neighboring villages would come to IMAGINE villages and that this would happen more frequently for IMAGINE villages than for non-IMAGINE villages.

In sum, we believe that the random assignment design implemented in this evaluation yielded credible impact estimates and that this alternative explanation is unlikely to explain the lack of major impacts reported earlier in this chapter.

## 2. Threats to the timing of measurement

Additional threats to the validity of the impact estimates might arise from the rollout of the NECS project prior to measurement of evaluation outcomes and from the start of the new school year in some villages before data collection was completed. We discuss each of these in turn below.

At the timing of data collection in October 2013, the NECS project had begun rollout of some project activities in NECS treatment villages, which include all IMAGINE villages. These activities include training of inspectors, teachers and community governance structures related to gender. To the extent that there may be synergies between the infrastructure project and any of the activities that have already begun in NECS treatment villages, we might expect to see larger impacts than we would without rollout of the NECS project. We test for this by comparing outcomes for children in IMAGINE villages that are also receiving the NECS project to

IMAGINE control villages that are receiving the NECS project. This is a reasonable comparison to make, because IMAGINE control villages receiving the NECS project are similar to IMAGINE villages on key characteristics by virtue of random assignment. ${ }^{34}$ As shown in Table V.25, the magnitude of the impact estimates for key child education outcomes variables are slightly larger than for the primary specification. In addition, the impact estimate for the project effect on French test scores is 0.087 standard deviations and is marginally significant at a 10 percent level. However, the overall conclusions about project effectiveness do not change when using this alternate control group.

## Table V.25. Impacts for children in IMAGINE villages compared to children in NECS-only villages

|  | IMAGINE <br> IMAGINE <br> treatment <br> group | receiving <br> NECS project | Difference |
| :--- | :--- | :---: | :---: |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/.10 level.

The timing of the data collection was just prior to the start of the 2013-2014 school year. However, school had already started by the time the data collection began in some villages. We first verified that there is no difference between treatment and control villages in terms of whether or not school was open at the time of data collection in the village. Even though child outcome data were not collected directly in schools, this gives us more confidence that start of school year activities may be affecting educational outcomes self-reported by parents differently across treatment and control villages. Second, we estimate impacts excluding the villages where school had already started, to ensure that the start of school had not affected outcomes. Results in Table V. 26 show that when we exclude these villages, impact estimates do not change.

[^23]Table V.26. Impacts for children in villages where the 2013-2014 school year had not yet begun at the time of data collection

|  | Treatment group | Control group | Difference |
| :---: | :---: | :---: | :---: |
| Child enrolled during last school year (SY 2012/2013) (percentage points) | 73.9 | 65.8 | 8.1*** |
| Child absent more than 2 consecutive weeks during last school year (SY 2012/2013) (percentage points) | 34.4 | 42.2 | -7.8*** |
| Math score - normalized (standard deviations) | 0.247 | 0.108 | 0.139** |
| French score - normalized (standard deviations) | 0.058 | -0.011 | 0.069 |
| Sample size (children) | 3,823 | 8,144 |  |
| Sample size (villages) | 53 | 110 |  |

Source: 2013 NECS Wave 1 data collection, Household Survey
Note: Children ages 6 to 14 are included in the analysis sample. Differences between treatment and control group means were tested using two-tailed t-tests. Control group means are regression adjusted, including commune fixed effects. Analysis accounts for clustering of households within villages. Sample sizes shown are for the full sample; some regressions may include a smaller size due to missing data.
***/**/* Statistically significant at the .01/.05/.10 level.

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## VI. CONCLUSIONS

This report documents the main findings from a three-year follow-up impact evaluation of the IMAGINE project. Three years after completion of the school construction project, effects on school infrastructure are large and significant. The number of classrooms and the number of classrooms made of finished materials are larger in treatment villages than in control villages. Similarly, the number of latrines, having latrines that are separate for boys and for girls, and the availability of lodging for teachers are statistically significantly larger in IMAGINE schools.

For children, IMAGINE had an 8.3 percentage point positive impact on primary school enrollment during the previous school year, a 7.9 percentage point impact on absenteeism, and a 0.127 standard deviation improvement in math scores. Using the basic model, there was no significant impact on French test scores; however, when using the full model with all control variables, there is a statistically significant impact on the French tests of 0.08 standard deviations. The project impacts were larger for girls than for boys. For girls, the project had an 11.8 percentage point positive impact on enrollment and a 10.6 percentage point impact on attendance, whereas for boys the project had a 5.0 percentage point impact on enrollment and a 5.3 percentage point impact on attendance. The difference in impacts between the genders is statistically significant for enrollment and attendance. For learning, the impacts on math and French test scores for girls were consistently large and statistically significant, whereas the impacts for boys were smaller and not significant. Impacts on math test scores for girls are 0.112 standard deviations significantly higher than for boys, whereas differences in impacts for the French test are not statistically significant. The project does not appear to affect children from families with different socioeconomic status differently.

## A. Comparison to one-year follow-up IMAGINE evaluation

Compared to the first follow-up evaluation of IMAGINE after one year of exposure to the new girl-friendly schools, effects on infrastructure are generally the same. ${ }^{35}$ On the other hand, effects for children's education outcomes have increased over time. One year after completion of the project, IMAGINE had a 4.3 percentage point positive impact on primary school enrollment, one-half the magnitude of the project’s impact on the same outcome three years later (Table V.27). Also, after one year, IMAGINE had no impact on attendance, math test scores, or French test scores compared to the impacts observed three years later. As with the three-year evaluation, project impacts were generally larger for girls than boys after one year. For girls, the project had an 8 percentage point positive impact on enrollment and a 5.4 percentage point impact on attendance. After one year, the project had no impact on girls’ math scores, though there is suggestive evidence it may have had a positive impact of 0.09 standard deviations on girls’ French test scores. No significant impacts were detected for boys' enrollment, attendance, or test scores after one year.

[^24]
## Table V.27. One-year impacts versus three-year impacts of IMAGINE on key child education outcomes

|  | One-year impacts ${ }^{36}$ | Three-year impacts |
| :--- | :---: | :---: |
| School enrollment (percentage points) | $4.3^{* *}$ | $7.8^{* * *}$ |
| School attendance (percentage points) | 1.7 | $7.9^{* * *}$ |
| Absenteeism (percentage points) | 0.03 | $0.13^{* *}$ |
| Math test scores (standard deviations) | 0.04 | 0.07 |
| French test scores (standard deviations) | $\mathbf{1 6 , 3 5 1}$ | $\mathbf{1 3 , 0 6 9}$ |
| Sample size: number of children | $\mathbf{1 7 8}$ | $\mathbf{1 7 8}$ |
| Sample size: number of villages |  |  |

Sources: Household Survey (Mathematica 2013), Village and School Infrastructure Questionnaire (Mathematica 2013), Household Survey (Mathematica 2011), School Survey (Mathematica 2011)

Notes: Child sample sizes may be smaller depending upon the outcome of interest

Impacts of IMAGINE on child educational outcomes might grow over time, for several reasons. Three years after the IMAGINE project implementation was completed, IMAGINE schools continue to have significantly better educational infrastructure and resources than nonIMAGINE schools. The infrastructure investments have remained present and functional, and few non-IMAGINE schools seem to have adopted similar types of infrastructure. The higher quality schools may drive parents to enroll their children in school at a higher rate as well as to encourage more consistent attendance. Viewed through the lens of the larger impacts for girls, it appears that there is indeed a "girl friendliness" about these schools, though it appears that it is solely the improved infrastructure. Due to the timing of the data collection, which occurred prior to the start of the school year, we were unable to collect more detailed information about school characteristics beyond the infrastructure directly observable by data collectors.

The small, early impacts on enrollment and attendance for young children appear to have also translated to an improvement in retention. The highest grade achieved by children in IMAGINE villages is higher than those in non-IMAGINE villages (Table V.11). Also, we see that the initial cohort of children exposed to the new schools is more likely to be enrolled in school in IMAGINE villages than in non-IMAGINE villages (Table V.7). The enrollment and attendance impact of the IMAGINE project was larger and significant for the youngest children as well as for children in the middle portion of the age range of interest. Children ages 10-12 at the time of data collection are among the first cohort of children likely affected by the IMAGINE schools, which were built three to four years prior. The small impacts on enrollment that were shown in IMAGINE appear to have been sustained for this cohort of children, and this has translated into impacts on test scores after a longer period of exposure to the project. Although the project appears to not have had an effect on children in what might be considered the next cohort (ages 8-9), impacts on enrollment and attendance are seen for the youngest children in the sample. These youngest children are not realizing test score impacts yet, but may be expected to do so after a longer exposure to the project.

[^25]Also, these results suggest that it may take more than one year of schooling in Niger for an improvement in learning to manifest. Because children stay in school longer in IMAGINE villages than in non-IMAGINE villages, they have more of a chance to learn, which could explain the improvement in test scores after three years when there were none after one year. Indeed, when broken down by age group, the learning effects are entirely driven by children ages 10-12 (Table V.7). In addition, for these 10- to 12-year-olds, there are larger statistically significant impacts for both math and French test scores than for the sample as a whole.

## B. Policy implications

The quality of the new school infrastructure remained similar between the one-year and three-year evaluations, and was better in IMAGINE schools than in non-IMAGINE schools. Impacts of the IMAGINE project increased over time between the two evaluations. Effects after three years were larger for enrollment and attendance and effects on learning were present in the long-term evaluation. This suggests that an improvement in enrollment and attendance can translate to some improvement in learning, and that it may take a few years for these learning improvements to manifest, as in the case of the IMAGINE project.

In addition, it is useful to think about the magnitude of these effects. Three years after the construction of these new girl friendly schools, enrollment is 13 percent higher than it would have been without the new schools. ${ }^{37}$ This magnitude is non-negligible, and the impact on enrollment is even higher for girls. One conclusion from this might be that in an environment without universal enrollment in school, the building of schools that are "girl friendly" can have a meaningful effect on enrollment rates. The permanency of the schools (as opposed to text books that could be lost or destroyed) suggests that these effects could continue over a longer period of time, thereby justifying the investment of such "hard" interventions. A study comparing the costeffectiveness of these "hard" interventions compared to "soft" interventions that are not as costly would be useful to policy makers. For the evaluation of the NECS project, we hope to do some exploratory work on this particular topic.

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## VII.NEXT STEPS AND FUTURE ANALYSIS

In this chapter, we discuss dissemination procedures, next steps, and future analyses.

## A. Dissemination procedures

In order for the findings in this report to be as useful as possible to a wide group of stakeholders, they must be disseminated accordingly. Mathematica is committed to making these findings accessible through multiple venues:

- Key findings from this report will be presented in Washington, DC, and were presented in Niamey, Niger. These presentations will inform stakeholders of the impact evaluation’s implementation, lessons learned, and results. They will provide stakeholders an opportunity to engage directly with the research team, pose questions about findings, and offer suggestions for the next round of data collection and analysis.
- We will make the report itself, in both French and English, freely available on both MCC’s and Mathematica's websites. In addition, an issue brief will be available on Mathematica's website.
- MCC will publish a public use version data file of the data on its website, along with documentation, allowing researchers to use the data to answer other, related research questions. In addition, a restricted use data file that was used in this analysis may be made available upon request, allowing researchers to replicate our analysis.
- Mathematica will present the results at a wide array of conferences focused on international education, such as the Association for Public Policy Analysis and Management (APPAM), International Initiative for Impact Evaluation (3ie), Comparative and International Education Society (CIES), Society for Research on Educational Effectiveness (SREE), Society for Research in Child Development (SRCD) and the American Evaluation Association (AEA).
- This report will ultimately form the basis for an article that we will submit to an appropriate peer-reviewed journal.

These options present a few key opportunities for disseminating these important findings such that they can be used to develop, enhance, or modify interventions focused on improving education outcomes. In service to Mathematica's mission-to improve public well-being by bringing the highest standards of quality, objectivity, and excellence to bear on the provision of information collection and analysis-we will continually seek additional opportunities as they arise to present these results to interested stakeholders.

## B. Future analyses

Mathematica will conduct a rigorous evaluation of the NECS project. In doing so, we will estimate the impacts of the package of NECS interventions with and without the IMAGINE infrastructure. This will be useful in helping policymakers to better understand the importance of a high quality physical environment in conjunction with interventions geared toward improving access to quality education and improving reading achievement through implementing a rapid reading curriculum in local languages. We will also conduct a cost analysis to determine whether the NECS and IMAGINE projects were economically justified. This will include determining the
combined projects’ effects on a per-dollar basis (cost-effectiveness), comparing potential benefits to costs in monetary terms (benefit-cost analysis), and computing a single summary statistic of the economic merits of the project (the economic rate of return, or ERR).

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APPENDIX A CENSUS

Commune

| SerialNumber | DistrictNumber | Concession | $\left\|\begin{array}{c} \text { Household } \\ \text { Number in } \\ \text { the } \\ \text { concession } \end{array}\right\|$ | First and last name of head of household |  | Number of adults in household age 18 or over that are not inschool school | Number of School-age children (5-14 years) in household |  | Eligible forSampleELIGLEL........ 1NOT.ELIGIBLE... | Serial Number of Eligible Househol | $\begin{gathered} \text { Sample } \\ \text { Housenold } \\ \text { Number } \\ \text { (IM4) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Girls | Boys |  |  |  |
|  |  |  |  |  | I_I | \|_1_| | \|__|_1 | 1_1_1 | I_I |  |  |
|  |  |  |  |  | +_\| | \|_1_| | \|_1_| | 1_1_\| | I_I |  |  |
|  |  |  |  |  | I_I | \|_1_| | \|_-_| | 1_1_\| | \| |  |  |
|  |  |  |  |  | - _\| | \|_|_| | \|_1_| | 1__I_I | I_I |  |  |
|  |  |  |  |  | \|_1 | +_1_1 | 1_1__\| | 1___1 | I_1 |  |  |
|  |  |  |  |  | \|_1 | \| $\mid$ _\| | \| _ | _ | | 1___\| | I_1 |  |  |
|  |  |  |  |  | I_I | \|_1_| | \|_1_| | 1_1_\| | I_1 |  |  |
|  |  |  |  |  | - _ | \| 1 _| | 1_1_\| | 1_1_1 | 1.1 |  |  |
|  |  |  |  |  | I_I | \|__|_| | \|_-_| | 1___\| | \|_1 |  |  |
|  |  |  |  |  | 1._1 | \|_1_| | \|__|_| | 1__I_1 | 1._1 |  |  |
|  |  |  |  |  | L_I | \|_|_| | \|___-| | 1_1_\| | I_1 |  |  |
|  |  |  |  |  | । | 1_1_1 | 1_1__1 | 1___1 | 1._1 |  |  |
|  |  |  |  |  | +_1 | +1_\| | 1_1_\| | 1_1_1 | 1.1 |  |  |
|  |  |  |  |  | L_I | \|_|_| | \|__|_| | 1_1_\| | 1._1 |  |  |
|  |  |  |  |  | \|_I | \|_|_| | \|_|__| | 1__I_I | \| |  |  |
|  |  |  |  |  | \|_1 | \|_1_| | \|_1_| | 1_1_\| | 1._1 |  |  |
|  |  |  |  |  | \|_1 | \|_-_| | \|_-__| | 1__I_1 | I_I |  |  |
|  |  |  |  |  | 1._1 | \|_1_| | \|_-|_| | 1_1_\| | 1._1 |  |  |
|  |  |  |  |  | I_I | \|_1_| | \|_1_| | 1_1_\| | 1._1 |  |  |
|  |  |  |  |  | L_I | L_-_\| | \|_1_| | 1_-__\| | - _ |  |  |

## APPENDIX B

VILLAGE AND SCHOOL INFRASTRUCTURE QUESTIONNAIRE

Hello. My name is [NAME] and I am working with the research institute CIERPA. We are working on a study concerned with education in your community. The study is funded by the Millennium Challenge Corporation, an American foreign aid agency, and is being carried out by Mathematica Policy Research. I would like to talk to you about your village. The interview will focus on village information only and will take some time. Your personal information will remain strictly confidential and this information will not be released in any way that would allow identification of you. Your participation is voluntary and you may choose not to answer any or all questions for any reason. In other words, you have the alternative to not participate. There are no risks and no direct benefits to you or your village in participating in this study. You may contact M. Kourgueni, the director of CIERPA, at 96.59.80.79, if you have questions, concerns or complaints about the study or your rights as participants. If you have any questions for me, please feel free to ask at any time.




| SCHOOL INFRASTRUCTURE PANEL | SCHOOL ID: \|__|_|_| | SS |
| :---: | :---: | :---: |
| RESPONSES TO THESE QUESTIONS SHOUL | OME FROM DIRECT OBSERVATION ONLY. |  |
| SS1. HOW MANY CLASSROOMS DOES THIS SCHOOL HAVE? | Classrooms $\qquad$ Not obsERVABLE....................................... 98 | \|__|_ |
| SS2. HOW MANY OF THESE CLASSROOMS ARE MADE OF FINISHED MATERIAL? | Number <br> Not ObSERVABLE......................................... 98 | _ |
| SS3. DOES THIS SCHOOL HAVE A POTABLE WATER SOURCE? | YES .......................................................................................................................... No | $\underset{2 \Rightarrow S S 6}{ }$ |


| SCHOOL INFRASTRUCTURE PANEL | SCHOOL ID: \|____|_| | SS |
| :---: | :---: | :---: |
| RESPONSES TO THESE QUESTIONS SHOULD COME FROM DIRECT OBSERVATION ONLY. |  |  |
| SS4. What tYpe Of WATER SOURCE IS IT? |  | \|_____| |
| SS5. DOES THIS WATER SUPPLY FOR THE SCHOOL FUNCTION? |  | I__\| |
| SS6. DOES THIS SCHOOL HAVE TOILET FACILITIES FOR STUDENTS? | $\begin{aligned} & \hline \text { YES ................................................................................................................... } \\ & \text { No....... } \end{aligned}$ | $\underset{2 \Rightarrow \mathrm{SS} 9}{ }$ |
| SS7. DO THE TOILETS FUNCTION? |  | $\|\underline{2 \Rightarrow S S 9}\|$ |
| SS8. DO GIRLS AND BOYS HAVE SEPARATE TOILET FACILITIES? |  | ____\| |
| SS9. DOES THIS SCHOOL HAVE A PRESCHOOL? | YES ......................................................................................................................................................................................... | \|______| |
| SS10. DOES THIS SCHOOL HAVE A PLAYGROUND? | YES ....................................................................................................................... No...... | \|___| |


| MODULE VILLAGE HOUSEHOLDS. |  |  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: |
| RECORD THE NUMBER OF HOUSEHOLDS ENUMERATED IN THE CENSUS, AND THE COUNT |  |  |  |  |  |
| OF ELIGIBLE HOUSEHOLDS FROM THE CENSUS. RECORD THE NUMBER OF HH |  |  |  |  |  |
| INTERVIEWED. VERIFY THAT 40 HOUSEHOLDS WERE INTERVIEWED IN EACH VILLAGE. IF |  |  |  |  |  |
| THERE ARE FEWER THAN 40 ELIGIBLE HOUSEHOLDS IN THE VILLAGE, VERIFY THAT ALL |  |  |  |  |  |
| ELIGIBLE HOUSEHOLDS WERE INTERVIEWED. |  |  |  |  |  |
| vM1. Count CENSUS |  |  |  |  |  |
| vM2. Count ELIGIBLE |  |  |  |  |  |
| vM3. Count Interviewed |  |  |  |  |  |


| INTERVIEW RESULT |  | RE |
| :---: | :---: | :---: |
| RE1. RESULT OF HOUSEHOLD INTERVIEW: \|___ |  |  |
| Complete ............................................. 01 | Refused .............................................. |  |
| InCOMPLETE............................................ 02 | OTHER (SPECIFY) ..... |  |
| RE2A. name of data entry clerk - ${ }^{\text {ST }}$ ENTRY : |  |  |
| Data entry clerk number | \|__|__| |  |
| DATA ENTRY DAY/MONTH/YEAR: |  |  |
| RE2b. NAME OF DATA ENTRY CLERK - $2^{\text {ND }}$ ENTRY : |  |  |
| Data entry clerk number | \|__| |  |
| DATA ENTRY DAY/MONTH/YEAR: | \|__|__|/|__|__|/|2|0|1迆 |  |

## APPENDIX C

## HOUSEHOLD QUESTIONNAIRE

Hello. My name is [NAME] and I am working with the research institute CiERPA. We are working on a study CONCERNED WITH EDUCATION IN YOUR COMMUNITY. THE STUDY IS FUNDED BY THE MILLENNIUM ChalLENGE CORPORATION, AN American foreign aid agency, and is being carried out by Mathematica Policy Research. I would like to talk to you about your household. The interview will take some time. All the information we obtain will remain STRICTLY CONFIDENTIAL AND THIS INFORMATION WILL NOT BE RELEASED IN ANY WAY THAT WOULD ALLOW IDENTIFICATION OF YOUR HOUSEHOLD OR YOUR FAMILY'S ANSWERS. THIS INFORMATION WILL BE USED FOR EVALUATION PURPOSES ONLY, AND ONCE THE STUDY IS COMPLETED DATA FROM THE STUDY THAT DOES NOT IDENTIFY YOU PERSONALLY WILL BE MADE PUBLICLY AVAILABLE TO ENABLE ADDITIONAL ANALYSES. YOUR PARTICIPATION IS VOLUNTARY AND YOU MAY CHOOSE NOT TO ANSWER ANY OR ALL QUESTIONS FOR ANY REASON. IN OTHER WORDS, YOU HAVE THE ALTERNATIVE TO NOT PARTICIPATE. THERE ARE NO RISKS AND NO DIRECT BENEFITS TO YOU IN PARTICIPATING IN THIS STUDY. YOU MAY CONTACT M. KOURGUENI, THE DIRECTOR OF CIERPA, AT 96.59.80.79, IF YOU HAVE QUESTIONS, CONCERNS OR COMPLAINTS ABOUT THE STUDY OR YOUR RIGHTS AS PARTICIPANTS. IF YOU HAVE ANY QUESTIONS FOR ME, PLEASE FEEL FREE TO ASK AT ANY TIME. DURING THIS TIME I WOULD LIKE TO SPEAK WITH THE HOUSEHOLD HEAD AND ALL MOTHERS OR OTHERS WHO TAKE CARE OF CHILDREN IN THE HOUSEHOLD.

| IDENTIFICATION OF HOUSEHOLD |  |
| :---: | :---: |
| IM1. REGION: ___ ID \| | IM2. Commune: ___ ID \|_____| |
| IM3. VILLAGE: ___ ID \|___|__|__| | IM4. HOUSEHOLD NUMBER: \| |
| IM5. Interviewter name and number: <br> Name $\qquad$ ID $\qquad$ I_ 1 _ | IM6. SUPERVISOR NAME AND NUMBER: <br> Name $\qquad$ ID $\qquad$ \|__| |
| IM7. Day/Month/YEAR OF INTERVIEW: $\qquad$ \|/ $\qquad$ | \|/ $\|2\| \underline{0}\|1\| 3 \mid$ |

