Early Grade Reading Assessment (EGRA)
Saut d'Eau – Haiti



CONCERN WORLDWIDE

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With the support of





Photo on front cover: Concern Worldwide (2012) Grade 1 children in Bon Samaritaine de Duverger school, Saut d'Eau, Haiti.

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EXECUTIVE SUMMARY

From November to December 2012, Concern Worldwide conducted an Early Grade Reading Assessment (EGRA) in Saut d'Eau, Haiti. The EGRA contributes to baseline data for Concern's Multi-Sectoral Rural Development Programme, specifically relating to the education sector of the programme.

The purpose of this EGRA is to identify baseline data for children's literacy skills, disaggregated by sex and grade, against which changes can be measured. In addition, the baseline data provides robust data to inform/adapt programme design and to present as evidence in advocacy for improved education policies and school management. The baseline was conducted in 12 schools supported by the programme in 2012, although the programme will scale up to 30 schools in 2013.

The Saut d'Eau education programme focuses on three objectives:

1. Improving **early grade literacy** through the use of appropriate mother-tongue curricula and improvement of teaching quality through teacher training and on-going support and supervision;
2. Ensuring **equal access** to quality education by increasing the accountability of schools to communities through support to parent-teacher committees;
3. Tackling the **risks and vulnerabilities** which act as barriers to a conducive learning environment and/ or the completion of primary education, such as corporal punishment and early pregnancy.

This EGRA baseline relates to the first objective, measuring children's skills in phonemic awareness, alphabetic knowledge, fluency, vocabulary, writing and comprehension in both French and Creole. Nine sub-tests are included in the baseline, providing rich data for programme planning and formative monitoring, but it is the sub-test for oral passage reading and comprehension that bears most weight in this programme. Accordingly, the programme results framework specifies improved literacy learning outcomes, with the following outcome-level indicator:

- % increase in **reading fluency in Creole** in grade 3 (disaggregated by sex) in targeted schools. The baseline assessment finds that the average reading fluency of grade 3 children is **9.6 correct words per minute (cwpm): 7.6 cwpm for girls and 11.3 cwpm for boys**.

The assessment was conducted by Concern's Teacher Trainers, Ministry of Education's Pedagogical Advisors and Inspectors of both Mirebalais and Saut d'Eau offices. Concern's Teacher Trainers were newly recruited and trained staff, so bias towards certain schools was unlikely.

As this was part of an overall baseline study, survey questions unrelated to literacy were included in the tool. These relate to home background and children's knowledge on sex education, HIV and AIDS, health and hygiene and responses to disasters such as an earthquake. Findings from these questions are presented in a separate baseline report. Findings presented in this report are limited to literacy skills and relate directly to the programme indicators.

Children in grades 1-6 were tested in pre-reading and early reading skills, using the Early Grade Reading Assessment. Each child is tested individually, responding to oral, written and reading tasks. Scores in this report are presented per grade. With the exception of grade 1, all children were tested across all skills. Grade 1 children were not tested in the full French language test. It was decided to test children in all grades due to the skewed age-range of children and the poor reading levels demonstrated in upper primary school during Concern's 2011 education evaluation.

Sub-tests 1-5: Phonemic awareness, alphabetic principle, vocabulary

Tasks 1-5 were administered to assess children's phonological awareness (recognizing sounds), alphabetic principle (naming letters), phonics (linking sounds to letters), speed at reading simple familiar words in isolation, and using de-coding skills to read unfamiliar (nonsense) words. Most of the sub-tests are timed, providing a score 'per minute' to assess both accuracy and speed, while also allowing the assessor to move on for children who cannot provide a response within a reasonable time-frame. These sub-tests are useful to identify the pre-reading and early reading skills children are learning, or gaps in instruction.

For all sub-tests, a positive progression can be seen as children move from grade to grade. This demonstrates that students are actually learning and building on skills each year. On the other hand, the progression demonstrated is far too slow – **children are taking up to six years to learn basic pre-reading skills that they should have mastered in the first year or two years of education**. Some never achieve mastery. When the skewed age range of students is considered this is even more serious – for example 74% of grade 3 students tested were more than two years older than the official age, including students as old as 17, 18 and 19 years of age.

Scores for each of these sub-tests were very low across all grades. One of the first pre-reading skills a child learns in school is alphabetic recognition – reciting the alphabet and identifying each letter by name. Scores for letter naming fell below 50 correct letters per minute until a child reaches grade 5 or 6 – this indicates that the **children do not master the alphabet until their fifth or sixth year in school**. When asked to listen to a word and then say the sound of the first letter in that word, children from grade 1 to 6 struggled. More than half of grade 2 and 3 students scored zero on this test, which is a skill usually mastered in grade 1. Scores were marginally higher for these sub-tests in French than in Creole, indicating that the limited instruction children receive on these skills focuses on French.