## HOUSEHOLD CHARACTERISTICS

hC1. Name of head of household:

```
HC2. RESPONDENT RELATIONSHIP TO HEAD OF HOUSEHOLD: |_____|
```

| HEAD ....................................... 01 | MOTHER/FATHER........................... 05 | ADOPTED/FOSTER/STEPCHLLD ......... 09 |
| :---: | :---: | :---: |
| Wife or Husband ...................... 02 | BROTHER OR SIITER .................... 06 | Not Related .......................... 10 |
| Son or Daughter ..................... 03 | Uncle/Aunt ............................. 07 | Other relation........................ 96 |
| GrandChild ............................... 04 | Niece/NePHEW ........................... 08 | Don't Know............................... 98 |

HC3. RESPONDENT'S NAME (IF NOT HEAD OF HOUSEHOLD)


HC5. DESCRIPTION OF HOUSEHOLD LOCATION: $\qquad$
hC6. Respondent's telephone Nr.: $\square$
$\square$
$\square$
$\square$ _ _ _
hC7. Head of household's telephone Nr.: |__|__|___________||
HC8. Person to contact to find the respondent in the future. if possible, this person should live in the VILLAGE. IF THE CODE IS ‘OTHER', SPECIFY THE RELATIONSHIP.

| HEAD ....................................... 01 | MOTHER/FATHER.......................... 05 | Adopted/Foster/Stepchild ........ 09 |
| :---: | :---: | :---: |
| WIFE OR HUSBAND ....................... 02 | BROTHER OR SISTER .................... 06 | NEIGHBOR................................. 10 |
| SON OR DAUGHTER ...................... 03 | UnCLE/AUNT ............................... 07 | COUSIN.................................... 11 |
| GRANDCHILD ............................... 04 | NIECE/NEPHEW ........................... 08 | FRIEND ..................................... 11 |
|  |  | OTHER (SPECIFY)........................ 96 |

NAME $\qquad$ RELATIONSHIP: | $\qquad$
$\qquad$
TELEPHONE NR: $\mid$ ______|__|_______||

| HOUSEHOLD CHARACTERISTICS |  | HC |
| :---: | :---: | :---: |
| HC9. SEX OF HEAD OF HOUSEHOLD: | MALE ..................................................................................................................................... FEMALE ........ |  |
| HC10. Age of head of household: (DON’T KNOW, 98) |  | \|__|__| |
| HC11. Highest level of education of head of MARK THE HIGHEST LEVEL, UP TO TWO RESPONSES <br> None. $\qquad$ 00 <br> Pre-school $\qquad$ 01 <br> Primary. $\qquad$ 02 <br> Secondary $\qquad$ 03 <br> Higher. $\qquad$ 04 | HOUSEHOLD: <br> ARE POSSIBLE <br> KORANIC SCHOOL $\qquad$ 05 <br> Madrasa. $\qquad$ 06 <br> Adult literacy $\qquad$ 07 <br> Don't KNOW $\qquad$ 98 | A. $\qquad$ <br> B. $\qquad$ |
| HC12. Total number of household members: |  | \|__|__| |
| HC13. TOTAL NUMBER OF CHILDREN UNDER 18 YE | ARS OLD IN HOUSEHOLD: |  |
| HC15. What national languages does the HEAD OF THIS HOUSEHOLD SPEAK? <br> MARK ALL THAT APPLY, UP TO THREE |  | A. $\qquad$ <br> B. $\qquad$ <br> C. $\qquad$ |
| HC16. DOES THE HEAD OF THIS HOUSEHOLD SPEAK FRENCH? |  | \|__|__| |
| HC17. CAN THE HEAD OF THE HOUSEHOLD READ A SIMPLE PHRASE IN ANY LANGUAGE? | YES .................................................................................................................................................................................................... | \|__|__| |


| HOUSEHOLD CHARACTERISTICS |  | HC |
| :---: | :---: | :---: |
| HC18. Main material of the dwelling FLOOR? | Natural material (EARTH, SAND) $\qquad$ 01 <br> RUDIMENTARY MATERIAL (WOOD PLANKS) $\qquad$ 02 <br> FINISHED MATERIAL (VINYL, ASPHALT, CERAMIC, CEMENT, TILE) $\qquad$ 03 <br> OTHER (SPECIFY) $\qquad$ 96 | 1___ |
| HC19. MAIN MATERIAL OF THE ROOF? | Natural material (no roof, straw) $\qquad$ RUDIMENTARY MATERIAL (RUSTIC MAT, WOOD PLANKS) $\qquad$ <br> Finished material (metal, wood, cement, $\qquad$ <br> OTHER (SPECIFY) ............................................... 96 |  |
| HC20. MAIN MATERIAL OF THE DWELLING WALLS? | NATURAL MATERIAL (EARTH, SAND). $\qquad$ RUDIMENTARY MATERIAL (WOOD PLANKS, PALM, $\qquad$ <br> FINISHED MATERIAL (ASPHALT, TILES, CEMENT) ..... 03 $\qquad$ <br> OTHER (SPECIFY) ................................................ 96 | $1$ |
| HC21. DO ANY MEMBERS OF YOUR HOUSEHOLD OWN ANY OF THE FOLLOWING FUNCTIONING GOODS? |  |  |
| A. Radio | YES ............................................................................................................................................... | I__\| |
| B. Telephone /Cell phone | YES .............................................................................................................................................. | I__\| |
| c. WATCH | YES .......................................................................................................................................... | \|__| |
| D. Bicycle | YES .......................................................................................................................................... | \|__| |
| E. ANIMAL DRAWN-CART | YES ........................................................................................................................................... | \|__| |
| F. Cattle | $\begin{aligned} & \text { YES ............................................................................................................................................. } 2 \\ & \text { No ........ } \\ & \hline \end{aligned}$ | \|__| |
| G. Camels |  | \|__| |
| HC22A. IF HC21B $=1$, HOW MANY CELL PHONES ARE OWNED BY MEMBERS OF THE HOUSEHOLD? | NuMber Of CeLL Phones .................................... | 1___ |


| HOUSEHOLD CHARACTERISTICS |  | HC |
| :---: | :---: | :---: |
| HC22b. IF HC21B $=1$, WHICH MEMBERS OF THE HOUSEHOLD HAVE THESE CELL PHONES? <br> Mark all applicable relations to the head of the HOUSEHOLD |  | A. $\qquad$ <br> B. 1 $\qquad$ <br> C. 1 $\qquad$ |
| HC22c. If HC21B = 1, WHICH MEMBERS OF THE HOUSEHOLD ARE ALLOWED TO USE THESE CELL PHONES? <br> Mark all applicable relations to the head of the HOUSEHOLD |  | A. $\qquad$ <br> B. $\qquad$ 1 <br> C. $\qquad$ |
| HC23. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR members of your household during the rainy SEASON? | PIPED WATER................................ 01 TUBE WELL OR BOREHOLE.............$~$ 03 | \|__|__| |
| HC24. What is the principal type of toilet that is used BY YOUR HOUSEHOLD? |  | \|___|__| |
| hC25. Have any adult members of this household PARTICIPATED IN LITERACY TRAINING OF ANY KIND? | YES ................................................................................................. | $\stackrel{\mid}{2 \leftrightharpoons \mathrm{HC} 29}$ |
| HC26. How many adult members participated, by GENDER? | A. MALES $\qquad$ <br> B. Females $\qquad$ |  |
| HC27. DO ANY ADULT MEMBERS CURRENTLY PARTICIPATE? | $\begin{aligned} & \text { YES ..................................................................................................... } \\ & \text { No ........ } \end{aligned}$ | $\underset{1 \Rightarrow \mathrm{HC} 29}{\mid}$ |


| HOUSEHOLD CHARACTERISTICS |  | HC |
| :---: | :---: | :---: |
| HC28. Have any adult members participated during the previous 1 YEAR? | $\begin{aligned} & \text { YES .................................................... } 1 \\ & \text { No.......................... } 2 \end{aligned}$ | $\square$ |
| HC29. Have any members of this household participated in any COMMUNITY EVENTS RELATED TO LITERACY AND READING IN THE PREVIOUS 1 YEAR? | Yes .................................................................................. No...... | \|___ |
| HC30. On average, how many meals per day do you have in your HOUSEHOLD? | Number of meals .................. | $\square$ |
| HC31. IN THE PREVIOUS 7 DAYS, HAVE YOU OR ANY MEMBER OF YOUR household gone to bed hungry because there was not ENOUGH FOOD AVAILABLE? | Yes .................................................................................. No...... | -__I |
| HC32. How satisfied are you with the infrastructure in the PRIMARY SCHOOL IN YOUR VILLAGE? <br> if there is more than 1 school, think of the school that the largest number OF YOUR CHILDREN ATTEND. | UNSATISIED ............................ 1 A LITTLE SATISFIED ................ 2 Somewhat SATISIED ............. 3 SATISFIED ........................... 4 | I___\| |
| HC33. How SATISFIED ARE YOU WITH THE TEACHERS IN THE PRIMARY SCHOOL IN YOUR VILLAGE? <br> if there is more than 1 school, think of the school that the largest number of your children attend. | UNSATISFIED .............................. 1 A LITTLE SATISFIED............... 2 SOMEWHAT SATISFIED ............. 3 SATIFIED ......................... 4 | I__\| |
| HC34. Does someone (Adult) in your household participate in ACTIVITIES WITH THE COGES/CGDES, AME OR APE DURING THE PREVIOUS YEAR? | Yes ...................................................... 01 No.............................. 98 DON'T KNOW ................ 98 | \|__|__| |
| HC35. Does the primary school offer separate bathrooms for BOYS \& GIRLS? |  | \|__|__| |
| HC36. Does the primary school offer a school feeding program? | Yes .................................................. 01 No 02 DON'T KNOW .............................. 98 | $\frac{1}{2 \leftrightharpoons \mathrm{H}}\|-\|$ |
| HC37. DOES THE PRIMARY SCHOOL OFFER DRY RATIONS? |  | $\left.\frac{1}{2 \Rightarrow \mathrm{H}} \right\rvert\,-1$ |
| HC38. IF YES, ARE THE DRY RATIONS FOR GIRLS ONLY? | Yes .................................................. 01 No............................... 98 DON'T KNOW ................ | \|__|__| |
| HC39. DOES THE PRIMARY SCHOOL OFFER TEXTBOOKS? | Yes ................................................. 01 No............................. 98 DON'T KNOW ................ | \|__|__| |
| HC40. AT What Age do you expect children to be capable of reading? | Age <br> Don't KNow $\qquad$ 98 | \|__|__| |

HOUSEHOLD LISTING FORM Village ID:

FIRST, PLEASE TELL ME THE NAME OF EACH CHILD WHO USUALLY LIVES HERE BETWEEN THE AGES OF 5 AND 14. List all household members between 5 and 14 years old in HL2, their relationship to the
household head (HL5), their sex (HL3), and their age (HL4). Then ask: ARE THERE ANY OTHER CHILDREN BETWEEN THE AGE OF 5 AND 14 WHO LIVE HERE, EVEN IF THEY ARE NOT MEMBERS OF YOUR FAMILY, DO NOT HAVE PARENTS LIVING IN THIS HOUSEHOLD, OR ARE NOT AT HOME NOW? (INGLUDING CHILDREN IN SCHOOL OR AT WORK). If yes, complete listing. Add a continuation sheet if there are more than 10 children in the household between the ages of 5 and 14. Tick here if continuation sheet used $\square$
The ID code of the child noted in HL1 has to be constant on all following pages.

| HL1. Child ID | HL2. <br> Child's name | HL3. Is (Name) MALE FOR FEMALE? <br> 1 male <br> 2 FEMALE | HL4A. <br> HOW OLD IS <br> (NAME)? <br> RECORD IN <br> COMPLETED <br> YEARS <br> 98 DON'T KNOW | HL4B. <br> Do you have (NAME'S) LEGAL BIRTH DOCUMENTS? <br> 1 Yes <br> 2 No | HL5. <br> What is the RELATIONSHIP OF (NAME) TO THE HEAD OF THE HOUSEHOLD? 01 SONOR DAUGHTER 02 GRANDSONOR GRANDDAUGHTER 03 BROTHER OR SISTER 04 NIECE OR NEPHEW 05 ADOPTED/FOSTERED/ STEPCHILD 06 no relation 96 OTHER (SPECIFY) 98 DON'T KNOW | HL6. <br> What is (Name)'s MOTHER TONGUE? <br> 01 HAOUSSA <br> 02 Zarma <br> 03 Tamasheq <br> 04 Fulfulde <br> 05 KANURI <br> 06 Toubou <br> 07 Arabe <br> 08 Boudouma <br> 09 Gourmantche <br> 10 DJoula <br> 11 French <br> 96 OTHER (SPECIFY) | HL7. <br> At any time during the PAST YEAR, did (name) do ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? <br> IF YES: FOR PAY IN CASH/ IN KIND OR NON-PAID? <br> 1 Yes, Paid (cash or IN KIND) <br> 2 Yes, Non-Pald 3 No | HL8. <br> What is the highest level of SCHOOL (NAME) attended? <br> LEVEL: <br> 00 Noschool <br> 01 Preschool <br> 02 Primary <br> 03 Secondary <br> 04 Nonformal <br> 98 Don't know <br> 00 OR 04 OR $98 \Rightarrow$ <br> HL10 | HL9. <br> What is the highest grade (NAME) COMPLETED AT THIS LEVEL? Grade: | HL10. <br> What is the HIGHEST LEVEL YOU THINK (NAME) WILL COMPLETE? <br> LEVEL: <br> 00 No School <br> 01 Preschool <br> 02 Primary <br> 03 Secondary <br> 04 Advanced degree <br> 98 Don'tknow | HL11. <br> What is the highest LEVEL OF SCHOOL YOU WOULD LIKE (NAME) TO ATTEND? <br> LEVEL: <br> 00 No school <br> 01 Preschool <br> 02 Primary <br> 03 Secondary <br> 04 Advanced degree <br> 98 Don't KNow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | Name | SEX | Age | BIRTH CERTIFICATE | Relation | Mother Tongue | WORK | Level | Grade | Level | Level |
| 01 |  | \|__| | \|__|__| | \|__| | \|__|__| | \|__|__| | \|__| | \|__|__| | \|__| | __\|__| | \|__|__| |
| 02 |  | \|__| | \|__|__| | _1 | ___\| | \|__|__| | __\| | \|__|__| | \|__| | ____\| | \|__|__| |
| 03 |  | \|__| | \|__|__| | \|__| | ___\| | \|__|__| | -1 | \|_____| | \|__| | \|__|__| | \|__|__| |
| 04 |  | \|__| | \|__|__| | _ | ___\| | \|__|__| | _-1 | \|__|__| | \|__| | ____\| | \|__|__| |
| 05 |  | L__I | \|__|__| | L__I | ____\| | \|__|__| | 1__\| | \|__|__| | L__\| | \|__|__| | L__\|__| |
| 06 |  | L__\| | \|___ ${ }_{\text {_ }}$ \| | \|__| | _\|__| | \|__|__| | I__\| | \|__|__| | L__\| | \|__|__| | \|__|__| |
| 07 |  | L__1 | \|__|__| | L__\| | ___\| | ___\| | L__\| | ____\| | L__\| | ___\| | \|__|__| |
| 08 |  | L__1 | \|__|__| | L__1 | \|__|__| | \|__|__| | I__\| | \|__|__| | L__I | 1__\|__| | \|__|__| |
| 09 |  | I__I | \|__|__| | L__1 | \|__|__| | \|__|__| | I__\| | I__I__\| | I__\| | ____\| | \|__|__| |
| 10 |  | I__I | \|__|__| | \|__| | \|__|__| | \|__|__| | I__\| | \|__|__| | I__1 | I___\| | \|___| |

HOUSEHOLD LISTING FORM Village ID: $\mid$

## To be administered for every child in the household age 5 through 14 years

| HL1. <br> CHILD <br> ID | HL2. CHILD'S NAME | HL12. <br> DURING THE (2011-2012) SCHOOL YEAR, HAS (NAME) ATTENDED SCHOOL OR PRESCHOOL AT ANY TIME? <br> 01 YES 02 NO $\Rightarrow$ HL15 98 DON'T KNOW $\Rightarrow$ HL15 | HL13. <br> What grade did (NAME) ATTEND DURING THE 2011/2012 SCHOOL YEAR? <br> GRADE: | HL14. <br> DID (NAME) COMPLETE THE SCHOOL YEAR? <br> 01 YES <br> 02 NO <br> 98 DON'T KNOW | HL15. <br> DURING THE (2012-2013) SCHOOL YEAR, HAS (NAME) ATTENDED SCHOOL OR PRESCHOOL AT ANY TIME? <br> 01 YES 02 NO $\Rightarrow$ HL18 98 DON'T KNOW $\Rightarrow$ HL18 | HL16. <br> What grade DID (NAME) ATTEND DURING THE 2012/2013 SCHOOL YEAR? | HL17. <br> DID (NAME) COMPLETE THE SCHOOL YEAR? <br> 01 YES <br> 02 NO <br> 98 DON'T KNOW <br> GO TO HL19 | HL18. <br> IF NO IN HL15: WHAT IS THE PRIMARY REASON (NAME) DID NOT ENROLL IN SCHOOL IN 2012-2013? <br> 01 NO SCHOOL IN THE VILLAGE <br> 02 SCHOOL FEES <br> 03 CHILD TOO YOUNG <br> 04 SCHOOL TOO FAR <br> 05 WORK FOR INCOME <br> 06 HOUSEHOLD WORK <br> 07 TAKING CARE OF SIBLINGS <br> 08 NO SEPARATE TOILETS <br> 09 CHILD TOO OLD <br> 10 AVOID DEBAUCHERY <br> 11 EARLY MARRIAGE <br> 12 FAMILY REFUSED <br> 13 NO CERTIFICATE OF BIRTH <br> 14 VIOLENCE <br> 15 CHILD HAS HEALTH PROBLEMS <br> 16 CHILD DISABLED <br> 17 CHILD REFUSED <br> 18 EXPELLED/FAILED <br> 96 OTHER (SPECIFY) <br> 98 DON'T KNOW | HL19. <br> DO YOU PLAN TO <br> ENROLL (NAME) <br> IN SCHOOL <br> DURING THE <br> 2013/2014 <br> SCHOOL YEAR? $\begin{array}{\|l} 01 \text { YES } \rightarrow \text { ED1 } \\ 02 \text { NO } \\ 98 \text { DON'T KNOW } \end{array}$ | HL20. <br> IF NO IN HL19: WHAT IS THE PRIMARY REASON YOU DO NOT PLAN TO ENROLL (NAME) IN SCHOOL IN 2013-2014? <br> 01 NO SCHOOL IN THE VILLAGE <br> 02 SCHOOL FEES <br> 03 CHILD TOO YOUNG <br> 04 SCHOOL TOO FAR <br> 05 WORK FOR INCOME <br> 06 HOUSEHOLD WORK <br> 07 TAKING CARE OF SIBLINGS <br> 08 NO SEPARATE TOILETS <br> 09 CHILD TOO OLD <br> 10 AVOID DEBAUCHERY <br> 11 EARLY MARRIAGE <br> 12 FAMILY REFUSED <br> 13 NO CERTIFICATE OF BIRTH <br> 14 VIOLENCE <br> 15 CHILD HAS HEALTH PROBLEMS <br> 16 CHILD DISABLED <br> 17 CHILD REFUSED <br> 18 EXPELLED/FAILED <br> 96 OTHER (SPECIFY) <br> 98 DON'T KNOW |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | NAME | $\begin{gathered} \text { ENROLLMENT } \\ 2011 / 2012 \\ \hline \end{gathered}$ | $\begin{gathered} \text { GRADE } \\ 2011 / 2012 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { COMPLETED } \\ & 2011 / 2012 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { ENROLLMENT } \\ 2012 / 2013 \\ \hline \end{gathered}$ | $\begin{gathered} \text { GRADE } \\ 2012 / 2013 \\ \hline \end{gathered}$ | $\begin{aligned} & \text { COMPLETED } \\ & 2012 / 2013 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { REASON NOT ENROLLED } \\ 2012 / 2013 \\ \hline \end{gathered}$ | $\begin{gathered} \text { ENROLLMENT } \\ 2013 / 2014 \\ \hline \end{gathered}$ | REASON NOT ENROLLED |
| 01 |  | $1$ | - | $1$ | \|___| | I__\| | $1$ | $\text { \|__ } \mid$ | $\mid$ | $1$ |
| 02 |  | ___\| | \|__| | -1 | \|__|__| | \|__| | \|__|__| | \|__|__| | \|__| | _____\| |
| 03 |  | $\mid$ | I__\| | \| | $\mid$ | I__\| | $\mid$ | \| | $\mid$ | $\mid$ |
| 04 |  | ___\| | _ | - | \|_____| | \|__| | ______\| | _____\| | _1 | _____\| |
| 05 |  | 1_____\| | -1 | 1__1 | ___1 | \|__| | I_____\| | ______\| | \|__| | $\mid$ |
| 06 |  | \| | _\| | $\text { _ } \mid$ | \| | I__1 | $\mid$ | \| | $1$ | \| |
| 07 |  | \|__| | _ | _ | _ | -1 | _ __\| | _ __\| | _1 |  |
| 08 |  | _\|__| | \|__| | ___\| | ___\| | _1 | ___\| | ____\| | _1 | ___\| |
| 09 |  | I__I__\| | I__\| | \|__|__| | \|_____| | I__\| | I_____\| | I_____\| | I__\| |  |
| 10 |  | \| | I__\| | $\mid$ | \| | I__\| | \|__|__| | \|____| | I__\| | \| |


| MODULE EDUCATION |  | Village ID: $\mid$ |  | HOUSEHOLD NUMBER \| _ | |  |  | ED |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To be Administered for Every chil in the household Age 5 THROUGH 14 YEARS THAT WENT TO SCHOOL DURING THE 2012-2013 SCHOOL YEAR (HL15=1) |  |  |  |  |  |  |  |
| HL1. CHILD ID | HL2. CHILD'S NAME HL15=1 | ED1. <br> DID (NAME) <br> HAVE ACCESS <br> TOA <br> COMPLETE SET <br> OF TEXTBOOKS <br> FOR HISOR <br> HER USE? <br> 1 <br> 1 <br> YES <br> 2 | What is the name of the sc 2012/2013 AND IN WHICH VIL <br> WRITE THE APPROPRIATE SC THE LIST. <br> IF SCHOOL IS NOT LISTED, RECO SCHOOL AND THE VILLAGE ID. <br> IF VILLAGE IS NOT LISTED, WRI VILLAGE NAME. | (name) ATtended in .ocated? <br> VILLAGE code from <br> D Write full name of <br> LAGE ID AND RECORD | ED3. <br> How LONG DOES It TAKE (NAME) TO TRAVEL TO HIS/HER SCHOOL? | ED4. <br> Of the following factors, (READ THE OPTIONS) WHAT IS THE MOST IMPORTANT TO YOU FOR SENDING (NAME) TO THIS SCHOOL? <br> 01 Distance to school <br> 02 техтвоокs <br> 03 School Canteen <br> 04 Dry rations <br> 05 Separate bathrooms for BOYS AND GRLS <br> 06 reading materalls in locale Language | ED5. <br> Of the following factors, (read THE OPTIONS) WHAT IS THE SECOND MOST IMPORTANT REASON TO YOU FOR SENDING (NAME) TO THIS SCHOOL? <br> 01 Distance to school <br> 02 Textbooks <br> 03 Schoolcanteen <br> 04 Dryrations <br> 05 Separate bathrooms for boys AND GIRLS <br> 06 reading materials in locale language |
| ID | NAME | manuals | ID School | ID VILLAGE | ONE WAY | PRINCIPAL REASON | SECONDARY REASON |
| 01 |  | I__\| | \|__|__|__| | \|__|___|__| | \|__|__| | \|__|__| | \|__|__| |
| 02 |  | \|__| | \|__|__|_-| | \|__|___|_-| | \|__|__| | \|__|__| | \|__|__| |
| 03 |  | I__I | \|__|__|_-| | \|__|__|__| | \|__|_-_| | \|__|__| | \|__|__| |
| 04 |  | I__\| | \|__|__|_-| | \|__|___|_-| | \|__|_-_| | \|__|_-_| | \|__|__| |
| 05 |  | I__I | \|__|__|__| | \|__|___|__| | \|__|_-_| | ___\|__| | \|__|__| |
| 06 |  | I__\| | \|__|__|_-| | \|___|__|_-| | \|__|__| | \|__|__| | \|__|__| |
| 07 |  | \|__| | \|__|__|__| | \|__|___|__| | \|__|_-_| | \|__|__| | \|__|__| |
| 08 |  | I__\| | \|__|__|__| | \|__|___|_-| | \|__|__| | \|__|__| | \|__|__| |
| 09 |  | I__\| | \|__|__|__| | \|__|___|__| | \|__|_-_| | \|__|__| | \|__|__| |
| 10 |  | I__\| | \|__|__|_-| | \|__|__|__| | \|__|_-_| | \|__|__| | \|__|__| |



TO BE ADMINISTERED FOR EVERY CHILD IN THE HOUSEHOLD AGE 5 THROUGH 14 YEARS THAT WENT TO SCHOOL DURING THE 2012-2013 SCHOOL YEAR (HL18=1)

| $\begin{aligned} & \text { HL1. } \\ & \text { CHILD } \\ & \text { ID } \end{aligned}$ | hl2. CHILD'S Name | ED6. <br> WAS THE CHILD EVER ABSENT FOR MORE THAN 2 CONSECUTVE WEEKS DURING THE PAST SCHOOL YEAR? <br> 01 YEs <br> 02 мо <br> 98 don't know | EDg. <br> HOW MANY DAYS DID (NAME) MISS DURING THE LAST MONTH THAT SCHOOL WAS OPEN? <br> 98 Don't KNOW <br> IF 00 OR 98, GO TO ED11 | ED10. <br> WHAT WAS THE PRINCIPAL REASON FOR (NAME) MISSING SCHOOL? <br> 01 sICK <br> 02 FUNERAL <br> 03 OTHER CEREMONY <br> 04 WORK FOR INCOME <br> 05 HOUSEHOLD CHORES <br> 06 FINANCIALREASONS <br> 07 taking care of siblings <br> 08 CHILD REFUSED <br> 09 TEACHER ABSENT <br> 10 school closed <br> 11 travel <br> 12 violence <br> 13 WORKING IN THE FIELD/PASTURAGE <br> 96 OTHER (SPECIFY) | ED11. <br> HOW OLD WAS (NAME) WHEN HE/SHE FIRST ENTERED PRIMARY SCHOOL? <br> 94 Not APPLICABLE (IF CHLD IS CURRENTLY IN PRESCHOOL) | ED13. Does (Name) have A MENTOR? <br> 01 YES <br> 02 NO <br> 98 DON'T <br> kNOW |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | NAME | PRESENCE | NR OF DAYS | REASON | AGE | MENTOR | Deworming |
| 01 |  | ____\| | I__\|__| | ___\|__| | \|__|__| | I__\|__| | I__I__\| |
| 02 |  | ___\|__| | \|__|__| | +__\|_-| | +__\|_-| | I__\|__| | I__I__\| |
| 03 |  | \|__|__| | \|__| | L__\|__| | \|__|__| | \|__|__| | I__\|__| |
| 04 |  | ___\|__| | \|__|__| | L__I__\| | I__\|__| | I__\|__| | L_____\| |
| 05 |  | \|__|__| | I__\|__| | \|__|__| | \|__|__| | I__\|__| | I__I__\| |
| 06 |  | \|__|__| | \|__|__| | ___\|_-| | ___\|__| | I__\|__| | I__\|__| |
| 07 |  | \|__|__| | I__\|__| | +__\|_-| | I__\|__| | \|__|__| | I__I__\| |
| 08 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| |
| 09 |  | \|__|__| | \|__|__| | L__\|__| | ___\|__| | L__\|__| | I__\|__| |
| 10 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\|__| |

## OPINIONS OF CHILDREN

Village ID:
HOUSEHOLD NUMBER
OE
To be administered for every child in the household age 5 through 14 years, even those that have never been currently enrolled in school. Before speaking with each child, obtain consent to speak to the child from the household head or the child's parent. "I am [name]. I work with parents and children. I am trying to learn more about the daily life of children like you. I would like to ask you a few questions." Pose some simple questions to the child to build a rapport. Make them feel comfortable. Use the language most comfortable to the child, his/her mother tongue, and note it in OE1. "What is your name? What is the name of your father? What is the name of your mother?" If the child refuses to speak with you, note the refusal and move to the next child. If the child speaks with you, say: "Now I would like to ask you a few questions about school and then give you a short test in [local language] and French. I will ask you a set of questions. You should give the answer that fits best. If you don't understand the question, I will read the question again. You can ask me anytime to explain a question. You can choose not to answer, or you can tell me if a question is hard for you and we will skip that question. If you like, you can end the interview at any time. Do you understand?" If the child understands, continue. If the child does not understand, ask what the child does not understand and clarify the issue for the child. If the child agrees, begin with a few questions about schooling in OE2-OE6 and then move to the first reading test. Record the result code of the child.

| HL1. <br> CHILD <br> ID | HL2. CHILD'S NAME COPY FROM HL2 | RESULT CODE CHILD <br> AFTER OBTAINING CONSENT, RECORD THE RESULT CODE <br> ```INTERVIEW COMPLETED IN THE HOME INTERVIEW COMPLETED AT THE SCHOOL PARENT REFUSED CHILD REFUSEDNone``` | OE1. <br> Write the Language used to POSE QUESTION TO THE CHILD <br> 01 FRENCH <br> 02 HAOUSSA <br> 03 ZARMA <br> 04 KANURI <br> 05 TAMASHEQ <br> 06 FULFULDE <br> 96 OTHER LOCALE LANGUAGE (SPECIFY) | OE2. HOW OLD ARE YOU? 98 Don'T KNow | OE3. <br> WERE YOU ENROLLED IN SCHOOL DURING THE LAST SCHOOL YEAR? <br> 1 YES <br> $2 \mathrm{NO} \Rightarrow \mathrm{OE} 6$ | OE4. <br> Did you experience VIolence in SCHOOL? $\begin{aligned} & 1 \mathrm{YES} \\ & 2 \mathrm{NO} \end{aligned}$ | OE5. <br> DID YOUR TEACHER CALL MORE ON BOYS OR ON GIRLS? <br> 1 BOYs <br> 2 GIRLS <br> 3 same | OE6. <br> Do you WANT TO GO TO SCHOOL? <br> 1 YES <br> 2 NO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | NAME | Result | LANGUAGE | AGE | Enrolled | Violence | Gender | School |
| 01 |  | \|__I | \|__|__| | \|__|__| | \|__| | \|__| | I__\| | I__I |
| 02 |  | \|__| | \|__|__| | ___\| | \|__| | \|__| | \|__| | -1 |
| 03 |  | \|__| | \|__|__| | _\|__| | \|__| | \|__| | \|__| | I__\| |
| 04 |  | \|__| | \|__|__| | \|__|__| | \|__| | \|__| | \|__| | __1 |
| 05 |  | \|__| | \|__|__| | ___\| | \|__| | \|__| | \|__| | -1 |
| 06 |  | \|__| | I__\|__| | \|_____| | \|__| | \|__| | I__\| | I__I |
| 07 |  | \|__| | \|__|__| | \|__|__| | \|__| | \|__| | I__\| | I__I |
| 08 |  | \|__| | \|__|__| | \|__|__| | \|__| | \|__| | \|__| | \|__| |
| 09 |  | I__\| | \|__|__| | \|__|__| | I__\| | I__\| | I__\| | I__I |
| 10 |  | \|__| | \|__|__| | \|__|__| | \|__| | \|__| | ___\| | \|__| |

## 

Based on the local language chosen for the main school, the reading tests begin either in Haoussa, Zarma, Kanuri, Tamasheq, or Fulfulde, and the children are only given one local language test. All the children in the village will take the same language test. After the local language test (Haoussa, Zarma, Kanuri, Tamasheq or Fulfulde), proceed to the French test and then the Math test, which will be administered to all children. Note that no matter what test is given, explain the instructions to the child in the language that they understand best.

The instructions for all the reading tests in local languages and French are the same.

LANGUAGE AND TEST CODE IN LOCAL LANGUAGE:
$\qquad$
Zarma.......................... 2
KANURI......................... 3
TAMASHEQ.................... 4
FULFULDE...................... 5

Use the sheets for the local language noted above.
After finishing the local language tests, continue with the French test.


Before continuing, say "Good effort! Let's continue to the next section!"

| FRENCH |  |  |  |  | HOUSEHOLD NUMBER \| ___| |  |  |  |  |  | FA2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This is not a timed exercise and is administered orally. <br> Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and states: "What is this?" Then the interviewer states: "You say 'it is an eye'". <br> Example 2: Interviewer points to his ear and states: "What is this?" Then the interviewer encourages the child to say 'ear'. <br> Interviewer states: "Do you understand?" If the child does not understand, the interviewer explains the instructions again and repeats the examples. If the child understands, the interviewer starts the test. If child makes 5 consecutive errors, continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. <br> Ask each question in French and note the response in the questionnaire. RESPONSE CODES: 1= CORRECT, 2=INCORRECT, 3=NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | $\begin{aligned} & \text { FA21. } \\ & \text { NEZ } \end{aligned}$ | $\begin{aligned} & \text { FA22. } \\ & \text { TETTE } \end{aligned}$ | $\begin{aligned} & \text { FA23. } \\ & \text { PIED } \end{aligned}$ | $\begin{aligned} & \text { FA24. } \\ & \text { DOIGT } \end{aligned}$ | $\begin{aligned} & \text { FA25. } \\ & \text { Cou } \end{aligned}$ | $\begin{aligned} & \text { FA26. } \\ & \text { DENTS } \end{aligned}$ | FA27. <br> Bouchel Levres | $\begin{aligned} & \hline \text { FA28. } \\ & \text { GENOU } \end{aligned}$ | FA29. <br> Pantalon/ PAGNE | $\begin{gathered} \text { FA210. } \\ \text { CHAUSSURE } \end{gathered}$ | No RESPONSE |
| ID | Name | Nose | Head | Fоot | Finger | NECK | Теетн | MOUTH/LIPS | KNEE | PANTS/SKIRT | SHOE | $\begin{gathered} \text { NO } \\ \text { RESPONSE } \\ \hline \end{gathered}$ |
| 01 |  | I__\| | I__\| | L__\| | I_I | I__\| | \|__| | I__\| | \|__| | I__\| | L__\| | I__\| |
| 02 |  | I__\| | \|__| | \|__| | \|__| | \|__| | \|__| | I__\| | \|__| | I__\| | \|__| | I__\| |
| 03 |  | I__I | I__\| | L__\| | I__\| | I__\| | L__\| | I__I | I__\| | I__\| | L__\| | I__\| |
| 04 |  | I__\| | I__\| | I__\| | I__\| | I__I | I__I | I__I | I__\| | I__I | L__\| | I__\| |
| 05 |  | I__\| | I__\| | I__\| | I__\| | \|__| | \|__| | I__I | \|__| | I__\| | I__\| | I__\| |
| 06 |  | I__\| | I__\| | L__\| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 07 |  | I__\| | I__\| | \|__| | \|__| | \|__| | \|__| | I__\| | \|__| | I__\| | I__\| | I__\| |
| 08 |  | I__\| | I__\| | L__\| | I_-\| | \|__| | \|__| | I_-1 | \|__| | I__\| | L__\| | I__\| |
| 09 |  | I__\| | \|__| | \|__| | I__\| | \|__| | \|__| | I__\| | \|__| | I__\| | L__\| | I__\| |
| 10 |  | I__I | I__\| | L__\| | I_-1 | I_-1 | I__\| | I_-1 | I__\| | I__\| | L__\| | I_-1 |

Before continuing, say "Good effort! Let's continue to the next section!"

## FRENCH <br> VILLAGE ID: <br> HOUSEHOLD NUMBER ${ }_{\square}$

## Subtask 3: Listening Comprehension

This is not a timed exercise and this is administered orally only.
Interviewer states "Now, I am going to read to you a story aloud one time. Afterwards, I will ask you some questions about the story. Listen carefully, and after you will answer the questions the best you can. Okay? Do you understand what are you supposed to do? Let's begin! Listen carefully."
The interviewer reads aloud the short story, ONE TIME, slowly, (about 1 word per second), in French.
After reading the text, ask the child each comprehension question and note the response. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not respond, go on to the next question.

| TEXT: <br> La Petite poule blanche est tombee dans la | ${ }_{10}^{\text {HL1 }}$ | HL2. CHILD'SNAME |  | A31. TOMBEE LA POULE? | $\begin{gathered} \text { F } \\ \text { DEQUEL } \\ \text { ESTL } \end{gathered}$ | A32. ECOULEUR Agneau? | $\begin{aligned} & \text { FA } \\ & \text { QULL } \\ & \text { IMPORTA } \\ & \text { POUL } \end{aligned}$ | 33. OBJET NTLA PETTIE EAVU? | $\begin{array}{\|l\|} \hline \text { POURO } \\ \text { VIENT } \\ \text { DELAF } \end{array}$ | A34. OILAGNEAU AU SECOURS ETTE POULE? | $\begin{array}{r} \mathrm{F} \\ \hline \text { QUAND } \\ \text { LESD } \\ \text { CR } \end{array}$ | A35. EST-CE QUE EUX AMIS IENT? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MARE. «AIDE-MOI! » ELLLE CRIE. UN AGNEAU NOIR VIENT A SON SECOURS. MAIS IL TOMBE LUI AUSSI DANS LA MARE. «QUE FARE ? » DEMANDE-T-IL. | ID | Name | $\begin{array}{c\|} \hline \text { A. } \\ \text { LA } \\ \text { MARE } \end{array}$ | B. Response Language | A. |  | $\begin{array}{\|c\|} \hline \text { A. } \\ \text { LE TRONC } \\ \text { D'ARBRE } \\ \hline \end{array}$ | B. Response LANGUAGE | $\begin{gathered} \text { A. } \\ \text { ILEST } \\ \text { TOMBEE } \end{gathered}$ |  | $\begin{gathered} \text { A. } \\ \text { APRES } \\ \text { GRIMPER } \end{gathered}$ | B. <br> RESPONSE Language |
| LA POULE DIT « REGARDE CE TRONC D'ARBRE QUI | 01 |  | I_I | ___\|__| | I__I | \|___|__| | -__\| | - | I__\| | \|__| | ___I | -__\| |
| GRIMPENT ALORS SUR LE TRONC D'ARBRE ET | 02 |  | I__\| | \|__|__| | I__I | \|_____| | I__\| | \|__|__| | I__\| | \|__|_-| | I__\| | \|__|_-_| |
| CRIENT, « OUF, NOUS ALLONS POUVOIR RETROUVER LA TERRE FERME!» | 03 |  | I__I | \|__|__| | L__\| | \|___ | I__I | I__I | I_-\| | \|__|__| | I__\| | L__\| |
| FA31. OU EST TOMBEELA PETITE POULE? | 04 |  | L__\| | \|__|__| | L__I | \|_____| | ___ | L__I_ | L_-\| | \|__|__| | L__\| | \|__| |
| FA33. QUEL OBJET IMPORTANT LA PETITE POULE A | 05 |  | -_I | \|__|__| | L__I | -__I | I__\| | \|__| | 1 | L_- | -_I | L__I |
| VA34.POURQUOIL'AGNEAU VIENT AU SECOURS | 06 |  | L_\| | \|__|__| | L__I | \|__|__| | -_I | ___l | L_-1 | \|____| | L__I | L__ |
| DELAPETITE POULE? <br> FA35. QUAND EST-CE QUE LES DEUX AMIS | 07 |  | I__\| | \|__|__| | L__\| | I__L | L__\| | L__\|__| | L_-\| | L_-_ | I__\| | - __I |
| T? | 08 |  | I__\| | \|__|__| | L__\| | \|__|__| | I__\| | - | I_-\| | - _I | L__\| | L__I_ |
| RESPONSE CODE: $1=$ CORRECT, $2=$ INCORRECT, $3=$ NO REPONSE | 09 |  | I__\| | \|__|__| | L__I | \|__|__| | -__\| | I__I_ | I__\| | \|__| | L__\| | I__I |
| RESPONSE LANGUAGE: 01 FRANÇAIS, 02 HAOUSSA, 03 ZARMA, 04 KANURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) | 10 |  | I__\| | \|__|__| | I__\| | \|___ | \|__| | \|__|__| | I__\| | \|__| | I__\| | \|__|__| |

Before continuing, say "Good effort! Let's continue to the next section!"

| FREN |  |  |  |  |  |  |  |  |  |  |  | FA4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 4: Letter identification (name or sound) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 4. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand? When I say "Begin", point to each letter with your finger as you read it. Be careful to read from left to right, line by line. Do you understand what I am asking? Put your finger on the first letter. Ready? Try to read quickly and correctly. Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first letter name or sound. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates on a letter for 3 seconds. In this case, point to the next letter and say "Please go on." Mark the letter skipped as incorrect on the test sheet. <br> After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark '00' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 10 letters, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'S NAME } \end{gathered}$ | FA41. | FA42. | FA43. | FA44. | FA45. | FA46. | FA47. | FA48. | FA49. | FA410. | $\begin{array}{\|l\|} \hline \text { Auto } \\ \text { Stop } \\ \hline \end{array}$ | $\begin{gathered} \text { TINE } \\ \text { REMANING } \end{gathered}$ | TOTAL CORRECT |
| ID | Name | (10) | (20) | (30) | (40) | (50) | (60) | (70) | (80) | (90) | (100) | AUTO | SECONDS | total |
| 01 |  | \|__|__| | \|__|__| | \| __|__| | \|__|__| | \| _-_ |__| | \| _-_ |__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | L_-1 | \|__|__| | I__I |
| 02 |  | \|__|__| | \|__|__| | L__I_ | \|__|__| | \|_-|__| | \|_-|__| | \|__|__| | \|__|__| | \|__|__| | \|_-|__| | -_\| | \|__|_-| | -_-\| |
| 03 |  | -__\| | \|__|_C| | \|_-|_-| | L__L_\| | \|__|__| | \|__|__| | \|__|__| | L__\|_C| | L__\|_| | \|__|__| | L__\| | \|_-| | I__I |
| 04 |  | \|__|__| | \|__|__| | \|_-|__| | \|__|__| | \|_-|__| | \|_-|__| | \|__|__| | \|__|__| | I__\|_ | \|__|__| | -_\| | \|__|__| | L_-\| |
| 05 |  | L__\|_-| | \|__|__| | \|_-|_-| | \|__|__| | \|__|_-| | L__\|_-| | L__\|_-| | L__\|_-| | I__\|__| | \|__|__| | I__\| | \|__|__| | L_-\| |
| 06 |  | \|__I__| | \|__|__| | \| _-|_-_| | I__\|__| | \|_-|__| | \| _-|__| | I__\|__| | \|___|__| | \|___ _ _ | | \|__|__| | -_\| | L__\|__| | I__\| |
| 07 |  | \|__|__| | \|__| | I__I | \|__|__| | \|__|__| | \|_-|__| | \|__|__| | L__L_ | \|__|_ | \|__|__| | 1 | \|_-| | -_-1 |
| 08 |  | \|__|__| | \|__|__| | I__\|__| | I__\|__| | I__\|__| | I__I__\| | \|__|__| | \|__|__| | \|__|__| | I__I__\| | -_\| | \|__|_-| | I__I |
| 09 |  | \|__|__| | \|__|__| | \|_-|_-| | \|_-|__| | \| _-|__| | \| _-|__| | \|__|__| | I__\|__| | \|__|_ | \|__|__| | - | I__I | L_-I |
| 10 |  | L__\|__| | I__\|__| | I__\|__| | L__I__\| | I__\|__| | I__\|__| | L__\|__| | L__\|_| | I__\|__| | I__\|__| | -_I | I | \|__|__| |

Before continuing, say "Good effort! Let's continue to the next section!"

| FRENCH |  | VILLAGE ID: |  |  | HOUSEHOLD NUMBER |  |  |  |  |  |  | FA5 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 5: Word Identification |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 5. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand what I am asking you to do? When I say "Start", read the words from left to right, line by line. At the end of the line, continue to the next line. Try to read quickly and correctly. Ready? Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first word. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates for 3 seconds. In this case, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 5 words, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | HL2. CHILD'SNAME | FA51. | FA52. | FA53. | FA54. | FA55. | FA56. | FA57. | FA58. | FA59. | FA510. | $\begin{array}{\|l\|} \hline \text { AUTO } \\ \text { STOP } \end{array}$ | $\begin{gathered} \text { TIME } \\ \text { REMANING } \end{gathered}$ | TOTAL CORRECT |
| ID | Name | (5) | (10) | (15) | (20) | (25) | (30) | (35) | (40) | (45) | (50) | auto | seconds | total |
| 01 |  | \|__|__| | \|__|__| | \|__|__| | \| __|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__I | \|__|__| | I__\| |
| 02 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\|__| | \|__|__| | I__\| | I__\|__| | L__I |
| 03 |  | \|__|__| | \|__|__| | L__\|__| | \|__|__| | L__\|__| | \|__|__| | \|__| | L__\|__| | L__\|__| | \|_-|__| | L__\| | L_-I | -__\| |
| 04 |  | \|__|_-| | \|__|__| | L__\|_-| | \|__|__| | L__\|_-| | L__\|_-| | L__\|_-| | L__\|_-| | I__\|_-| | \|__|_-| | I__I | L__\|_l| | I__I |
| 05 |  | \|_-|__| | \|__|__| | \|__|__| | \|__|__| | L__\|__| | \|__|__| | L__\|__| | L__\|__| | I__\|__| | \|_-|__| | I__I | \|_-|__| | \|__|__| |
| 06 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\|__| | L__\|__| | L__\|__| | I__\|__| | I__\|__| | \|__|__| | I__\| | \|__|__| | -_-\| |
| 07 |  | \|__|__| | \|__|__| | I__\|_-| | \|__|__| | I__\|__| | \|__|__| | L__\|__| | I__\|_-_| | \|__|__| | \|__|__| | I | I__I_ | \|__|_-| |
| 08 |  | \|__|__| | \|__|__| | \|__|_-_| | \|__|__| | L__\|__| | L__\|__| | L__\|__| | \|__|_-_| | \|__|__| | I__\|__| | I_ | I__I | I_-I |
| 09 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I_-1 | I__\|__| | \|__|__| |
| 10 |  | \|__|__| | \|__|__| | \|___|__| | L__\|__| | L__\|__| | \|__|__| | L__\|__| | \|__|__| | \|__|__| | \|_-|__| | I__\| | \|__| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