Scores for familiar word recognition were poor across all grades. The set of words used are taken from the most frequently used words in French or Creole, such as *ma, il, sol, papa, table, mur, blue.* In French, students in grade 4 scored an average of 14 correct words per minute. In Creole, grade 4 students scored 17 correct words per minute. These scores indicate that **children in their fourth year of education have not developed a basic reading vocabulary** which is necessary for reading fluency. A comparison of these basic words with the level of vocabulary provided in a grade 4 textbook is a good illustration of the gap in children's skills for their grade-level.

Sub-test 6 and 7: Reading fluency and reading comprehension

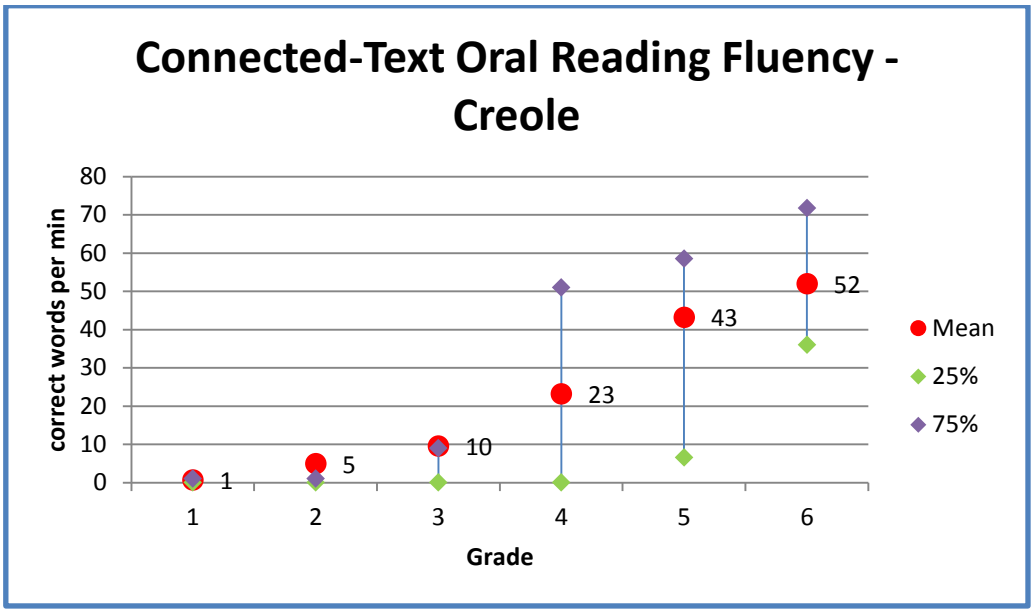
A good indicator of a child's reading level is their fluency at reading meaningful, connected text. Importantly, we also need to test that the child understands the key messages communicated by that text (comprehension). In English, we would expect an eleven-year old child to read at a speed of about 123 correct words per minute (cwpm)[1]. Early Grade Reading Interventions have generally set international targets for grade 3, for both English and French, at approximately 60 cwpm[2], which is considered to be the minimum speed at which text can be read and understood. Some experts suggest that a reading rate of 35-60 correct words per minute is the minim rate needed to comprehend the most basic story[3] – targets can vary considerably based on the language and orthography. Some governments and donors have set *interim* targets of 45 cwpm for literacy interventions within their education sector plans[4]. The government of Haiti has not yet established targets for reading speeds, but is in the process of doing so.

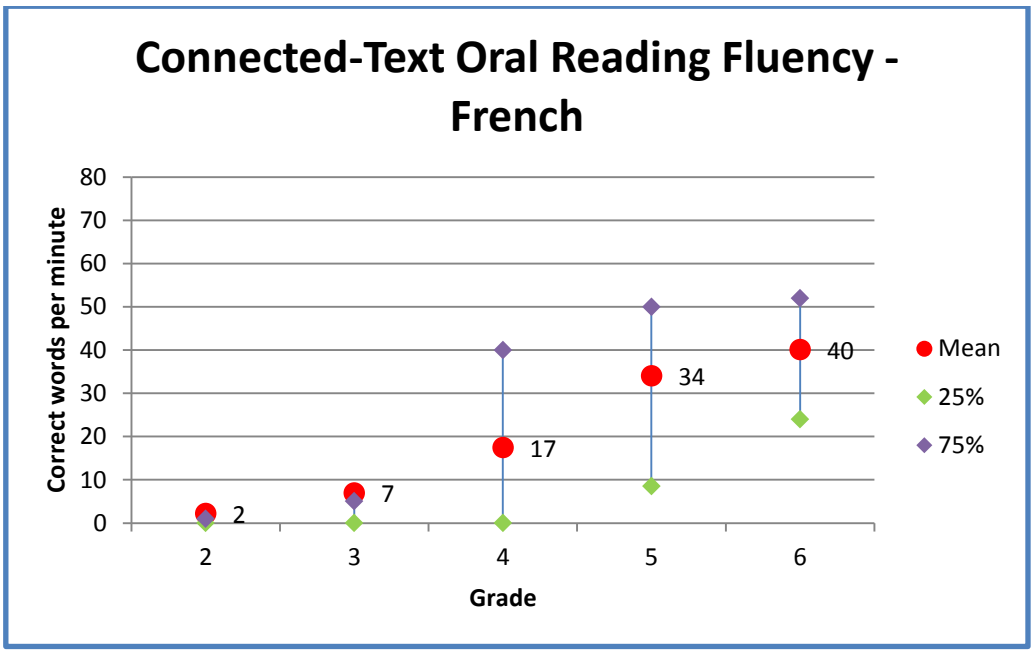
In this test children were asked to independently read a simple text of eight sentences, aligned to grade 2 level. Five comprehension questions were then asked, based on the text, requiring lower-order responses (recalling facts from the story, not requiring inference/judgment/opinions).