To be administered for every child in the household age 5 through 14 years, even those are not currently enrolled in school. Pose the questions in the language that is most comfortable for the child. Do not assist the child by reading the numbers to them. If the child misses four questions in a row, stop the test. RESPONSE CODES: $1=$ CORRECT; $2=$ INCORRECT

| $\begin{aligned} & \hline \text { HL1. } \\ & \text { CHILD } \\ & \text { ID } \end{aligned}$ | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | MA1 <br> Count from 1 то 10 <br> Enter HIGHEST NUMBER CORRECT <br> MARK 00 IF NOT ABLE TO COUNT | MA2. <br> Are you able TO IDENTIFY THE FOLLOWING NUMBERS? <br> A. 3 <br> B. 9 <br> Show Card Do not say the number |  | MA3. <br> Are you able to count the FOLLOWING ITEMS? <br> A. Canaris <br> B. roosters <br> Show Card Do not say the number |  | MA4. <br> Of the numbers below, are you able TO IDENTIFY THE GREATER NUMBER? Which is LARGER? <br> A. 78 <br> B. 6354 <br> C. $381 \quad 279$ <br> Show Card <br> Do not say the numbers |  |  | MA5. <br> Are you able to Complete THE FOLLOWING ADDITION? <br> A. $4+2=$ <br> B. $13+3=$ <br> Show Card Do not say the number |  | MA6. <br> Are you able TO COMPLETE THE FOLLOWING SUBTRACTION? <br> A. 3-1= <br> B. 12-9= <br> Show Card <br> Do not say the numbers |  | MA7. <br> Oral question: <br> Are you able to solve the FOLLOWING PROBLEMS I WILL READ OUT LOUD? <br> A. Mohammed has 2 mangoes. His father gives him 5 more mangoes. How many does he have now? <br> B. THERE ARE 8 KIDS WALKING to school. 6 ARE BOYS, AND THE OTHERS ARE GIRLS. HOW MANY GIRLS ARE WALKING TO SCHOOL? |  | MA8. <br> ARE YOU ABLE TO INDENTIFY THE TRIANGLE AMONG THE FOLLOWING FIGURES? <br> Show Card | MA9. <br> Are you able TO COMPLETE THE FOLLOWING CALCULATIONS? <br> A. $2 \times 4=$ <br> B. $12: 3=$ <br> Show Card <br> Do not say <br> the numbers |  | MA10. Oral QUESTION: <br> Amadou GOES 180km in 6 hours. What is HIS AVERAGE SPEED? <br> 180km/н $60 \mathrm{~km} / \mathrm{H}$ $30 \mathrm{~km} / \mathrm{H}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | Name | COUNT | A=3 | $B=9$ | $\mathrm{A}=4$ | $\mathrm{B}=7$ | A $=8$ | $\mathrm{B}=63$ | $\mathrm{C}=381$ | $\mathrm{A}=6$ | $\mathrm{B}=16$ | A = 2 | $\mathrm{B}=3$ | $\mathrm{A}=7$ | $\mathrm{B}=2$ | triangLe | A=8 | $\mathrm{B}=4$ | $30 \mathrm{KM} / \mathrm{H}$ |
| 01 |  | ____\| | I__\| | _1 | - | \|__| | - | I__I | I | I | I___\| | \|___| | I__I | I__I | \|__| |  |  |  |  |
| 02 |  | 1 | ___I | _1 | I___\| | I___\| | I | I__I | I__\| | 1 | ____\| | ____\| | I | I__I | \|__| | __I |  |  | _1 |
| 03 |  |  | __1 | _1 | I__I | I__I | -1 | I__\| | L__\| | \|__| | I__\| | ___\| | I | I__I | __1 | __1 | -_I |  | __I |
| 04 |  | I__\|__| |  | I__I | I__I | I__I | - | L__I | - | - | I__I | I__I | \| | I__\| | I__\| | I__I | L__I |  | \|__| |
| 05 |  | \|__| |  | \|__| | - | ___1 | - | 1__1 | - | I__\| | ___\| | - | I__I | - | \|__| | \|__| |  |  | - |
| 06 |  | -_1 |  | 1 | 1 | - | \|__| | I__I |  | I__\| | I__\| |  | I__I |  | ___\| |  |  |  |  |
| 07 |  | -_1 |  | \|___| | 1 | 1 | \| | I__I |  | 1 | - | 1 | I__I | I__I |  |  |  |  |  |
| 08 |  | \|__|__| |  | I__\| | 1 |  |  | 1 |  | 1 | 1 | 1 | \|__| | 1 |  |  |  |  | __\| |
| 09 |  | \|__|__| |  | \|__| | \|__| | I |  | 1 | I | I | 1 | 1 | \|__| | 1 |  |  |  |  | __\| |
| 10 |  | \|__| | \|___| | _l | I__\| | I | -1 | I__\| | - | I__\| | 1 | __I | I__\| | I__\| | I | _1 |  |  | _1 |

After finishing the test, say "Very good effort! Thank you!"

$\qquad$
RE2. Interviewer/supervisor notes: use this space to record notes about the interview with THIS HOUSEHOLD.

RE3A. Name of data entry clerk - ${ }^{\text {ST }}$ entry: $\qquad$
Data entry clerk number:


DATA ENTRY DAY/MONTH/YEAR:

|/ $\qquad$ |/|2||0|1|3|

RE3b. Name of data entry clerk - $2^{\text {ND }}$ entry: $\qquad$
DATA ENTRY CLERK NUMBER:


DATA ENTRY DAY/MONTH/YEAR: $\qquad$ |/ $\qquad$ |/|2||0|1|3|

| HAOU |  | VILLAGE ID: \| | I |  | HOUS | EHOLD N | NUMBER \| | - |  |  |  | HA1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 1: Receptive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "We are going to play a game, ok? I am going to give you instructions, and we can see if you can follow what I say." <br> Example 1: Interviewer states: "Point to your nose"." The interviewer points to his nose, and encourages the child to do the same. If the child points correctly, say "Bravo, that is correct!" If the child does not point, repeat the instructions and ask, "Can you point to your nose?" <br> Example 2: Interviewer states: "Point to your head". This time the interviewer does not point, but encourages child to point. If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in Haoussa and note the response in the questionnaire. RESPONSE CODES: $1=$ CORRECT, $2=$ INCORRECT, $3=$ NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ |  | HA12. GWODI BAKIN KA/KI | HA13. <br> GWODI <br> GUWA <br> HANUU KA/K1 | $\begin{gathered} \text { HA14. } \\ \text { DAGA KAFA } \\ \text { KA/KI } \end{gathered}$ | HA15. GwODI MINI YATSA/ FARCE KA/KI | HA16. <br> TAbA HUNNUA <br> KA/KI | HA17. <br> TUMA DA BAYA <br> BAYA | $\begin{array}{c\|} \hline \text { HA18. } \\ \text { DAGA HANU } \\ \text { KA/KI } \end{array}$ | HA19. DUKA | HA110 <br> SA <br> WANNAN <br> ABU A <br> GABAN <br> KA/KI | $\begin{gathered} \text { NO } \\ \text { RESPONSE } \end{gathered}$ |
| ID | Name | Ear | Моитн | Elbow | Foot | Finger | Clap | $\begin{array}{\|c\|} \hline \text { JUMP } \\ \text { BACKWARDS } \\ \hline \end{array}$ | Hand | $\begin{gathered} \text { BEND } \\ \text { FORWARD } \\ \hline \end{gathered}$ | PLACE IN FRONT | No Response |
| 01 |  | I__\| | I__\| | I__I | \|__| | I__\| | I__I | I__I | I__\| | I__\| | L__\| | I__I |
| 02 |  | I__I | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 03 |  | I__\| | I__\| | I__\| | \|__| | I__\| | I__\| | L__\| | I_I | I__\| | I__\| | I__\| |
| 04 |  | I__\| | I__\| | I__\| | \|__| | I__\| | \|__| | I__\| | I__\| | \|__| | L__\| | I__\| |
| 05 |  | I__I | I_I | I__\| | I__\| | I_I | I__\| | I_I | I_I | I__I | L__\| | I__\| |
| 06 |  | I__\| | I__\| | I__\| | \|__| | I__\| | I__\| | I__\| | I__\| | \|__| | \|__| | \|__| |
| 07 |  | I__\| | \|__| | I__\| | \|__| | I__\| | \|__| | \|__| | I__\| | I__\| | L__I | I__\| |
| 08 |  | I__\| | I_I | I__\| | I__\| | I__\| | I__\| | I__\| | I_I | I__\| | I__\| | I_I |
| 09 |  | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 10 |  | I__I | I__\| | I__I | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"

| HAOUSSA V | VILLAGE ID: |  |  | HOUSEHOLD NUMBER \| _ | _ | | |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and says, "What is this?" Interviewer says, "You say it is an eye!" <br> Example 2: Interviewer points to his ear, and says, "What is this?" The interviewer encourages the child to say "ear". "Interviewer asks, "Do you understand?" If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. If child makes 5 consecutive errors, stop the test and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in the test language and note the response in the questionnaire. RESPONSE CODES: 1= CORRECT, 2= INCORRECT, 3=NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | HA21. HANCI | $\begin{gathered} \text { HA22. } \\ \text { YATSA/FARCE } \end{gathered}$ | $\begin{aligned} & \text { HA23. } \\ & \text { WUYY } \end{aligned}$ | HA24. HAKURA | $\begin{gathered} \text { HA25. } \\ \text { LEБA/BAKI } \end{gathered}$ | HA26. GWUWA | $\begin{gathered} \text { HA27. } \\ \text { WANDO/ZANE } \end{gathered}$ | HA28. GWUWA HANNU | $\begin{aligned} & \text { HA29. } \\ & \text { HAMMATA } \end{aligned}$ | $\begin{aligned} & \text { HA210. } \\ & \text { KAFADAA } \end{aligned}$ | $\begin{gathered} \text { NO } \\ \text { RESPONSE } \end{gathered}$ |
| ID | Name | Nose | Finger | NECK | TеEтH | Mouth/LIPs | Knee | Pants/Skirt | Elbow | Armpit | SHoLDER | $\begin{array}{c\|} \hline \text { NO } \\ \text { RESPONSE } \\ \hline \end{array}$ |
| 01 |  | \|__| | I__\| | I__I | \|_-| | I__I | I__I | I__I | I__\| | \|__| | I__\| | I_I |
| 02 |  | \|__| | I__\| | I__\| | -_-\| | I__\| | I__\| | I__I | I__\| | \|_-1 | L__\| | I__\| |
| 03 |  | I__\| | I__\| | I__I | L_-1 | I__I | I__I | I__I | L__I | L_-1 | L__I | I_I |
| 04 |  | I__\| | I__\| | \|__| | I_-\| | I__\| | I__\| | I__\| | L__I | I_-1 | L__I | L__1 |
| 05 |  | \|__| | I__\| | I__\| | -_-1 | I__\| | I__\| | I__\| | I__\| | -__\| | L__\| | I__\| |
| 06 |  | \|__| | I_I | L__\| | L_I | I__\| | I__\| | I__\| | L__\| | -_\| | L__\| | I__\| |
| 07 |  | \|__| | \|__| | \|__| | \|_-| | I__\| | I__\| | I__\| | \|__| | \|_-| | L__\| | \|__| |
| 08 |  | \|__| | I__\| | \|__| | \|__| | I__\| | I__\| | I__\| | L__\| | -__\| | L__\| | \|__| |
| 09 |  | \|__| | I__\| | \|__| | I__\| | I__\| | I__\| | I__\| | L__l | I__\| | L__\| | I__\| |
| 10 |  | \|__| | I__\| | I__\| | \|_-| | I__\| | I__\| | I__\| | L__\| | I_I | I__\| | I__\| |

[^27]|  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is not a timed exercise and this is administered orally only. The Interviewer states "Now, I am going to read to you a story aloud ONE TIME. Afterwards, I will ask you some questions about the story. Listen carefully, and after you will answer the questions the best you can. Okay? Do you understand what are you supposed to do? Let's begin! Listen carefully." <br> The interviewer reads aloud the short story, ONE TIME, slowly, (about 1 word per second), in the language of the test. <br> After reading the text, ask the child each comprehension question and note the response. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not respond, go on to the next question. |  |  |  |  |  |  |  |  |  |  |  |  |
| TEXT: <br> MUSA DA ABOKIN SA ALI SUKA HADU DAN SU CI SHINKAFA. MUSA YA YI ZARIN LOMA, SAI SHINKAFA TA SARKE SHI.SAI YA FARA TARI, ALI YA DAMU KWARAI. SAI YA YI SAURI YA KAWO MASA RUWA YA SHA. BAYANMUUS SHA RUWA, SAI SUKA GAMA CIN SHINFKAFARSU, SAI SUKA RUGA A GUJE YIN WASAR KWALLO. QUESTIONS: <br> HA31. MINENE MUSA DA ALI SUKA CI TARE? <br> HA32. YAYA ALI YA TAIMAKI MUSA? HA33. ME SUKAYI BAYAN SUN KARE CIN ABINCI? <br> HA34. DOMI ALI YA KAWO MA MUSA RUWA? <br> HA35. A WANE LOKACI SUN KA TAHI WASSAN KOLLON KAFA (BALLO)? <br> RESPONSE CODES : 1=CORRECT, 2=INCORRECT, 3 =PAS DE REPONSE REPONSE LANGUAGE: 01 fRENCH, 02 HAOUSSA, 03 ZARMA, 04 KANURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) | ${ }_{10}^{\text {H11. }}$ |  | HA31. <br> - MINENE MUSA DA ALI SUKA CI TARE? |  | HA32 YAYA ALI YATAIMAKI MUSA? AIMAKI MUSA? |  | ME SUKAYI Kare cin ABINCl |  | KAWO MA MUSA RUWA? |  | HA35. anal SUN KA TAHI (BALLO)? |  |
|  | ID | NamE | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|c\|} \substack{\text { Alik }} \\ \hline \end{array}$ | Language |  | Language | $\underset{\substack{\text { WASAN } \\ \text { KNALLO }}}{\text { A }}$ | ¢ ${ }_{\text {B. }}^{\text {Lingage }}$ | $\begin{gathered} \text { AUA } \\ \text { MUA } \\ \text { TWARA } \end{gathered}$ | Language | $\begin{array}{\|c\|} \hline \text { A. } \\ \text { DA suka } \\ \text { KARE CIIN } \\ \text { CINKAFA } \\ \hline \end{array}$ | Lamaide |
|  | 01 |  | - | -___-I | L_I | L_-_-\| | L_I | -_-_I | I_I | L_-_-1 | [_] | -_- |
|  | 02 |  | -__ | L_-_-\| | L_-1 | L_-_-\| | L_I | L_-_-\| | L_-1 | L__L | L__I | L__I |
|  | 03 |  | -_-1 | I_-_-_\| | L_- | L_-_-_\| | I | L_-1 | L_I | - | L__\| | L_L |
|  | 04 |  | L_-1 | \|_-_-_| | L_I | L_-_-_\| | L_I | \|_-_-_| | L_I | \|_-_-_| | L_I | I__I |
|  | 05 |  | -_- | L_-_-\| | - - | L_-_-\| | L_I | L_-_-\| | - | \|_-_-| | - | - |
|  | 06 |  | -_ | \|_-_-| | - _ | L_-_-\| | L_I | L-_-\| | L_I | - | L_I | -_I |
|  | 07 |  | -_ | \|_-_-| | - | \|_-_-| | -_I | L_-_\| | - | \|-_-_| | L_I | L_- |
|  | 08 |  | -_-1 | \|_-|_-| | L_-1 | \|_-_-_| | 1 | -_-_-1 | L_I | - | L__\| | -__\| |
|  | 09 |  | - _ | L_-_-\| | L-1 | L__L | L_I | L_- | L_I | L_-1 | L_I | - |
|  | 10 |  |  | - | -_ | I | L_I | I | I_I | I | -_I | - - |

Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

| HAOUSSA SUBTASKS 6 \& 7 |  |  |  | Village id: \|________| |  |  |  |  | Household Number __________ HA6 \& HA7 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'S NAME } \end{gathered}$ | SUBTASK 6- ORAL READING FLUENCY <br> Give the child 60 seconds to read as much of the text as possible. Note the number of words read correctly per each line. Show the child the test booklet. "Here is a story. Now I would like you to read it out loud, quickly and correctly, and afterwards, I will ask you some questions. Start here when I tell you. If you don't know a word, continue to the next word. Ready? Start." <br> Give the child 60 seconds to read all that he can. <br> Stay quiet, except when providing answers as follows: if the child hesitates for 3 seconds, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. <br> Auto stop rule: if the child cannot read correctly a single word in the first two lines, stop the test and note "auto-stop". Say "thank you" and end the test. <br> NOTE THE NUMBER OF WORDS READ CORRECTLY FOR EACH LINE. IF THE CHILD READ EVERYTHING IN LESS THAN ONE MINUTE, NOTE THE EXACT NUMBER OF SECONDS REMAINING ON THE TIMER. OTHERWISE, MARK '00' SECONDS. |  |  |  |  |  |  | SUBTASK 7 - Reading Comprehension <br> After the child has finished reading, take the card from the child and ask the first question. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not answer, go to the next question. Ask only those questions that correspond to the lines of text read by the child, up to the last line the child was able to read. <br> "Now I am going to ask you a few questions about the story you just read." <br> Pose the corresponding questions to the child, in Haoussa. <br> Yanzu zan yi miki/maka wasu yan tambayoyi game da labarin da kika/ka karanta. Ki/ka yi kokari Kika/ka bada amsa gwargwadon iyawarka/ki <br> A. Yaw wace rana ce? <br> B. Minene Raabi ta ke son ta sayé? <br> C. Wane irin kalan riga ne Rabi take nema ? <br> D. Ta samu jan rigan ? <br> E. Minene Raabi ta samu? <br> RESPONSE : 1=CORRECT, 2=INCORRECT, 3=NO RESPONSE <br> LANGUAGE OF RESPONSE : 01 FRENCH, 02 HAOUSSA, 03 ZARMA, 04 KANOURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) |  |  |  |  |  |  |  |  |  |
| ID | Name | $\begin{gathered} \text { A } \\ (4) \end{gathered}$ | $\begin{aligned} & \text { B } \\ & (7) \end{aligned}$ | $\begin{gathered} C \\ (5) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ (11) \end{gathered}$ | $\underset{(10)}{E}$ | Time | AUTO STOP | A1. Ranan KASUWA | $\begin{gathered} \text { A2. } \\ \text { LANGUAGE } \end{gathered}$ | B1. RigA | B2. <br> Language | C1. JAN Riga | $\begin{gathered} \text { C2. } \\ \text { LANGUAGE } \end{gathered}$ | D1. <br> A'A | $\begin{array}{\|c\|} \hline \text { D2. } \\ \text { LANGUAGE } \end{array}$ | E1. <br> SABUAR <br> RIGA/RIGA <br> MAY KAW |  |
| 01 |  | -_1 | \| __| | \|__| | \|__| | \|__| | L_I_\| | I__\| | I__I | \|__|__| | \|_-| | \|__|__| | \|__| | \|__|__| | I__\| | \|__|__| | I__I | I__\|__| |
| 02 |  | I_I | I__\| | I__\| | I__\| | I__\| | - _ \| _ | | I__I | I__I | \|__|__| | I_I | I__\|__| | I__I | \|__|_-| | I__\| | \|__|_-| | I__I | I__\|_C| |
| 03 |  | I__I | \|__| | I__I | I__I | I__I | L_-_\| | I__I | I__I | \|___ _ _ | | I_I | \|___ _ _ | I__I | \|__|__| | I__I | \| _-_ | I__I | I__\|__| |
| 04 |  | -_I | I__\| | I__\| | I__\| | \|__| | L I_-1 | I__I | I__I | \|__|__| | I_I | I__\|__| | I__I | \|__|__| | I__\| | \|__|_-_| | I__\| | I__\|__| |
| 05 |  | \|__| | \|__| | \|__| | \|__| | \|__| | \|_-_| | I__\| | I__\| | \|__|__| | I__\| | \|__|__| | I__\| | \|__|__| | \|__| | \|__|__| | I__\| | I__\|__| |
| 06 |  | -_I | I__\| | I__\| | I__\| | I__\| | \| - |_| | I__I | I__\| | \|__|_-| | I_I | I__\|__| | I__1 | \|__|__| | \|__| | \|__|_-| | I__\| | I__\|_| |
| 07 |  | I_I | I__\| | I__\| | I__\| | I__\| | L_\|_| | I__I | I__I | \|__|__| | I_I | I__\|__| | I__\| | \|__|__| | I__\| | \|__|_-| | I__I | I__\|_l| |
| 08 |  | I__I | I__\| | I__\| | I__\| | I__\| | L_\|_| | I__I | I__I | \|__|__| | I__I | I__\|__| | I__I | \|__|_-| | I__\| | \|__|_-| | I__I | I__\|_-| |
| 09 |  | I__\| | \|__| | I__\| | I__\| | \|__| | L_I_\| | I__I | I__\| | \|__|__| | I_I | \|__|__| | I__I | I__\|_| | 1 | \|__|__| | I__I | I__\|__| |
| 10 |  | I__I | I__\| | I__\| | I__\| | I__\| | L $\quad$ _ | I__I | I__\| | \|__|_| | I__I | \|__|_| | I__I | I__\|_| | I__\| | \|__|_| | I__\| | I__\|_| |

Before continuing, say "Good effort! Let's continue to the next section!"

| Subtask 1: Receptive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "We are going to play a game, ok? I am going to give you instructions, and we can see if you can follow what I say." <br> Example 1: Interviewer states: "Point to your nose"." The interviewer points to his nose, and encourages the child to do the same. If the child points correctly, say "Bravo, that is correct!" If the child does not point, repeat the instructions and ask, "Can you point to your nose?" <br> Example 2: Interviewer states: "Point to your head". This time the interviewer does not point, but encourages child to point. If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. <br> Ask each question in Zarma and note the response in the questionnaire. <br> RESPONSE CODES: 1= CORRECT, 2= INCORRECT, 3= NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | ZA11. Cebeni hanga | $\begin{array}{c\|} \hline \text { ZA12. } \\ \text { CEBE NIMEYO } \end{array}$ | ZA13. CEBENI KANBAY | $\begin{gathered} \text { ZA14. } \\ \text { SAMBU NI CE } \\ \text { FA } \\ \hline \end{gathered}$ | ZA15. Ay cebeni kAMBAYZO | $\begin{gathered} \underset{\text { KOBI6. }}{\text { ZA1. }} \end{gathered}$ | $\begin{gathered} \text { ZA17. } \\ \text { NIMA SAR } \\ \text { BANDA } \end{gathered}$ | ZA18. Sambu ni KAMBA | $\begin{gathered} \text { ZA19. } \\ \text { SONKOM } \end{gathered}$ | ZA110. Jina wo GIII NI JINE | No RESPONSE |
| ID | Name | EAR | MOUTH | ELBOW | FOOT | FINGER | CLAP | $\begin{array}{\|c\|} \hline \text { JUMP } \\ \text { BAKCWARDS } \\ \hline \end{array}$ | HAND | Bend | PLACE IN FRONT | $\begin{gathered} \mathrm{NO} \\ \text { RESPONSE } \\ \hline \end{gathered}$ |
| 01 |  | -_\| | I__\| | I__\| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__I |
| 02 |  | L_I | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 03 |  | -_-\| | I__\| | \|__| | I__\| | I__\| | \|__| | I__\| | I__\| | \|__| | -__\| | I__\| |
| 04 |  | -_I | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 05 |  | I__\| | I__\| | I__\| | I__\| | \| __| | \|__| | I__\| | I__\| | \| __| | L__\| | I__\| |
| 06 |  | -_-\| | \|__| | I__\| | I__\| | I__\| | -__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 07 |  | I_I | I__\| | I__\| | I__\| | I__\| | -_I | I__\| | I__\| | I__\| | L__1 | I__\| |
| 08 |  | -_I | \|__| | \|__| | I__\| | I__\| | -_-\| | I__\| | I__\| | \|__| | -__\| | I__\| |
| 09 |  | -_\| | I__\| | \|__| | I__\| | I__\| | \|__| | I__\| | I__\| | \|__| | L__\| | I__\| |
| 10 |  | I__\| | I__\| | I__l | \|__| | I__\| | \|__| | I__\| | \|__| | \|__| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"

| ZARMA <br> Subtask 2. Expressive Oral |  |  |  | HOUSEHOLD NUMBER \| | | | | |  |  |  |  |  |  | ZA2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and says, "What is this?" Interviewer says, "You say it is an eye!" <br> Example 2: Interviewer points to his ear, and says, "What is this?" The interviewer encourages the child to say "ear". "Interviewer asks, "Do you understand?" <br> If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop the test and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. <br> Ask each question in the test language and note the response in the questionnaire. RESPONSE CODES: $\mathbf{1 =}$ CORRECT, $2=$ INCORRECT, $\mathbf{3 = N O}$ RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | $\begin{gathered} \text { ZA21. } \\ \text { NINE } \end{gathered}$ | $\begin{aligned} & \text { ZA22. } \\ & \text { CANBAIZE } \end{aligned}$ | ZA23. | $\begin{aligned} & \text { ZA24. } \\ & \text { HINGEY } \end{aligned}$ | $\begin{gathered} \mathrm{ZA} 25 . \\ M E \end{gathered}$ | ZA26. <br> kANGE | $\begin{aligned} & \text { ZA27. } \\ & \text { MUDUNE } \end{aligned}$ | $\begin{aligned} & \text { ZA28. } \\ & \text { KAMBA } \\ & \text { GOLLO } \end{aligned}$ | $\begin{aligned} & \text { ZA29. } \\ & \text { FATA. } \end{aligned}$ | ZA210. GESA | No RESPONSE |
| ID | Name | Nose | Finger | Neck | Теетн | Моитн | Knee | Pants/Skirt | Elbow | Armplt | SHolder | $\begin{gathered} \text { NO } \\ \text { RESPONSE } \\ \hline \end{gathered}$ |
| 01 |  | \|__| | I__\| | \|__| | \|__| | -__\| | \|__| | I__I | I__1 | \|__| | L__I | I__I |
| 02 |  | \|__| | I__\| | \|__| | \|__| | I__\| | I__\| | I__I | I__\| | I__\| | L__\| | I__\| |
| 03 |  | \|__| | I__\| | \|__| | \|__| | -__\| | \|__| | I__\| | -_-\| | I_-\| | L__I | I__\| |
| 04 |  | I__\| | I__I | I__\| | I__\| | L_I | L__I | I__I | L_-1 | L_-1 | L_I | I__I |
| 05 |  | \|__| | I__\| | \|__| | \|__| | L__\| | I__\| | I__\| | I_I | I__\| | L__\| | I__\| |
| 06 |  | \|__| | I__\| | \|__| | \|__| | -_I | \|__| | I__\| | -_-1 | L_I | L_I | I__\| |
| 07 |  | \|__| | \|__| | \|__| | \|_-| | L_-1 | \|__| | \|__| | L_I | I_I | L__\| | \|__| |
| 08 |  | \|__| | I__\| | \|__| | \|__| | -_\| | \|__| | I__\| | -_\| | I__\| | L_I | I__\| |
| 09 |  | I__\| | I__I | I__\| | I__\| | L_I | I__I | I__I | L_I | I_I | L_I | I__I |
| 10 |  | I__\| | I__\| | I__\| | I__\| | L_I | \|__| | I__\| | I_I | I_I | L_I | I__\| |

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Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

| ZARMA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 5. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand what I am asking you to do? When I say "Start", read the words from left to right, line by line. At the end of the line, continue to the next line. Try to read quickly and correctly. Ready? Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first word. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates for 3 seconds. In this case, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 5 words, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{aligned} & \mathrm{HLL} .2 \\ & \text { CHILD } \end{aligned}$ | za51. | 2 295. | 2453. | ZA54. | ZA55. | ZAS6. | ZA57. | 2A58. | zas9. | ZA510. | $\underset{\substack{\text { AuTo } \\ \text { STop }}}{ }$ |  | dotal <br> Coprect |
| ID | Name | (5) | (10) | (15) | (20) | (25) | (30) | (35) | (40) | (45) | (50) | auto | seconos | Total |
| 01 |  | -_-1 | -_-_ | L_-_- | - | I_-_\| | L_-_-\| | \| -_-_| | L-_ | - - - | L_-_-1 | - | I_-_-1 | -_L |
| 02 |  | L_-_-\| | L_-_-\| | L_-_-\| | I____\| | I_-_-\| | L_-_-\| | \|_-_-| | L___ | I_-_-\| | I | -_-1 | L_- | -__I |
| 03 |  | L_-_-_\| | L_-_-\| | L_-_-1 | I__L_\| | I_-_-\| | L_-_-\| | \|_-_-| | L_-_-\| | I_-_-\| | L_-_-\| | -_ | L_-1 | -_-1 |
| 04 |  | L__L\| | L_-_-1 | L_-_-\| | L_-_-\| | \|_-_-| | L_-_-\| | \|-_-_| | L_-_-\| | \|_-_-| | \|_-_-| | I_-1 | L_ | - - |
| 05 |  | L_-_-_\| | \|_-_-_| | L_-_-_\| | L_-_-_\| | 1_-_-_\| | L_-_-_\| | \|_-_-_| | L_-_-_\| | \|_-_-_| | \|_-_-_| | L_-1 | L_-_-_1 | L_-1 |
| 06 |  | L__L_\| | \|_-_-| | L_-_-\| | I_-_-_\| | I_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | I_-_-\| | L_-1 | -_-1 | L__ L_\| | L_L |
| 07 |  | L__L_\| | \| -_-_| | \|_-|_-| | I__\|_| | \|_-|_-| | L_-_-1 | \|_-|_-| | -_-_-\| | \|_-_-_| | \|_-_-_| | I_-1 | L_-_-1 | 1-_1 |
| 08 |  | \|__|_-| | \|_-_-_| | \|_-_-_| | I___-_\| | \|_-_-_| | \|_-_-_| | I_-_-_\| | L__\|_1 | \|_-__| | \|_-| | - _ | I_-1 | - |
| 09 |  | L__L_-\| | L_-_-\| | L_-_-\| | L_-_-_\| | I_-_-\| | L_-_-1 | L_-_-_\| | L_-_-1 | I_-_-\| | -_-1 | - | L__L | - |
| 10 |  | L__\|_-| | L_-_-\| | \|-_|_-| | \|_-_-_| | \|_-_-| | L_-_-\| | \|-_|_-| | L-_-_\| | \|_-|_-| | \|-_|_-| | I- | L_-_ | - - - |

Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

| KAN | VILLAGE ID: \|_______| |  |  |  |  |  |  |  |  | KA1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 1: Receptive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "We are going to play a game, ok? I am going to give you instructions, and we can see if you can follow what I say." <br> Example 1: Interviewer states: "Point to your nose"." The interviewer points to his nose, and encourages the child to do the same. If the child points correctly, say "Bravo, that is correct!" If the child does not point, repeat the instructions and ask, "Can you point to your nose?" <br> Example 2: Interviewer states: "Point to your head". This time the interviewer does not point, but encourages child to point. If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. <br> Ask each question in Kanuri and note the response in the questionnaire. <br> RESPONSE CODES: 1= CORRECT, 2=INCORRECT, 3= NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD's NAME } \end{gathered}$ | KA11. Snmonnm FNLENE | $\begin{array}{c\|} \hline \text { KA12. } \\ \text { CINNM FNLENE } \\ \hline \end{array}$ | KA13. N'DJURAMI OUM FNLENE | $\begin{gathered} \text { KA14. } \\ \text { SI FAL SANGE } \end{gathered}$ | KA15. <br> NGULONDO <br> FAL <br> FNLESNGNNE | $\begin{gathered} \text { KA16. } \\ \text { KAWA JANE } \end{gathered}$ | KA17. SNKTNNE NGAWORO | KA18. NUKKO SANGE | $\begin{gathered} \hline \text { KA19. } \\ \text { N'GUOUNE } \end{gathered}$ | KA110. <br> KARE ADNA <br> FUWUNNMB <br> OYAKKE | No RESPONSE |
| ID | Name | EAR | MOUTH | ELBOW | FOOT | FINGER | CLAP | $\begin{array}{\|c\|} \hline \text { JUMP } \\ \text { BACKWARD } \\ \mathrm{S} \end{array}$ | HAND | BEND | PLACE IN FRONT | NO RESPONSE |
| 01 |  | I__\| | I__\| | I__\| | I__\| | I__I | I__\| | I__\| | \|__| | I__I | I__I | I__\| |
| 02 |  | I__\| | I__\| | I__\| | \|_-| | I__\| | I__\| | I_-1 | I_I | I__\| | L_-1 | I_-1 |
| 03 |  | I__\| | \|__| | I__\| | I__\| | \|__| | I__\| | I__\| | \|_-| | I__\| | L_-1 | \|__| |
| 04 |  | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I_I | I__\| | I__\| | I__\| |
| 05 |  | I__\| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | L_-1 | I__\| | L__\| | \|__| |
| 06 |  | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | \|_-| | \|__| | L__\| | \|__| |
| 07 |  | I__\| | I__\| | I__\| | I__\| | I__I | I__\| | I__I | -_I | I__\| | L__I | I__\| |
| 08 |  | I__\| | I__\| | I__I | I__\| | I__I | I__I | I__I | \|__| | I__I | I__I | \|__| |
| 09 |  | I__\| | I__\| | I__\| | I__\| | I__\| | \|__| | I__\| | -_\| | \|__| | L__\| | \|__| |
| 10 |  | \|__| | I__\| | I__\| | I__\| | \|__| | \|__| | I__\| | -_\| | \|__| | -__\| | \|__| |

Before continuing, say "Good effort! Let's continue to the next section!"

| KANURI |  |  |  | HOUSEHOLD NUMBER \|_______| |  |  |  |  | KA2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and says, "What is this?" Interviewer says, "You say it is an eye!" <br> Example 2: Interviewer points to his ear,and says, "What is this?". The interviewer encourages the child to say "ear". "Interviewer asks, "Do you understand?" <br> If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop the test and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in the test language and note the response in the questionnaire. <br> RESPONSE CODES: $1=$ CORRECT, $2=$ INCORRECT, $3=$ NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | KA21. KIINA | $\begin{gathered} \text { KA22. } \\ \text { NGULONDO } \end{gathered}$ | $\begin{gathered} \hline \text { KA23. } \\ \text { DAU } \end{gathered}$ | $\begin{aligned} & \hline \text { KA24. } \\ & \text { SHEDI } \end{aligned}$ | KA25. KA CIYE | $\begin{array}{c\|} \hline \text { KA26. } \\ \text { N'GURUNGUR } \\ \text { AM } \\ \hline \end{array}$ | $\begin{aligned} & \hline \text { KA27. } \\ & \text { YANGE } \end{aligned}$ | $\begin{gathered} \text { KA28. } \\ \text { N'DJURAMI } \end{gathered}$ | $\begin{aligned} & \text { KA29. } \\ & \text { TヨLWU } \end{aligned}$ | $\begin{gathered} \text { KA210. } \\ \text { N'GAWARNA } \end{gathered}$ | $\begin{gathered} \text { No } \\ \text { RESPONSE } \end{gathered}$ |
| ID | Name | Nose | Finger | NECK | TEETH | моитн | knee | PANTS/SkIRT | Elbow | ARMPIT | SHoulder | No ReSponse |
| 01 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 02 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 03 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | \|__| | I__\| | I__\| | L__\| | I__\| |
| 04 |  | \|__| | I__\| | \|__| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | \|__| | \|__| |
| 05 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | \|__| | L__\| | I__\| |
| 06 |  | \|__| | I__\| | \|__| | I__\| | \|__| | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 07 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |
| 08 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 09 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | L__\| | I__\| |
| 10 |  | \|__| | I__\| | \|__| | \|__| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"

| KANURI VILLAGE ID: $\mid$ _ \| _ | _ | |  |  | HOUSEHOLD NUMBER \| | | | | |  |  |  |  |  |  |  | KA3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 3: Listening Comprehension |  |  |  |  |  |  |  |  |  |  |  |  |
| This is not a timed exercise and this is administered orally only. The Interviewer states "Now, I am going to read to you a story aloud ONE TIME. Afterwards, I will ask you some questions about the story. Listen carefully, and after you will answer the questions the best you can. Okay? Do you understand what are you supposed to do? Let's begin! Listen carefully." <br> The interviewer reads aloud the short story, ONE TIME, slowly, (about 1 word per second), in the language of the test. <br> After reading the text, ask the child each comprehension question and note the response. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not respond, go on to the next question. |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }_{\text {HLL }}^{10}$ | $\begin{gathered} \text { HL2. } \\ \text { CHILD'S NAME } \end{gathered}$ | KA31 <br> Wi Musa shia Ali RROKKO JAWO? |  | Awilan All, Musa banayeno? |  | AWI TCHADO GAWO JAWOU NAYEN? |  | KA34. <br> ABiro <br> INGUI TCHIWSsaro |  |  |  |
| buworo napkera. Musa kolama KIDヨNIYA, SAY SHINGAWA DAW U JULAN dayeno. Kasawudu badiyeno, ALYEHANGAL JU JAWURO CI YENO, SAY | ID | NamE | $\begin{gathered} \boldsymbol{S}_{\text {Aliva }}^{\text {AHiNa }} \end{gathered}$ | Lancuage | $\begin{gathered} A_{\text {NGGI }} \end{gathered}$ | Buage Langage |  | $\begin{array}{\|l\|l\|} \hline \text { Language } \end{array}$ | $\begin{array}{c\|} \text { A. } \\ \text { Kossakt } \\ \text { OU } \\ \text { BDIINA } \\ \text { NANKARO } \\ \hline \end{array}$ | $\begin{gathered} \mathrm{B}, \mathrm{i} \\ \text { Language } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { A. } \\ \hline \text { BIIINDJA } \\ \text { NDNASSAOU } \\ E N G G U W O \end{array}$ |  |
| N'GAWO MUSA INGI CANAYEN, SAY KUMBO | 01 |  | L_I | L-_-_-\| | L-_1 | \|_-_-_| | L__\| | -_-1 | L_- | L_-_-_\| | I_-1 | - |
| SHINGAWA YE DA TUMOYERA SAY CIJANE N'GURMJANE KヨLANGA BALL YERO LEYERA, | 02 |  | -_- | - - - - | L_-1 | I_-_-_\| | -_-1 | \|_-_-_| | -_I | L_-_- | -_I | - |
|  | 03 |  | L_-\| | L_-_-_\| | L_-I | \|__I_| | - | L_-_-_\| | L__I | \|_-_-_| | L_I | - |
| KA31. Awi Musa shila Ali rrokko jawo? | 04 |  | -_ | -_- | L_I | -__- | -_ | - | -_ | - | -_ | - |
| KA32. AWLAN AL, MUSA A ANAYENO? KA33. AWI TCHADO GAWO JAWOU NAYEN? | 05 |  | - | L-_-_\| | - | -_-_-_\| | - | -_-_-\| | L_I | L_-_-1 | L_I | -_-1 |
| KA34. ABIRO ALI MOUSSARO INGUI TCHWDO? KA35 YIMBI LIDYANE KLELANGUA BALL YÉ | 06 |  | L_- | L-_ | L_- | L_-1 | L__I | L_-_-\| | [_] | L_-_-1 | I_I | -_- |
| Hena? | 07 |  | - | -_-_\| | - | -___\| | -__\| | \|_-_-| | L_I | -_-_\| | [_] | - |
| RESPONSE CODE: $1=$ CORRECT, $2=$ INCORRECT, | 08 |  | - _ | L_-_-\| | - _ | \|_-__| | I_I | \|_-_-_| | -_ | L__-_1 | [_] | -_- |
| Sponse language : 01 rrench, | 09 |  | -1 | -_-1 | - | I_- | I | \|_-_-_| | L__I | I__I | L_-1 | - |
| haOUSSA, 03 FULFULDE, 04 KANURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) | 10 |  | L_-1 | L_-_- | L_\| | I__-_\| | L__\| | L_-_-\| | L_I | - | I__\| | -_- |

Before continuing, say "Good effort! Let's continue to the next section!"

| KANU |  |  |  |  | HOUSEHOLD NUMBER \| |  |  |  |  | KA4 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 4: Letter Identification (name or sound) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 4. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand? When I say "Start", point to each letter with your finger as you read it. Read from left to right, line by line. Do you understand what I am asking? Put your finger on the first letter. Ready? Try to read quickly and correctly. Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first letter name or sound. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates on a letter for 3 seconds. In this case, point to the next letter and say "Please go on." Mark the letter skipped as incorrect on the test sheet. <br> After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 10 letters, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'S NAME } \end{gathered}$ | KA41. | KA42. | KA43. | KA44. | KA45. | KA46. | KA47. | KA48. | KA49. | KA410. | $\begin{array}{\|l\|} \hline \text { Auto } \\ \text { STop } \end{array}$ | $\begin{gathered} \text { TIME } \\ \text { REMANNG } \end{gathered}$ | $\begin{gathered} \hline \text { TOTAL } \\ \text { CORRECT } \end{gathered}$ |
| ID | Name | (10) | (20) | (30) | (40) | (50) | (60) | (70) | (80) | (90) | (100) | Auto | SECONDS | total |
| 01 |  | _-_\| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__| | \|__| | L__ | -_\| | \|__| |
| 02 |  | \|__|__| | \|__|__| | \|__|_-| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__| | \|_-_ | - | -_-\| | L__I |
| 03 |  | \|__|__| | \|__|__| | L__\|__| | L__\|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | - | -_\| | \|__|__| | \|__| |
| 04 |  | -_-\| | \|__|__| | -__ | \|__|__| | \|__|__| | -_\| | I__\|_ | L__\|__| | - | 1 | L_-\| | \|_-| | L__\| |
| 05 |  | \|__|__| | \|__|__| | I__\|_-| | \|__|__| | \|__|__| | \|__|_-| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\| | \|__I__| | \|_-| |
| 06 |  | L__\|__| | \|__|__| | L__\|_-| | L__\|__| | \|__|__| | L__\|__| | \|__|__| | I__\|__| | I__I_ | - |  | - | I__\|__| |
| 07 |  | \|_-|__| | \|__|__| | I__\|_-| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | 1 | I__\|__| | - |
| 08 |  | \|__|__| | \|__|__| | \|__|_-| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__I_ | 1 | L__\|__| | - |
| 09 |  | \|_-|__| | \|_-_-_| | I__\|_-| | I__\|__| | I__\|__| | \|__|_ | \|__|_-| | I__\|__| | I__I | \|__| | I_I\| | I__\|_-| | -__\| |
| 10 |  | L__\|__| | \|__|__| | L__\|__| | \|__|__| | \|__|__| | L_-_-_\| | \|__|__| | \|__|__| | \|__|__| | I__\|_-| | 1 | \|__|_-| | I__I |

Before continuing, say "Good effort! Let's continue to the next section!"