The charts below show the mean reading speeds of children in Creole and French, per grade. Scores are marginally higher in Creole, but still very low. **Mean reading speeds for children in grades 1-3 are too slow to achieve any comprehension from the text** – a reader in grade 3 takes on average 6 seconds to read one word, so they will have forgotten the first words by the time they finish reading a sentence. By grades 5 and 6 students do achieve an acceptable (yet still low) reading fluency. However, the text they are reading in this test is suitable for a grade 2 child, indicating that **students in grade 6 are reading a grade 2 passage at an acceptable, but low, speed**. This is not aligned to the complex standard of text required in a grade 6 textbook. In all grades, including grade 5 and 6, there were children who scored zero, unable to read a single word correctly.

Unsurprisingly, comprehension scores were low across all grades in both Creole and French. Again, scores were slightly higher in Creole**. In Creole, the vast majority of children from grades 1-4 could not answer a single question correctly**. In grade 6, 37% of children answered all five questions correctly, but there were still 22% who could not answer any questions correctly. Scores in French were similarly spread, but slightly lower for all grades.

[1] Hasbrouck, J., Tindal, G.A., 2006. Oral reading fluency norms: a valuable assessment tool for reading teachers. The Reading Teacher 59, 636–644.
[2] Kenya: 55-99 cwpm; Ethiopia: 60-75 cwpm; Gambia 50 cwpm;
[3] Abadzi, H. (2006) *Efficient learning for the poor: insights from the frontier of congnitive neuroscience.* World Bank.
[4] Liberia and Rwanda have set interim targets of 45 cwpm for their national literacy interventions.





Sub-test 8: Dictation

Reading and writing are complementary literacy skills – children learn to read by writing; they learn to write by reading. In this sub-test students were asked to write a brief sentence (6 words) which was read to them three times in total. The sentence was aligned with grade 2 standard Creole, and another in grade 2 standard French. In Creole, looking at all children who took the test, **only ten children out of 366 could write the full sentence correctly** (*Josef ap danse bo lari a*). 78% of grade 2 students and 54% of grade 3 students could not write a single word from the text. In grades 5 and 6 the mean scores were 3 and 4 correct words written respectively. In French scores were marginally lower but similar across each grade. Assessors reported that some children did write random words, unrelated to the sentence read to them, indicating that they have learned some letter formation and practiced writing without linking this to the meaning of the text (e.g. copying text from the blackboard).

Sub-test 9: Listening comprehension

To assess children's oral language skills, they were read a short story (grade 2 level) and asked five questions relating to the text. In Creole, the mother-tongue of 95% of the children tested, scores were high across all grades. In total, 44% of children tested answered all five questions correctly and 34% answered four questions correctly. **High scores**

in the children's Creole oral language skills are very positive – this indicates the full potential the children have for learning further literacy skills (reading and writing) if taught effectively.

Listening comprehension scores in French were much lower. 62% of children could not answer any question and only 1.6% of children gave the correct response to all five questions. In grade 6, when all textbooks and instruction are officially through the medium of French, the mean score was just 2 correct questions out of 5 on a grade 2 level text. These results demonstrate that **the children do not understand oral French** and therefore need explicit instruction on French as a second language.

1. INTRODUCTION

1.1. PROGRAM BACKGROUND

Concern Worldwide in Haiti has been working in the commune of Saut d'Eau since the year 2002. After completing a contextual analysis in February 2012, the organization began the implementation of a new four year (2012-2015) multi-sector program. The aim of this intervention is to address Concern's three dimensions of poverty (lack of/low return on assets; inequality; risk and vulnerability) through directly targeting households and extremely disadvantaged communities with Education and Food Income Markets components. As seen from the results of the Contextual Analysis, poverty in the Saut d'