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 5. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand what I am asking you to do? When I say "Start", read the words from left to right, line by line. At the end of the line, continue to the next line. Try to read quickly and correctly. Ready? Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first word. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates for 3 seconds. In this case, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. Auto stop rule: If the child does not give a single correct response in the first 5 words, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{aligned} & \text { HL2. } \\ & \text { CHILD'SNAME } \end{aligned}$ | KA51. | KA52. | KA53. | KA54. | KA55. | KA56. | KA57. | KA58. | KA59. | KA510. | Auro STop |  | $\begin{gathered} \text { rotral } \\ \text { Conerecer } \end{gathered}$ |
| ID | Name | (5) | (10) | (15) | (20) | (25) | (30) | (35) | (40) | (45) | (50) | Auto | seconos | тotal |
| 01 |  | -_-_\| | \|_-|_-| | \|__|_-| | \|_-_-| | \|_-|_-| | \|_-|_-| | -__\|_1 | _-_-1 | \|_-_-_| | \|__| | \|__| | I__\|_l | -__\|_| |
| 02 |  | - | \|-_-_| | L_-_-\| | I_-_-\| | \|-_-_| | \| - - - | | -__-_\| | -_-_1 | I_-_-\| | -_-_-\| | -_I | I_-_-\| | L_-_-1 |
| 03 |  | -_-_-\| | \| -_-_| | \| _-_-| | \|_-_-| | \|_-_-| | \| _-_-| | __L_-1 | -_-_1 | -_-_1 | -_L_1 | I_I | I__\|_| | L_-_\| |
| 04 |  | -_-_-\| | \|-_-_-1 | \|-_|_-| | I_-_-\| | \|-_|_-| | \| -_-_-| | -_-_-\| | -_- | I_-_-_\| | -_-_-_ | I_-I | I_-_-\| | L__I |
| 05 |  | -_-_-\| | \|-_|_-| | \| - | - | | I_-_-\| | \|-_|_-| | \|_-|_-| | I_-_-\| | -_L_\| | L_-_-\| | L-_-_\| | I_-1 | I_-_-\| | I_-_-1 |
| 06 |  | - _-_-\| | I_-_-_\| | \| - - _ | $\mid$ | I_-_-1 | I_-_-\| | \| _-_-_| | L__L_-\| | -_-_-1 | L_-_-_\| | L_-_-1 | I_-1 | L_-_-\| | I_-_-1 |
| 07 |  | - | L_-_-_\| | L_-_-_\| | L_-_-\| | \|_-_-_| | L_-_-\| | -__L_-\| | - | L_-1 | L_-1 | L-_1 | L_-_-\| | L-_- |
| 08 |  | -___\| | \| -_-_| | \| -_-_| | I__-_\| | \| - | - | | \| -_-_| | -__L\| | -__ | -_- | -_-_-1 | -_I | I___-\| | L_-_-\| |
| 09 |  | -__\| | \|-_|-_| | \| - - - - 1 | I_-_-\| | \|_-|_-| | \| -_|_-| | I__-_\| | -_-_-_\| | L_-1 | -_-1 | I_-1 | I_-_-\| | I_-_-1 |
| 10 |  | L_-_-_\| | \|-_|_-| | L_-_-\| | I_-_-_\| | \|-_|-_| | L-_-_-\| | \|-_|-_| | \|-_-_-| | \|-_-_-| | L_-1 | L-_1 | I_-_-\| | L-_ |

Before continuing, say "Good effort! Let's continue to the next section!"

| KAN | BASK 6 \& 7 | VILLAGE ID: \|___|__|__| |  |  |  |  |  |  | HOUSEHOLD NUMBER \|___|__|__| |  |  |  |  |  |  | KA6 \& KA7 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HL1. | HL2. CHILD'S NAME | SUBTASK 6- ORAL READING FLUENCY <br> Give the child 60 seconds to read as much of the text as possible. Note the number of words read correctly per each line. Show the child the test booklet. "Here is a story. Now I would like you to read it out loud, quickly and correctly, and afterwards, I will ask you some questions. Start here when I tell you. If you don't know a word, continue to the next word. Ready? Start." Give the child 60 seconds to read all that he can. <br> Stay quiet, except when providing answers as follows: if the child hesitates for 3 seconds, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. <br> Auto stop rule: if the child cannot read correctly a single word in the first two lines, stop the test and note "auto-stop". Say "thank you" and end the test. <br> NOTE THE NUMBER OF WORDS READ CORRECTLY FOR EACH LINE. IF THE CHILD READ EVERYTHING IN LESS THAN ONE MINUTE, NOTE THE EXACT NUMBER OF SECONDS REMAINING ON THE TIMER. OTHERWISE, MARK '00' SECONDS. |  |  |  |  |  |  | SUBTASK 7 - READING COMPREHENSION <br> After the child has finished reading, take the card from the child and ask the first question. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not answer, go to the next question. Ask only those questions that correspond to the lines of text read by the child, up to the last line the child was able to read. <br> "Now I am going to ask you a few questions about the story you just read. ." <br> Pose the corresponding questions to the child, in Kanuri. <br> Kirmaa koro laa niro n'djidiki kla hawara kranemba di kawari de nounksine kla awo nonumbadi. <br> A. Ku kingal $f$ ? <br> B. Awi rabi cirawo tiro casukuworo? <br> C. Kaluwu kala fiya rabi maji? <br> D. Kaluwu kime da cuwandina'a? <br> E. Awi rabi cakko? <br> RESPONSE: 1=CORRECT, 2=INCORRECT, 3=NO RESPONSE <br> LANGUAGE OF RESPONSE : 01 FRENCH, 02 HAOUSSA, 03 ZARMA, 04 KANOURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) |  |  |  |  |  |  |  |  |  |
| ID | Name | $\begin{array}{\|c\|} \hline \text { A } \\ \text { (4) } \\ \hline \end{array}$ | $\begin{array}{r} \hline \mathrm{B} \\ \hline(6) \\ \hline \end{array}$ | $\begin{gathered} c \\ \text { (4) } \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ \hline(8) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \mathrm{E} \\ & \text { (8) } \\ & \hline \end{aligned}$ | TIME | $\begin{array}{\|l\|l\|} \hline \text { AUTO } \\ \text { STOP } \end{array}$ | A1. | $\begin{array}{\|c\|} \hline \text { A2. } \\ \text { LANGUAGE } \\ \hline \end{array}$ | B1. | $\begin{array}{\|c\|} \hline \text { B2. } \\ \hline \text { LANGUAGE } \\ \hline \end{array}$ | C1. | $\begin{gathered} \text { C2. } \\ \text { LANGUAGE } \\ \hline \end{gathered}$ | D1. | $\begin{gathered} \text { D2. } \\ \text { LANGUAGE } \\ \hline \end{gathered}$ | E1. | $\begin{gathered} \hline \text { E2. } \\ \text { LANGUAGE } \end{gathered}$ |
| 01 |  | I_I | I_I | I-I | L_-1 | -__\| | - - - | I_I | -_I | I__\|_-| | - - | I__\|_-| | - - | I__-_\| | -_-1 | L__-_-\| | - - | I_-_-\| |
| 02 |  | I_-1 | - - | I_I | 1_-1 | L__I | L। | L_I | I__I | \| - I_-1 | 1-1 | I__\| _ | | 1-1 | I__L_\| | 1-1 | L__ - _ | -_-1 | \|-_|_-| |
| 03 |  | I_-1 | L_-1 | I-I | L_I | I__\| | - - - - | I-1 | I_I | \|__|_-| | - - 1 | \|__|__| | - - 1 | \|__|_-| | 1-1 | \|__|_-| | -_-1 | \|_-_-| |
| 04 |  | I_-1 | -_-1 | -_-1 | L-I | L__I | - - - | - - | -_I | L_-_-\| | - - I | I_-_-_ | -_-1 | L_-_-\| | 1-1 | L_-_-_\| | । | L_-_-\| |
| 05 |  | I_-1 | I_-1 | \|-_| | L_-1 | I_-\| | - - - | I_I | I_-I | I_-_- | 1-_\| | I_-_-_\| | I__I | I_-_-_\| | 1-_\| | L_-_-\| | I__\| | L_-_-_\| |
| 06 |  | I-1 | I_1 | \| - | | ।-1 | I_-I | L। | 1-1 | I_-\| | I__\|_-| | 1-1 | ।__\|_-| | 1-1 | I__\|_-| | 1-1 | \|__|_-| | 1-_\| | L_-_-\| |
| 07 |  | L_-1 | L_-1 | I_-1 | L_I | I__I | - \| - | L_I | I__I | I_-_-\| | I_-1 | \|_-_-| | 1-_\| | I_-_-\| | 1_-1 | \|_-_-| | I_I | \|-_-_| |
| 08 |  | I__I | I_-1 | I_-1 | L_-1 | I__I | L। | I_I | I_-I | L_-_-\| | I_I | I_-_-_\| | I_I | L_-_-\| | I_I | L_-_-\| | I_I | I_-_-\| |
| 09 |  | I__I | -__I | -_I | -_I | L__I | L। | -_-1 | -__\| | ।_-_-\| | -_-1 | \|__|_-| | 1 | ।__-_\| | I | \|__|_-| | I_ | \|-_-_| |
| 10 |  | I__I | I_-I | I_-I | I-I | I__I | L।-1 | I-1 | I__\| | I__-_\| | 1-_\| | \|_-_-| | 1-_\| | I__-_\| | I-I | L_-_-\| | I_I | \|_-_-| |

Before continuing, say "Good effort! Let's continue to the next section!"

| FULFULDE |  | VILLAGE ID: \|__| |  |  | HOUSEHOLD NUMBER $\left.\right\|_{\text {___ }} ^{\text {I }}$ |  |  |  |  | FU1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 1: Receptive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "We are going to play a game, ok? I am going to give you instructions, and we can see if you can follow what I say." <br> Example 1: Interviewer states: "Point to your nose"." The interviewer points to his nose, and encourages the child to do the same. If the child points correctly, say "Bravo, that is correct!" If the child does not point, repeat the instructions and ask, "Can you point to your nose?" <br> Example 2: Interviewer states: "Point to your head". This time the interviewer does not point, but encourages child to point. If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in Fulfulde and note the response in the questionnaire. <br> RESPONSE CODES: $1=$ CORRECT, $2=$ INCORRECT, $3=$ NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | FU11. Holu NOWRU maADA | $\begin{aligned} & \text { FU12. } \\ & \text { HOLLU } \\ & \text { HUNNDUKO } \\ & \text { MAADA } \end{aligned}$ | $\begin{aligned} & \text { FU13. } \\ & \text { YolLAM } \\ & \text { SOBUDU } \\ & \text { MADA } \end{aligned}$ | FU14. bANTU KOYNGAL | $\begin{gathered} \text { FU15. } \\ \text { HOLLAM } \\ \text { HONNDU } \\ \text { Wo'OTURU } \end{gathered}$ | FU16. Hellu | $\begin{gathered} \text { FU17. } \\ \text { FITIR GADA } \\ \text { MA } \end{gathered}$ | FU18. bantu JUNNGO | $\begin{aligned} & \text { FU19. } \\ & \text { POPPINA } \end{aligned}$ | FU110. [HOKKA SUKA HUUND] RESU HUUNDE NDEE YEESO MAADA | No <br> RESPONSE |
| ID | Name | EAR | MOUTH | ELBOW | LEG | FINGER | CLAP | $\begin{array}{\|c\|} \hline \text { JUMP } \\ \text { BAKCWARDS } \\ \hline \end{array}$ | HAND | Bend | PLACE IN FRONT | No response |
| 01 |  | I__\| | I__\| | L__I | I__\| | I__I | I_I | I__I | I__\| | I__\| | L__\| | I__\| |
| 02 |  | I__\| | \|__| | -_I | I__\| | I__\| | I__\| | I__\| | L__I | I__\| | L__I | I__\| |
| 03 |  | I__\| | \|__| | L__\| | I__\| | I__I | I__\| | I__I | I__\| | I__\| | I__\| | I__\| |
| 04 |  | I__\| | \|__| | L_\| | I__\| | I__\| | L_I | \|__| | \|_-| | \|__| | L__\| | I__\| |
| 05 |  | I__\| | I__\| | I__\| | I__\| | I__\| | \|_-| | I__I | \|__| | I__\| | I__\| | I__\| |
| 06 |  | I__\| | \|__| | I__\| | I__\| | I__\| | I__\| | I__\| | I_-\| | I__\| | L__\| | I__\| |
| 07 |  | I_I | I_I | I__I | I_I | I__I | L_I | I_-1 | -_-1 | I_-1 | L_-1 | I__I |
| 08 |  | I__I | I__\| | I__\| | I__\| | I__I | I_I | I__I | L__1 | I__\| | L__I | I__\| |
| 09 |  | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | I__\| | L__I | I__\| |
| 10 |  | I__\| | I__\| | I_I | I__\| | I__\| | \|__| | I__\| | -_\| | I__\| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"

| FULFULDE |  | VILLAGE ID: \|________| |  |  | HOUSEHOLD NUMBER \|________| |  |  |  |  | FU2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and says, "What is this?" Interviewer says, "You say it is an eye!" <br> Example 2: Interviewer points to his ear, and says, "What is this?". The interviewer encourages the child to say "ear". "Interviewer asks, "Do you understand?" <br> If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop the test and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in the test language and note the response in the questionnaire. <br> RESPONSE CODES: $1=$ CORRECT, $2=$ INCORRECT, $3=$ NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | HL2. CHILD'S NAME | FU21. Hinere | $\begin{aligned} & \text { FU22. } \\ & \text { HuNDU } \end{aligned}$ | $\begin{gathered} \hline \text { FU23. } \\ \text { DADE } \end{gathered}$ | $\begin{gathered} \hline \text { FU24. } \\ \text { NIJE } \\ \hline \end{gathered}$ | FU25. Hunduko | $\begin{aligned} & \hline \text { FU26. } \\ & \text { HOWRU } \end{aligned}$ | $\begin{aligned} & \hline \text { FU27. } \\ & \text { SARA } \end{aligned}$ | FU28. sobudu | $\begin{aligned} & \hline \text { FU29. } \\ & \text { NAWKI } \end{aligned}$ | FU210. walawo | No RESPONSE |
| ID | Name | Nose | Hair/Head | Fоot | Finger | NECK | TEETH | SHIRT | PANTS/SKIRT | Shoe | Pen/Pencil | No Response |
| 01 |  | I__I | I__I | -__\| | \|__| | \|__| | L__I | L_I | I__I | I__I | L__\| | I__\| |
| 02 |  | I__\| | I__\| | L__1 | \|__| | I__\| | I__\| | I_I | \|__| | \|__| | I_-1 | I__\| |
| 03 |  | I__\| | I__\| | -_I | \|_-| | I__\| | L__\| | -_-1 | I__\| | \|__| | I__\| | I__\| |
| 04 |  | I_I | I__I | L_I | \|__| | L__1 | L__I | L_I | I__I | \|__| | L__1 | I_I |
| 05 |  | \|__| | I__\| | -_\| | \|__| | L__\| | L_I | L_I | I__\| | \|__| | -__\| | I__\| |
| 06 |  | \|_-| | \|__| | -_1 | \|_-| | \|__| | -__\| | -_-1 | I__\| | \| __| | I__\| | \|__| |
| 07 |  | I__\| | I__\| | L_I | \|_-| | I__\| | \|__| | L__\| | I__\| | \|__| | L_-1 | \|__| |
| 08 |  | I__I | I__I | L_I | I__1 | I__I | I__I | \|__| | I__I | I__\| | I__I | I__I |
| 09 |  | I__\| | I__\| | -_I | \|_-| | I__\| | \|__| | \|__| | I__\| | \|__| | L__\| | I__\| |
| 10 |  | I__\| | I__I | L_I | I_-1 | I__\| | \|__| | \|__| | I__\| | \|__| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

| FULF |  | VILLAGE ID: \|___|_____| |  |  | HOUSEHOLD NUMBER _ $_{\text {_ }}^{\text {_ }}$ |  |  |  |  |  |  | FU4 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 4: Letter Identification (name or sound) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 4. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand? When I say "Start", point to each letter with your finger as you read it. Read from left to right, line by line. Do you understand what I am asking? Put your finger on the first letter. Ready? Try to read quickly and correctly. Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first letter name or sound. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates on a letter for 3 seconds. In this case, point to the next letter and say "Please go on." Mark the letter skipped as incorrect on the test sheet. <br> After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 10 letters, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | FU41. | FU42. | FU43. | FU44. | FU45. | FU46. | FU47. | FU48. | FU49. | FU410. | $\begin{array}{\|l\|l} \hline \text { AUTO } \\ \text { STop } \end{array}$ | $\begin{gathered} \text { TIME } \\ \text { REMANING } \end{gathered}$ | $\begin{aligned} & \text { TOTAL } \\ & \text { CORRECT } \end{aligned}$ |
| ID | Name | (10) | (20) | (30) | (40) | (50) | (60) | (70) | (80) | (90) | (100) | AUто | SEConds | total |
| 01 |  | - | \|__|__| | L__\|__| | L__\|__| | \|__|__| | L__\|__| | \|__|__| | L__\|__| | \|__|__| | \|__|__| | \|__| | I__\|__| | \|__| |
| 02 |  | \|__| | - | L__\|__| | L__\|__| | L__\|__| | L__\|__| | L__\|__| | L__\|__| | 1 | 1 | I__\| | L__I |  |
| 03 |  | L__L_\| | \|__|_-| | L__\|_-| | L__L_l | L__L\| | L__L_\| | \|__|_| | L__L_\| | \|__|__| | \|_-|__| | 1 | \|__|__| | -__\| |
| 04 |  | \|__|__| | \|__|__| | L__\|_-| | L__L_\| | L__\|_| | L__\|_-| | \|__|__| | L__\|_-| | \|__|__| | I__\|__| | -_1 | I__\|_C| | L_-1 |
| 05 |  | \|__|__| | \|__|__| | I__\|__| | \|__| | I__\|__| | L__\|__| | \|__|__| | L__I_ | I__\|__| | I__\|__| | I__\| | I__I__\| | 1 |
| 06 |  | I__\|__| | \|__|__| | I__\|__| | I__I__\| | I__\|__| | L__\|__| | \|__|__| | L__\|__| | I__\|__| | I__\|__| | I__I | L__I | L_-I_ |
| 07 |  | L__\|__| | I__\|__| | L__I | \|__|__| | L__\|_-| | 1 | \|__|__| | L__I_ | I__\|__| | I__I | 1 | I_I_ | I__I |
| 08 |  | \|__|__| | \|__|__| | I__\|__| | L__\|_-| | \|_-|_-| | \|__|_-| | \|__|__| | I__\|_-| | I__\|__| | \|_-|__| | 1 | I__I__\| | -_-1 |
| 09 |  | \|__|__| | \|__|__| | I__\|__| | I__\|__| | I__\|__| | \|__|__| | L__\|__| | L__\|__| | I__\|__| | \|_-___| | 1 | \|__| | I__\|__| |
| 10 |  | L__\|__| | I__I__\| | I__\|__| | L__\|__| | \|__|_-| | \|__|_-| | \|__|__| | L__\|_-| | \|__|__| | \|_-_-_| | I_-\| | L_-1 | I__\|_-| |

Before continuing, say "Good effort! Let's continue to the next section!"

## Subtask 5: Word Identification

This is a timed exercise and is administered using the test booklet.
Show the test booklet to the child for subtask 5. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand what I am asking you to do? When I say "Start", read the words from left to right, line by line. At the end of the line, continue to the next line. Try to read quickly and correctly. Ready? Begin."
Start the timer when the child reads the first word. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates for 3 seconds. In this case, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet.
After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds.
Auto stop rule: If the child does not give a single correct response in the first 5 words, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask.

| HL1. | $\begin{gathered} \text { CHILD'SNAME } \\ \hline \text { HL. } \end{gathered}$ | FU51. | FU52. | FU53. | FU54. | FU55. | FU56. | FU57. | FU58. | FU59. | FU510. | $\begin{array}{\|l\|l\|} \hline \text { Auvo } \\ \text { STop } \end{array}$ | $\begin{array}{\|c\|} \hline \text { REMAN } \mathrm{TMNG} \\ \hline \end{array}$ | ${ }_{\text {coorde }}^{\text {corect }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ID | Name | (5) | (10) | (15) | (20) | (25) | (30) | (35) | (40) | (45) | (50) | Auto | sEconos | total |
| 01 |  | \|_-_-_| | \|_-_-_| | \|_-|_-| | \|_-_-_| | L_-_-_\| | \|_-_-_| | \|_-_-_| | -_-_-_\| | \|_-_-_| | -_-_-_\| | -_-1 | \|_-_-_| | \|_-_-_| |
| 02 |  | \|_-_-_| | \|_-_-| | \|_-|_-| | \|_-_-| | L_-_-\| | -_-_-\| | I_-_-\| | -_-_-\| | \|_-_-| | L_-_-_\| | L_-1 | I__I_ | \|_-_-_| |
| 03 |  | \|-_-_| | -_-_-\| | \|_-_-| | -_-_-\| | L_-_-1 | -_-_-\| | -_-_-\| | -_-_-\| | \|-_-_| | -_-_-_\| | -_I | -_-_-\| | - - - |
| 04 |  | -_-_-\| | \|_-_-| | \|_-_-| | I_-_-\| | L_-_-1 | -_-_-\| | L_-_-\| | -_-_-\| | \|-_-_| | -_-_-\| | - | I_-_- | -_-_ |
| 05 |  | - - - - 1 | -_-_-\| | L_-_-\| | L-_-_\| | L-_-_\| | -_-_-\| | L-_-_\| | L-_-_\| | L-_-_\| | L-_-_\| | - | -_-_- | - - - |
| 06 |  | \|-_|_-| | \|_-_-| | \|_-|_-| | I_-_-\| | L_-_-\| | -_-_-\| | L_-_-\| | \|-_-_-| | \|-_-_-| | L-_-_-\| | I_-I | -_-_-\| | -_-1 |
| 07 |  | \|-_-_-| | \|-_|_-| | L_-_-\| | L_-_-\| | L-_-_-1 | -_-_-\| | L-_-_\| | L-_-_\| | \|-_-_-| | L-_-_-\| | I_-I | I_-_-_ | -_-1 |
| 08 |  | \|_-_-| | \|_-_-| | \|_-_-| | \|_-_-| | L_-_-1 | -_-_-\| | \|-_-_-| | \|-_-_-| | \|-_-_-| | I_-_-_\| | L_-1 | -_-_-\| | - _- |
| 09 |  | \|_-_-| | \|_-_-| | \|_-_-| | \|_-_-| | L_-_-\| | -_-_-\| | \|-_|_-| | \|-_|_-| | \|-_|_-| | L_-_-_\| | L_-1 | I_-_-_ | -_-_1 |
| 10 |  | -_-_-\| | L_-_-\| | -_-_-\| | L_-_-\| | L_-_-1 | \|-_-_| | L-_-_\| | \|-_-_-| | \|-_-|| | \|-_-_| | -_I | -_-_ | \|-_-_| |

Before continuing, say "Good effort! Let's continue to the next section!"

| FULFULDE SUBTASK 6 \& 7 |  |  | VILLAGE ID: \|__|__|__| |  |  |  |  | HOUSEHOLD NUMBER ________\| $_{\text {I }}$ |  |  |  |  |  | FU6 \& FU7 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'S NAME } \end{gathered}$ | SUBTASK 6- ORAL READING FLUENCY <br> Give the child 60 seconds to read as much of the text as possible. Note the number of words read correctly per each line. Show the child the test booklet. <br> "Here is a story. Now I would like you to read it out loud, quickly and correctly, and afterwards, I will ask you some questions. Start here when I tell you. If you don't know a word, continue to the next word. Ready? Start." <br> Give the child 60 seconds to read all that he can. <br> Stay quiet, except when providing answers as follows: if the child hesitates for 3 seconds, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. <br> Auto stop rule: if the child cannot read correctly a single word in the first two lines, stop the test and note "auto-stop". Say "thank you" and end the test. <br> NOTE THE NUMBER OF WORDS READ CORRECTLY FOR EACH LINE. IF THE CHILD READ EVERYTHING IN LESS THAN ONE MINUTE, NOTE THE EXACT NUMBER OF SECONDS REMAINING ON THE TIMER. OTHERWISE, MARK '00’ SECONDS. |  |  |  |  |  |  | SUBTASK 7 - READING COMPREHENSION <br> After the child has finished reading, take the card from the child and ask the first question. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not answer, go to the next question. Ask only those questions that correspond to the lines of text read by the child, up to the last line the child was able to read. <br> "Now I am going to ask you a few questions about the story you just read.." <br> Pose the corresponding questions to the child, in Fulfulde. <br> "Djonimi diamete dow habaruji ko janguouda wad kokari gnotanam iyaka andal mada." <br> A. Haden nyalloma oyé non? <br> B. Dume Raabi yidi fa sooda? <br> C. Iri toggoré nde Raabi yidi ? <br> D. O hebi toggore wodere nden na? <br> E. Dume Raabi hebi? <br> RESPONSE : 1=CORRECT, 2=INCORRECT, 3=NO RESPONSE <br> LANGUAGE OF RESPONSE : 01 FRENCH, 02 HAOUSSA, 03 ZARMA, 04 KANOURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) |  |  |  |  |  |  |  |  |  |
| ID | Name | $\begin{gathered} \text { A } \\ \text { (5) } \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ (8) \end{gathered}$ | $\begin{gathered} c \\ (6) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ (8) \end{gathered}$ | $\underset{(6)}{E}$ | TIME | $\begin{array}{\|l\|l\|} \hline \text { AUTO } \\ \text { STOP } \end{array}$ | $\begin{array}{\|l\|} \hline \text { A1. } \\ \text { HAOEN } \\ \text { LLumo } \\ \text { HoN } \\ \hline \end{array}$ |  | $\begin{gathered} \text { B1. } \\ \text { TOG } \\ \text { ORE } \end{gathered}$ | $\begin{gathered} \text { B2. } \\ \text { LANGUAGE } \end{gathered}$ |  | $\begin{gathered} \mathrm{C} 2 . \\ \text { LANGUAGE } \end{gathered}$ | $\begin{gathered} \hline \text { D1. } \\ \text { HEBAYE } \end{gathered}$ |  |  | $\begin{gathered} \text { E2. } \\ \text { LANGUAGE } \end{gathered}$ |
| 01 |  | -_-1 | \|_-| | \|_-| | \|_-| | -_-1 | \|-_-_| | -_-1 | - | \|_-|_-| | -_I | \|-_-_-| | L_-1 | -_-_-1 | I- | \|-_-_| | L_I | \|_-_-| |
| 02 |  | L-1 | - - \| | 1-_\| | I-I | L_-1 | \|-_-_| | - | - | \| - - - - | -_I | \|-_-_| | - | \|_-_-_| | L_-1 | \|-_-_| | L_-1 | \|_-_-| |
| 03 |  | L-I | - - 1 | I_I | I-I | L_-1 | - - - - | -_I | I_I | \| - I_-| | L-I | \|-_-_| | L_-I | \|_-_-_| | - | \|-_-_| | - | \|_-_-| |
| 04 |  | L_-1 | I_-\| | \|_-| | I_-1 | -_-1 | - - - - | I_I | I__ | I_-_-\| | - | -_-_-1 | -_-1 | I_-_-_\| | I_I | -_-_-1 | -_-1 | L_-_-\| |
| 05 |  | L-I | \|_-| | \|_-| | I__\| | - _-\| | 1-1.1 | I_I | I__\| | \| -_|_-| | -_I | \|-_-_-| | L_-\| | -_-_-\| | - | \|-_-_| | I__I | L_-_-\| |
| 06 |  | L-_1 | 1-_\| | I_- | 1-_1 | L-_1 | - - - | L_-1 | 1 | \|-_|_-| | -_I | \|-_-_| | L_-1 | \|_-_-_| | I-1 | \|-_-_| | L_-1 | L-_-_\| |
| 07 |  | - | I_I | I-I | I_I | L_I | 1-1.1 | - | - | \|-_-| | L_I | -_-\| | L_I | -_-_\| | I_I | -_-_ | - - | --_-\| |
| 08 |  | L_I | I__\| | I_-1 | I_I | L_-1 | L-_- | 1 | - | \|-_-_| | L_I | \|-_-_| | - | -_-_-\| | I_I | \|-_-| | L__I | L-_-\| |
| 09 |  | I-I | I_-1 | I_-I | I_-1 | L-I | 1-1.1 | - - | I-I | \|-_|-| | - 1 | -_-_\| | - | \|_-_-_| | L_-1 | \|-_-| | - - | \|-_-_| |
| 10 |  | L_I | - _\| | I_-\| | I_I | L_I | - - - | 1-1 | I_I | \| - - - | | - I | \|-_-_| | L_-1 | -_-_\| | I-1 | \|-_-| | L_I | \|_-_-| |

Before continuing, say "Good effort! Let's continue to the next section!"


Before continuing, say "Good effort! Let's continue to the next section!"

| TAMASHEQ |  |  |  |  | HOUSEHOLD NUMBER \|_______| |  |  |  |  | TA2 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 2: Expressive Oral Language |  |  |  |  |  |  |  |  |  |  |  |  |
| This section is not timed and there are no stimuli for the child (to be administered orally). <br> Interviewer states: "Now I am going to show you things, and you tell me what they are called." <br> Example 1: Interviewer points to his eye and says, "What is this?" Interviewer says, "You say it is an eye!" <br> Example 2: Interviewer points to his ear, and says, "What is this?" The interviewer encourages the child to say "ear". "Interviewer asks, "Do you understand?" <br> If the child does not understand, the Interviewer states the instructions again and repeats the examples. If the child understands, start the test. <br> If child makes 5 consecutive errors, stop the test and continue to the next subtask. If child does not respond, mark "No Response", and continue to the next subtask. Ask each question in the test language and note the response in the questionnaire. <br> RESPONSE CODES: 1= CORRECT, 2= INCORRECT, 3=NO RESPONSE |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | HL2. CHILD'SNAME | $\begin{gathered} \hline \text { TA21. } \\ \text { TENJART } \end{gathered}$ | $\begin{aligned} & \text { TA22. } \\ & \text { AḍAd } \\ & \hline \end{aligned}$ | $\begin{gathered} \hline \text { TA23. } \\ \text { IRI } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { TA24. } \\ \text { ISENAN } \\ \hline \end{gathered}$ | $\begin{gathered} \text { TA25. } \\ \text { IḍəLAY } \\ \hline \end{gathered}$ | $\begin{aligned} & \hline \text { TA26. } \\ & \text { ヨFuD } \end{aligned}$ | $\begin{gathered} \hline \text { TA27. } \\ \text { EKARBAY } \end{gathered}$ | $\begin{gathered} \hline \text { TA28. } \\ \text { TAYMAR } \end{gathered}$ | $\begin{gathered} \hline \text { TA29. } \\ \text { TEDDAWEN } \end{gathered}$ | $\begin{gathered} \hline \text { TA210. } \\ \exists J \exists \mathrm{R} \end{gathered}$ | $\begin{gathered} \text { No } \\ \text { RESPONSE } \\ \hline \end{gathered}$ |
| ID | Name | Nose | FINGER | NECK | TEETH | моUTH | KNEE | PANTS/SKIRT | Elbow | ARMPIT | SHoulder | No RESPonse |
| 01 |  | \|__| | \|__| | \|__| | \|__| | \|__| | \|__| | I__\| | \|__| | \|___| | I__\| | I__\| |
| 02 |  | I_-1 | -_\| | L_I | I__I | L__\| | I__\| | I__I | -__\| | I__\| | L__1 | I__\| |
| 03 |  | \|_-| | \|__| | \|__| | I__\| | \|__| | \|__| | I__\| | \|__| | I__\| | L__\| | \|__| |
| 04 |  | I__\| | \|_-| | I__\| | I__\| | L__\| | \|__| | I__\| | \|_-| | I__I | I__\| | I_-1 |
| 05 |  | I__\| | \|__| | I__I | I__\| | \|__| | \|__| | I__\| | \|__| | I__\| | I__\| | \|__| |
| 06 |  | I__I | I_I | L__I | I__\| | \|__| | \|__| | I__\| | I_I | \|__| | L__\| | \|__| |
| 07 |  | I__\| | I_I | I__\| | \|__| | \|__| | \|__| | \|__| | \|__| | \|__| | L__\| | \|__| |
| 08 |  | I__\| | \|__| | I__I | I__\| | \|__| | \|__| | I__\| | \|__| | I__\| | L__\| | \|__| |
| 09 |  | \|_-| | \|_-| | I__I | I__I | \|__| | \|__| | I__I | \|_-| | I__\| | L__I | I__\| |
| 10 |  | I__I | I_I | I__I | I__\| | L__\| | I__\| | I__\| | L_I | I__\| | I__\| | I__\| |

Before continuing, say "Good effort! Let's continue to the next section!"

| TAMASHEQ VILLAG |  |  | HOUSEHOLD NUMBER $\mid$ _ \| | |  |  |  |  |  | TA3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 3: Listening Comprehension |  |  |  |  |  |  |  |  |  |  |  |  |
| This is not a timed exercise and this is administered orally only. The Interviewer states "Now, I am going to read to you a story aloud ONE TIME. Afterwards, I will ask you some questions about the story. Listen carefully, and after you will answer the questions the best you can. Okay? Do you understand what are you supposed to do? Let's begin! Listen carefully." <br> The interviewer reads aloud the short story, ONE TIME, slowly, (about 1 word per second), in the language of the test. <br> After reading the text, ask the child each comprehension question and note the response. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not respond, go on to the next question. |  |  |  |  |  |  |  |  |  |  |  |  |
| TEXT: <br> Mûsa əd əmidineṭ Yaliyu əməyan Fel ad əcĭn tafayat. Mûsa yiga tatôgât məqərat. Tôyayas tafayat. Yôfăr təṣut. Yaliyu yirmǎy huḷen. Yiṭ rab yikfê ǎman, yiša. Dəfur as iša ǎman, aṣ ismandan têtè n'tafayat nasan ôzalan sər aḍalan təwayya (baló). | ${ }^{\text {HL1. }}$ | $\begin{gathered} \text { HL2. } \\ \text { CHILD's NAME } \end{gathered}$ | TA31. <br> MAY MOS AWA acan Musa əd əMIDINEt? |  | TA32. <br> MANI əMUK WAS togaz Xaliyu ? |  | TA33. MĂGAN DəFUR AS ŠAN IMəNSIWǍN ? |  | TA34. MĂ FEL YALIYU Az DEWAY AMAN Î MÛSA? |  | TA35. <br> MǍNI ALOQ WAS IKKAN ADDALAN N'TAWAYYA (BALO)? |  |
|  | ID | Name | $\begin{gathered} \text { A. } \\ \text { TAFAYAT } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { B. } \\ \hline \text { LANGUAGE } \\ \hline \end{array}$ | $\begin{gathered} \text { A. } \\ \text { ÅMAN } \end{gathered}$ | $\begin{array}{c\|} \hline \text { B. } \\ \hline \text { LANGUGGE } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { A. } \\ \text { AdALAN } \\ \text { TOWAYYA } \\ \hline \end{array}$ | $\begin{gathered} \text { B. } \\ \text { LANGUAGE } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { A. } \\ \text { FEL } \\ \text { Təsût } \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline \text { B. } \\ \hline \text { LANGUAGE } \\ \hline \end{array}$ | A. DəFUR əMANSIWAN | $\begin{array}{\|c\|} \hline \text { B. } \\ \hline \text { Language } \\ \hline \end{array}$ |
|  | 01 |  | - | L__\| | L__\| | L__I | I__\| | -__\| | - | 1__ | L | \|_-1 |
| QUESTIONS : | 02 |  | - | \|__|__| | - | L__L_C | \|__| | \|__|_-| | I_-1 | - | - | -__\|_-_| |
| TA31. May môs awa acan Mûsa əd әmidineṭ? | 03 |  | -_I | L__L_\| | L__\| | L__L_\| | I__l | L_-_ | I- | I__I | -__ |  |
| TA32. Mani əmuk waṣ tôgaz Yaliyu? | 04 |  | I- | I__\| | L__I | L_-1 | I__\| | L_-\|__| | L_I | L__ | I__\| | I- |
| TA34. Mă fel Yaliyu az deway aman î | 05 |  | L__\| | 1 | L__I | 1 | I__\| | \|__|__| | I_I | I__\| | I__\| | L_-\| |
| TA35. Mǎni alôg waṣ ikkan addalan | 06 |  | [__ | L____\| |  | L__L_\| | I | L__L_\| | 1 | I__L_\| | I__\| | I__I_ |
| n'tawayya (baló)? | 07 |  | L__1 | I_I | L__I | L__I | I__I | L__L_\| | I_I | I__I | I__I | I__L |
| RESPONSE CODES : 1=CORRECT, $2=$ INCORRECT, 3=NO RESPONSE | 08 |  | I__\| | I__\|__| | L__\| | I__I__\| | I__\| | \|__|_-| | 1 | \|__|__| | \|__| | L__I |
| RESPONSE LANGUAGE: 01 french, 02 HAOUSSA, | 09 |  | I__\| | I__I | L__I | L__L | I__I | L__I_- | I__\| | I__I | I__\| | I__I_ |
| 03 FULFULDE, 04 KANURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) | 10 |  | I__I |  | - | \|___ | I__I | I | I |  | I__I | \|__| |

Before continuing, say "Good effort! Let's continue to the next section!"

| TAM |  |  |  |  |  |  |  |  |  |  | TA4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subtask 4: Letter Identification (name or sound) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 4. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand? When I say "Start", point to each letter with your finger as you read it. Read from left to right, line by line. Do you understand what I am asking? Put your finger on the first letter. Ready? Try to read quickly and correctly. Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first letter name or sound. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates on a letter for 3 seconds. In this case, point to the next letter and say "Please go on." Mark the letter skipped as incorrect on the test sheet. <br> After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 10 letters, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{gathered} \text { HL2. } \\ \text { CHILD'SNAME } \end{gathered}$ | TA41. | TA42. | TA43. | TA44. | TA45. | TA46. | TA47. | TA48. | TA49. | TA410. | $\begin{array}{\|l\|} \hline \text { AUTO } \\ \text { STOP } \end{array}$ | $\begin{gathered} \text { TIME } \\ \text { REMANANG } \end{gathered}$ | TOTAL CORRECT |
| ID | Name | (10) | (20) | (30) | (40) | (50) | (60) | (70) | (80) | (90) | (100) | AUto | SECONDS | total |
| 01 |  | \|__|__| | _-_\| | 1 | L__\|_C| | - | L__\|__| | __\| | \| | I-1 | \|__| | L__\| | L__\| | - |
| 02 |  | \|__|__| | \|__|__| | \|__|__| | L__\|_| | L__L | \|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | L_-\| | L__\|_| | I__\| |
| 03 |  | \|__|__| | \|__|__| | \|__|__| | L__\|_-| | L__\|_| | L__\|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | L__\| | L__\|_| | I__\| |
| 04 |  | \|__|__| | \|__|__| | \|_-| | 1 | \|_-| | L__-_\| | 1 | L__-_\| | 1 | 1 | 1 | L__\| | 1 |
| 05 |  | \|__|__| | \|__|__| | \|__|__| | \|__|_-| | \|__|_-| | \|__|__| | \|__|__| | \|__|__| | \|__I__| | \|__|__| | I__\| | L__L | L__I |
| 06 |  | \|__|__| | \|__|__| | \|__|__| | I__\|__| | I_I | 1 | I__\| | 1 | I__\| | I__\| | 1 | I__\| | I__\|_-| |
| 07 |  | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | \|__|__| | I__\|__| | \|__|__| | \|__|__| | 1 | I__\|__| | \| _ | |
| 08 |  | \|__|_-| | \|__|__| | \|__|_-| | \|__|_-| | \|__|_-| | \|__|_-| | \|__|_-| | \|__|__| | \|__|__| | \|__|__| | 1 | I_-I | \|__|__| |
| 09 |  | \|__|__| | \|__|__| | \|__|__| | L__\|__| | L__\|__| | L__\|__| | \|__|__| | L__\|__| | I__\|__| | \|__|__| | 1 | L__\|_-| | L__\| |
| 10 |  | I__\|__| | I__I__\| | \|__|_-_| | L__\|__| | L__\|_-| | L__L | L__\|__| | \|__|__| | \|__|__| | \|__|__| | I_-\| | I_I_ | I__\|_-| |

Before continuing, say "Good effort! Let's continue to the next section!"

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| This is a timed exercise and is administered using the test booklet. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Show the test booklet to the child for subtask 5. Explain the subtask in the child's maternal language, using the examples in the booklet. After explaining the examples, say "Ok? Do you understand what I am asking you to do? When I say "Start", read the words from left to right, line by line. At the end of the line, continue to the next line. Try to read quickly and correctly. Ready? Begin." |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Start the timer when the child reads the first word. If the child does not respond after 10 seconds, mark 'Auto Stop'. Count self-corrections as correct. Stay quiet, except if the child hesitates for 3 seconds. In this case, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. <br> After 60 seconds say, "Stop and Thank you." Note the total number correct. If the child read everything in less than one minute, note the exact number of seconds remaining on the timer. Otherwise, if the child has not finished the exercise, mark ' 00 ' seconds. <br> Auto stop rule: If the child does not give a single correct response in the first 5 words, gently tell the child to stop, and mark 'Auto Stop'. Say "Thank you" and go on to the next subtask. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| HL1. | $\begin{aligned} & \mathrm{HLL2} \\ & \text { CHILD'SNAME } \end{aligned}$ | TA51. | TA55. | TA53. | TA54. | TA55. | TA56. | TA57. | TA58. | TA59. | Ta510. | ${ }_{\substack{\text { AuTO } \\ \text { STop }}}$ | ${ }_{\text {TMEE }}^{\text {TME }}$ | $\begin{gathered} \text { rototh } \\ \text { core } \end{gathered}$ |
| ID | NamE | (5) | (10) | (15) | (20) | (25) | (30) | (35) | (40) | (45) | (50) | auto | SEConos | тот |
| 01 |  | -_-_1 | -_-_-\| | L_-_-\| | \|-_-_| | L-_-_\| | L_-_-\| | -_-_-\| | L-_-_\| | L_-_ | \|-_-_| | I_I | -__\|_-| | -_-1 |
| 02 |  | -_-_-\| | L-_-_\| | L_-_-\| | L_-_-\| | L-_-_\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L-_-_\| | I- | L_-_-\| | L-_-_\| |
| 03 |  | I-_-_\| | L-_-_\| | L_-_-\| | I_-_-\| | L-_-_\| | I_-_-\| | L_-_-\| | L_-_-\| | L_-_\| | L-_-_\| | - | L_-_-\| | -_-_ |
| 04 |  | L_-_-1 | L_-_-1 | L_-_-\| | I_-_-\| | L-_-_\| | L_-_-\| | L_-_-_\| | L_-_-\| | L_-_-1 | \|-_-_-| | -_I | L_-_-_\| | L__L |
| 05 |  | L_-_-_\| | \|_-_-_| | L_-_-\| | \|_-_-_| | L_-_-\| | 1_-_-_\| | L_-_-_\| | L_-_-\| | L_-_-\| | L_-_-_\| | I_-1 | L_-_-_\| | L__L |
| 06 |  | L_-_-1 | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-1 | L_-_-\| | L_-_-1 | L-_1 | - | L_-_-\| | L-_-_\| |
| 07 |  | \|-_-_| | L_-_-1 | L_-_-\| | I_-_-_\| | \|-_|-_| | L_-_-\| | L_-_-\| | L_-_-1 | L_-_-1 | \|-_-_| | -_-1 | L_-_-\| | L__L |
| 08 |  | \|_-_-| | L_-_-\| | L_-_-\| | I_-_-\| | L_-_-\| | I_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | I__ | I_-_-\| | L__L |
| 09 |  | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-_-\| | L_-1 | - | L_-_-\| | L_-1 |
| 10 |  | -_-_-\| | \|-_|_-| | L_-_-\| | \|-_-_| | \|-_|_-| | L_-_-\| | L_-_-\| | \|-_|_-| | L_-_-\| | \|-_-_| | I_-\| | \|-_|_-| | - - - |

Before continuing, say "Good effort! Let's continue to the next section!"

| TAM | SUBTASK | VILLAGE ID: \|___|__|__| |  |  |  |  |  |  | HOUSEHOLD NUMER \|__|__|__| |  |  |  |  |  | TA6 \& TA7 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|c\|c\|} \hline \text { HL1. } \\ \text { ID } \\ \text { de } \\ \text { lent } \\ \text { ant } \end{array}$ | HL2. <br> CHILD'S NAME | SUBTASK 6- ORAL READING FLUENCY <br> Give the child 60 seconds to read as much of the text as possible. Note the number of words read correctly per each line. Show the child the test booklet. <br> "Here is a story. Now I would like you to read it out loud, quickly and correctly, and afterwards, I will ask you some questions. Start here when I tell you. If you don't know a word, continue to the next word. Ready? Start." <br> Give the child 60 seconds to read all that he can. Stay quiet, except when providing answers as follows: if the child hesitates for 3 seconds, point to the next word and say "Please go on." Mark the word as incorrect on the test sheet. <br> Auto stop rule: if the child cannot read correctly a single word in the first two lines, stop the test and note "auto-stop". Say "thank you" and end the test. <br> NOTE THE NUMBER OF WORDS READ CORRECTLY FOR EACH LINE. IF THE CHILD READ EVERYTHING IN LESS THAN ONE MINUTE, NOTE THE EXACT NUMBER OF SECONDS REMAIIING ON THE TIMER. OTHERWISE, MARK '00' SECONDS. |  |  |  |  |  |  | SUBTASK 7 - READING COMPREHENSION <br> After the child has finished reading, take the card from the child and ask the first question. If the child does not give any response after 10 seconds, repeat the question, and give the child another 5 seconds to respond. If the child still does not answer, go to the next question. Ask only those questions that correspond to the lines of text read by the child, up to the last line the child was able to read. <br> "Now I am going to ask you a few questions about the story you just read." Pose the corresponding questions to the child, in Tamasheq. « əmarda ada kâga iṣəṣtânan fel əlquiṣatta tayrê. » <br> a. Ayôra wa n'dar əzal ? <br> b. Mâ tarâ Rǎbi as ṣat wazənzu ? <br> c. Mâ fst tôlă tekarsat ta taǧammay ? <br> d. Tağraw tekarsat ta zaǧayat ? <br> e. Mâ tazlağ Răbi ? <br> RESPONSE: 1=CORRECT, $2=$ INCORRECT, $3=$ NO RESPONSE <br> LANGUAGE OF RESPONSE : 01 FRENCH, 02 HAOUSSA, 03 ZARMA, 04 KANOURI, 05 TAMASHEQ, 06 FULFULDE, 96 OTHER (SPECIFY) |  |  |  |  |  |  |  |  |  |
| ID | Name | $\begin{gathered} \text { A } \\ (6) \end{gathered}$ | $\begin{gathered} \text { B } \\ (7) \end{gathered}$ | $\begin{gathered} \text { C } \\ (4) \end{gathered}$ | $\begin{gathered} \mathrm{D} \\ (8) \end{gathered}$ | $\underset{(8)}{E}$ | TIME | AUTO STOP | $\begin{gathered} \text { A1. } \\ \text { OZAL } \\ \text { N'Așuk }^{\prime} \end{gathered}$ | $\begin{gathered} \text { A2. } \\ \text { LANGUE } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { B1. } \\ \text { TEKARS } \\ \text { AT } \end{array}$ | $\begin{gathered} \text { B2. } \\ \text { LANGUE } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { C1. } \\ \text { TEKARSAT } \\ \text { ZAĞAYAT } \end{array}$ | $\begin{gathered} \text { C2. } \\ \text { LANGUE } \end{gathered}$ | $\begin{gathered} \text { D1. } \\ \text { BEHU/K } \\ \text { AY-KAY } \end{gathered}$ | $\begin{gathered} \text { D2. } \\ \text { LANGUE } \end{gathered}$ | E1. TEKARSAT TENAYÂT/ TEKARSAT HÔsAYAT | $\begin{gathered} \text { E2. } \\ \text { LANGUE } \end{gathered}$ |
| 01 |  | -_-1 | \|_-| | \|_-| | I_-1 | I_-1 | L_- | I_-I | -_1 | \|_-|_-| | L-1 | \|_-_-_| | L_I | \|_-_-| | L-I | \|__|_-| | I__\| | \|_-|_-| |
| 02 |  | - - | -_-I | -_-I | - - 1 | I_-1 | L_-1 | -_I | - | \|_-_-| | -_ | \|_-_-| | L_-1 | \|_-_-| | I_I | I__\|_| | I_I | I_-_-\| |
| 03 |  | L_I | - _-I | L_-1 | I_-1 | I_-1 | L_\| | I__I | - _ | \|_-|_-| | L_I | \|_-_-| | L_-1 | \|_-_-| | I__I | \|__|_-| | L_-1 | \|_-|_-| |
| 04 |  | - - | -_-1 | 1-1 | I_-1 | I_-1 | L-_\| | I_-I | L_I | \|_-|_-| | I_I | L_-_-_\| | L_-1 | I__I_I | L__I | \|_-_-_| | L_-1 | I__\|__| |
| 05 |  | - - | 1-_\| | -_-\| | - - | I_-1 | L_- | 1-_\| | L-1 | \|_-_-| | L-I | -__\|_| | L_I | \|_-_-| | I_I | \|__|_-| | -_-1 | I_-_-\| |
| 06 |  | -_1 | L_-1 | -_\| | - - | I_-1 | L - - | L_-I | - | L_-_-\| | L_I | L_-_-1 | L_I | L_-_-\| | I_I | \|_-_-| | I_1 | I_-_-\| |
| 07 |  | L_I | \|-_| | 1-_\| | L_I | I_-1 | L-1 | I_I | L-I | \|_-_-| | L-I | -__\|-| | L_I | \|_-_-| | I_I | 1__-_\| | I_I | \|_-_-| |
| 08 |  | L_I | \|-_| | I_-\| | - _- | I_-\| | L_-1 | I_-I | L_I | \|_-_-| | L_I | \|__ - _| | L_I | I__\|_l | L_-I | I__\|_| | L_I | I_-_-\| |
| 09 |  | - | -_I | I-I | - | -_I | - | - | - | L_-_\| | - | \|_-_| | - | -_-_\| | - | \|_-_-| | - | -_-_\| |
| 10 |  | - - | I_I | I_I | - - | L_-1 | L - 1 | I__I | - - | \|-_-_| | L_I | L_-_\| | - _\| | \|-_-| | L-I | -_-_\| | - _\| | -_-_-\| |

Before continuing, say "Good effort! Let's continue to the next section!"

## APPENDIX D

TEST BOOKLET

## NECS

## Baseline

|  |  | e | K | D |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a | $r$ | i | a | n | Z | K | e | K | W |
| U | c | n | i | W | a | 0 | U | Y | S |
| M | f | a | Y | t | Y | G | A | y | k |
| a | S | T | K | 0 | i | h | N | U | F |
| a | A | i | a | C | A | K | T | S | U |
| y | A | $t$ | D | N | V | k | L | e | d |
| i | M | $y$ | a | m | I | r | A | R | i |
| N | i | R | b | A | D | N | S | A | n |
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Haoussa - HA4

|  | ku | suka | wasa |  |
| :---: | :---: | :---: | :---: | :---: |
| tana | in | nan | tahiya | sai |
| ina | kai | tsaya | yi | zo |
| su | malam | za | ku | ce |
| makaranta | audu | suna | ta | iya |
| shi | gida | ba | har | ka |
| wata | tare | ya | wasa | to |
| ruwa | yara | tafi | ana | mai |
| lahiya | ki | da | wani | daga |
| yana | ga | rana | aka | suka |
| cikin | ke | ina | ne | ni |

Kasuwa. Yau raná kasuwa.
Rabi zata kasuwa domin ta saya riga.
Rabi na neman jan riga.
Ba ta samu jan riga ba, Rabi ta samu fará riga.
Raabi ta na murna, ta sa sabuwá riga mai kyan.

|  |  | e | c | D |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| S | e | N | h | 0 | y | E | i | s | b |
| $t$ | $\eta$ | d | U | $y$ | $s$ | Z | m | b | a |
| K | U | A | m | b | t | i | B | d | Z |
| g | W | C | 0 | j | M | U | k | G | y |
| I | p | $\eta$ | i | $f$ | a | h | z | S | w |
| a | Y | e | K | I | r | t | C | m | a |
| Z | h | r | E | $s$ | k | $\overline{\mathrm{a}}$ | g | W | $p$ |
| p | M | J | d | $\eta$ | o | f | h | e | S |
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Zarma - ZA4

| garu | ay | kaŋ | kasi | mooto |
| :---: | :---: | :---: | :---: | :---: |
| kali | afo | tira | dabu | bini |
| lutu | gure | mari | koli | mitti |
| habu | lutu | hina | jine | furu |
| sari | \#una | kwaayi | gabu | suba |
| pati | cawyaŋ | fansi | zagu | waasi |
| kande | dondon | hantum | kayne | moolo |
| fundi | kurne | zanjiğombo | ganji | haari |
| dundu | tara | zunku | tamma | bindi |
| sungay | hungum | dangay | kollo | faasa |

Habu. Hunkuna zaaro, habu no.
Raabi go ga koya habu ga day kwayi. Raabi go ga kwaayi ciray ceeci.
A man du kwaei ciraa, Raabi du kwaayi kwaarey.
Raabi go ga farhã a du kwayi han no.

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| M | SH | H | a | n | z | J | T | H | sh |
| 0 | k | $y$ | R | t | d | a | k | N | U |
| w | i | E | $g$ | U | N | C | F | K | 0 |
| y | n | L | e | i | c | D | e | n | W |
| s | R | k | $r$ | a | h | j | $u$ | z | B |
| m | U | t | y | d | i | p | A | 1 | 0 |
| c | p | s | k | U | p | N | sh | ny | d |
| n | d | F | c | n | s | n | t | M | 0 |

Wu knla bnri

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| karwu | bollo | njo | ci | bul |
| jaawol | kani | cidi | kolji | andi |
| milo | kam | ingi | kamu | bina |
| dondi | ti | kalu | kura | so |
| ngnla | deke | bnlnm | fe | badi |
| collo | goro | kiari | knri | dalo |
| knla | kaji | karo | wuri | nja |

Kasuwu. Ku im kasuwuye. Rabi Kasuwuro leji kaluwu n'jiworo. Rabi kaluwu kime maji.
Kaluwu kime da cuwandinni, Rabi kaluwu bul cuwando.
Rabi kiji fanji, kaluwu birin shawa ciwandinna nangaro.

## s $\quad$ k

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| b | ng | ] | B | Ng | T | 1 | Y | W | e |
| mb | h | $\bigcirc$ | mb | 1 | d | L | P | D | Ny |
| $b$ | i | p | C | c | S | nj | S | J | nd |
| c | j | r | E | H | ny | Mb | F | T | k |
| d | nj | $s$ | F | m | D | Nd | ワ | A | S |
| nd | k | $\dagger$ | J | Ng | M | w | C | 0 | Y |
| d | I | U | n | k | r | Nj | i | 6 | i |
| e | m | w | U | A | p | g | K | f | G |

Fulfulde - FU4
pilkol goggo loonde

| emo | lila | an | ibe | cardi |
| :---: | :---: | :---: | :---: | :---: |
| oole | liila | be haako | bibbe | ummu |
| sooda | ceede | daado | haala | gada |
| una | miilo | on | rewbe | pilkol |
| uulo | ada | nder | foti | yaha |
| oolo | adol | jam | pade | roogo |
| lima | omo | nanii | pede | debbo |
| elol | min | weeti | lootoo | lobbo |
| molu | no | waali | loota | natal |
| daago | leele | inna | licce | mboyri |

Fulfulde - FU5

Lumo. Handen nyalooma lumo non. Raabi no don ya lumo fa sooda toggore. Raabi no don filloo toggoré wodere.
O hebaye toggoré woodere, Raabi heebi toggore ranere.
Raabi sehake o hebi toggore loobere.

## q $\times \quad 3$

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Tamasheq - TA4

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| :---: | :---: | :---: | :---: | :---: |
| ta | əd | yel | imi | amidi |
| wa | anu | tile | əwəl | eyos |
| wen | aman | win | ener | idi |
| yur | anna | tin | a!əm | tafala |
| daw | dadăy | idi | eyăyd | ax |
| sər | har | tayat | ad | bəhu |
| əs | fel | taṣt | işan | əšink |
| ăkal | dagman | măṣ | taləmt | enăle |
| ehăn | dənnəg | afud | as | awăra |
| ezăl | kăy | kăm | ehăd | ammas |

Əșuk. Ayôra wa əzal n'aṣuk. Răbi takka əșuk fel aṭ taẓzunzu tekarsat. Răbi tagammay tekarsat zaǧayat.
Wer təgraw tekarsat zağayat, Răbi təgraw tekarsat malât.
Răbi tiddî wat fellas təgraw tekarsat tenâyat hôṣayat.
b
0

| E | i | $f$ | 0 | A | é | C | Q | z | U |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| b | N | 0 | $s$ | i | m | L | n | G | T |
| w | 0 | g | U | L | T | j | C | P | M |
| V | K | a | R | U | f | é | J | s | b |
| s | L | c | a | D | Y | $f$ | H | a | e |
| i | s | U | P | M | V | i | T | n | P |
| Z | n | e | g | i | F | d | 0 | n | V |
| d | é | b | A | m | n | T | C | 0 | r |
| R | L | q | B | e | n | i | a | p | U |
| g | E | h | V | d | U | ç | 1 | m | x |

Français - FA4

| ta |  | elle | lune |  |
| :---: | :---: | :---: | :---: | :---: |
| tu | il | vol | sa | ma |
| ou | or | lire | ami | car |
| sol | peur | papa | sage | bébé |
| carte | cri | vache | blé | fleur |
| sur | chaise | peau | vole | bleu |
| mil | mur | table | clé | monde |
| fin | date | tour | posé | kilo |
| ronde | pré | abri | faire | porter |
| été | beau | pain | rougir | moto |
| mal | douze | bol | vélo | vide |

Le repas. Il est midi. Issa a faim.
Maman ne l'appelle pas. Le repas n'est pas prêt. Issa va à la cuisine. Maman prépare le riz. Le plat est prêt. Toute la famille est à table. Issa est content. Il mange le plat qu'il aime.



Math

## APPENDIX E

IMPLEMENTATION STATUS OF COMPLEMENTARY ACTIVITIES AT NTP

## SUSPENSION

This table provides a summary of the complementary, or "soft", activities originally planned for the IMAGINE project alongside the construction of the girl friendly primary schools. The implementation status at the time of the suspension of the NTP is listed for each activity. This table was compiled based on the information included in the Final Evaluation of the IMAGINE Project Report submitted by PLAN Niger and the consortium partners Aide et Action and VIE in September 2010.

## Table E.1. Implementation status of complimentary activities at NTP suspension

| Planned activities | Realized activities | Realization rate |
| :---: | :---: | :---: |
| Improving the quality of teaching and children's performance |  |  |
| Elaborate, validate, and disseminate new training modules and didactic materials | Integrated module—spelling and writing-elaborated and validated through a workshop | Partly realized |
| Train 100 pedagogical inspectors and counselors in gender, spelling, active learning, and evaluation of students performance | 52 pedagogical inspectors and counselors trained | 52\% |
| Train at least 1,800 teachers on gender, spelling, active learning, evaluation of student performance, and tutoring by pedagogical inspectors and counselors | 96 teachers trained | 5.33\% |
| Organize two regional training workshops on the integrated module | Two workshops organized | 100\% |
| Equip 68 project schools (initially planned) with 7 teacher guidebooks, for a total of 476 guidebooks | 476 teacher guidebooks distributed to 68 schools | 100\% |
| Training of 110 teachers in spelling and writing | 96 teachers (school managers) trained | 87.72\% |
| Rewards for 22 teachers and 11 schools | Not realized | 0\% |
| Introduction of tutoring | Not realized | 0 |
| Practical and productive activities in 198 targeted schools | 78 schools | 39.39 |
| Teaching of hygiene and sanitation | Not realized | 0 |
| Establishment of school governments | 135 schools | 68.18\% |
| Provision of school stationery kits to 200 targeted schools | 200 kits distributed | 100\% |
| Provision of school manuals to 68 schools | 68 schools each received 350 school manuals | 100\% |
| Mobilization campaigns in support of Girls' education |  |  |
| Formulation of a vision of girls' education at national level | Not realized | 0\% |
| Adoption of a communication strategy to advocate for girls' education | Document elaborated and validated but not implemented | 0\% |
| Organization of annual regional advocacy day (for three years) on girls' education | Process suspended at internal ToR validation phase | 0\% |


| Planned activities | Realized activities | Realization rate |
| :---: | :---: | :---: |
| Mobilization of financial and material means for implementation of communication strategy | Information, education and communication materials not conceived and not disseminated | 0\% |
| COGES, Student Parents Association (APS), and Educational Mothers Association capacity building | Realized | 100\% |
| Development and dissemination of the training modules on social mobilization | Modules and didactic support developed | 100\% |
| Elaboration of 198 Local Action Plans (PALs). | 155 PALs elaborated | 78.28\% |
| Implementation of 155 PALs | 155 PALs implemented | 100\% |
| Training of regional and departmental education officials (198) on monitoring COGES activities | Partly realized, with 80 regional and departmental education officers trained | Approximately 40\% |
| Implementation of subsidy program to support communities in implementation of their PALs | Not realized | 0\% |
| Training of at least 6,000 women in income generating practices | Activity not realized | 0\% |
| Literacy of 3,000 members of COGES, APS, and Educational Mothers Association (AME) | Validation of the animators' training manuals 35 animators and focal points participated in the initial training; 1,002 learners, of which 711 are women, started the literacy classes in 34 centers | Partly realized-35\% started the activities |

Source: Plan International Final Performance Evaluation Report 2010.

Improving public well-being by conducting high quality, objective research and data collection

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## MATHEMATICA

Policy Research


[^0]:    ${ }^{1}$ IMAGINE's official name is "IMprove the educAtion of Girls In NigEr".

[^1]:    ${ }^{2}$ Sixty-eight villages were actually selected to receive schools. The GoN chose three villages prior to Mathematica's involvement in the evaluation. These villages were outside of the random assignment process and therefore were not included in the evaluation, dropping the number of villages included from 204 to 201 . Further, two communes were not included in the evaluation because random assignment was not respected. In addition, three villages in the volatile Agadez region were not surveyed due to security concerns. As a result, the evaluation sample consisted of 178 villages: 57 treatment villages and 121 control villages.

[^2]:    ${ }^{3}$ The gross enrollment rate is the total enrollment in a specific level of education, regardless of age, expressed as a percentage of the eligible official age group corresponding to the same level of education in a given school year. For primary education, it is calculated by expressing the number of students enrolled in primary levels of education, regardless of age, as a percentage of the actual, official primary school age population. As a result, the proportion can exceed 100 percent when more students are enrolled in a primary school than there are children in this age group due to early or late entrants or repeaters.

[^3]:    ${ }^{4}$ Based on our understanding of the NECS intervention, project activities began in July 2012, however the roll-out of the bulk of activities that might affect child or households in villages did not begin until late 2013.
    ${ }^{5}$ See Chapter II for further details.
    ${ }^{6}$ Random assignment for the NECS program occurred in November 2012 and initial rollout of some program activities in communities began during summer 2013. These activities included training of inspectors and community leaders. The majority of NECS activities, specifically those focused on learning outcomes, began in the 2013-2014 school year.

[^4]:    ${ }^{7}$ Villages that were to receive only complementary interventions are not included in the evaluation because they were not randomly selected.

[^5]:    ${ }^{8}$ Plan used its own funds to allow completion of the construction of the 62 schools after project funds were withdrawn.

    9 Details about the full implementation of each activity are available in the first IMAGINE impact evaluation report (Dumitrescu et al. 2011) and in the final report produced by Plan International (2010). A complete list of complementary activities and their implementation status can be found in Appendix E.

[^6]:    ${ }^{10}$ The IMAGINE girl-friendly schools are based on a model for schools used by Plan International, and the model was also implemented in the BRIGHT project.

[^7]:    ${ }^{11}$ As noted earlier, eligibility criteria included the number of school-aged girls in the village, access to water, and distance to a major road.
    ${ }^{12}$ In plan, the 65 villages in the treatment group were going to receive a school and a package of soft interventions, and villages nearby the treatment villages, some of which may have been control villages, were going to receive the package of soft interventions only. In practice, however, the soft interventions were only partially implemented; therefore, the impact estimates are probably most reflective of the impact of the construction of girl-friendly schools relative to what would have happened in the absence of the IMAGINE program.
    ${ }^{13}$ This variation is mainly due to historical reasons. Originally, the IMAGINE program was going to be implemented in the Tilaberri and Zinder regions only. When the GoN decided to expand the number of regions for the program, the eight communes located in Tilaberri and Zinder were selected to receive a higher number of schools than those located in the newly added regions. Indeed, as can be seen in Table III.1, the fraction of treatment villages in these eight communes was between 50 and 60 percent, whereas it was only around 20 percent for the other communes in the project.

[^8]:    ${ }^{14}$ In commune number 19, 2 villages were assigned from the 10 identified. One of those was determined to be ineligible. It was replaced with number 10 on the list after determining no other village in that commune met the

[^9]:    ${ }^{16}$ Some of the outcomes of interest, such as enrollment, are binary in nature. However, we still prefer to conduct estimation using a linear probability (OLS) model in these cases, because of ease of interpretation. Nevertheless, we investigated the sensitivity of our results to using a logit or probit model that accounts for the binary nature of these outcomes.

[^10]:    ${ }^{17}$ Ideally, this type of analysis should be performed with baseline data. Given that there was no baseline survey in the evaluation, it was done using data collected in the follow-up survey on characteristics that one would not expect the program to have affected (such as demographics or socioeconomics) and retrospective data collected at followup.

[^11]:    ${ }^{18}$ At the outset, it is important to note that the evaluation included 90 percent of the communes and about 90 percent of the villages that formed part of the IMAGINE project. Hence, the exclusion of the two communes is unlikely to have affected substantially the impacts presented in this report.

[^12]:    ${ }^{19}$ Although data were collected from all 178 villages, no school infrastructure information was collected from one village.

[^13]:    ${ }^{20}$ Enrollment during the 2012-2013 school year is the enrollment outcome of primary interest throughout the remainder of this report.

[^14]:    ${ }^{21}$ Because the survey was conducted prior to opening of all schools for the 2013/2014 school year (so school was not yet in session for all villages in the sample at the time of data collection), attendance was reported based on recall of the previous school year. There is no reason to suspect systematic differences in recall between treatment and control villages.
    ${ }^{22}$ Children reporting being absent more than two consecutive weeks during the last school year is the attendance outcome of primary interest throughout the remainder of this report.
    ${ }^{23}$ We conducted analyses on the primary enrollment and attendance outcomes using a logit model, finding results consistent to those reported in Table V.2.

[^15]:    ${ }^{24}$ The math test had 18 items; raw score reported in the table is the number of items the child correctly answered. The French test had six sections, each of differing lengths; therefore, we report the percentage correct across all sections.

[^16]:    ${ }^{25}$ Socioeconomic status was measured by constructing a household quality index, which is a normalized measure of the type of floor, roof, walls, water source, and toilet available to a household.
    ${ }^{26}$ To address any concern that the method of measuring a household's socioeconomic status may influence the results, we conducted robustness checks using alternate measures of household socioeconomic status to conduct impact estimates. We constructed a measure of household assets (a normalized score based on whether or not a household owns a series of consumer goods, such as radios, telephones/cell phones, watches, bicycles, animal-drawn carts, cattle, and camels) and a measure of household hunger (a normalized scored based on the number of meals per day a household reports and whether any member of the household has gone to bed hungry due to lack of food). We also used parent education (whether or not parents completed primary or secondary school) as a potential indicator of socioeconomic status. Results for each of these measures of socioeconomic status are consistent with the results presented in the report.

[^17]:    ${ }^{27}$ Because schools were not open during data collection, we were unable to gather information on whether the increased presence of female teachers found during the original IMAGINE evaluation was sustained.

[^18]:    ${ }^{28}$ When conducting the gender and household socioeconomic status subgroup analyses with weights only, the impact estimates decrease and are no longer significant. However, the significance of the impacts returns with the inclusion of household- and village-level controls in the full model.

[^19]:    ${ }^{29}$ We continue to exclude from the sample the commune that was excluded during the first evaluation because we were unable to collect data in several villages due to civil unrest at the time of the survey.

[^20]:    ${ }^{30} \mathrm{We}$ continue to exclude from the sample the three villages that were chosen to receive a school outside of the random assignment process.

[^21]:    ${ }^{31}$ The strategy instruments for actual receipt of IMAGINE schools with the random assignment value.

[^22]:    ${ }^{32}$ In terms of regression models, this can also be estimated using an instrumental variables (IV) approach (Imbens and Angrist 1994). In this approach, the learning outcome is regressed on an indicator for enrollment in a treatment school, and village treatment status is used as an "instrument" to adjust for any selection bias.
    ${ }^{33}$ IMAGINE might still have impacts on the test scores of out-of-school children. For example, there could be positive spillovers if enrolled siblings share learning with non-enrolled siblings. These possible impacts are an important caveat to the validity of the adjusted estimates.

[^23]:    ${ }^{34}$ Village, household, and child characteristics for IMAGINE control villages that were assigned to receive NECS were compared to IMAGINE treatment villages (that also receive NECS), with findings similar to those presented in Tables IV.3, IV.4, and IV.5.

[^24]:    ${ }^{35}$ The magnitudes have diminished somewhat over time, though they still are large and significant.

[^25]:    ${ }^{36}$ The first follow-up estimates are at the village level and may include villages with more than one school. Of the 178 villages in the first follow-up IMAGINE data, 28 villages had two schools surveyed and 9 villages had three schools surveyed.

[^26]:    ${ }^{37}$ An impact of 8 percentage points on enrollment translates to 13 percent of the control group mean enrollment rate of 60 percent.

[^27]:    Before continuing, say "Good effort! Let's continue to the next section!"

[^28]:    Before continuing, say "Good effort! Let's continue to the next section!"

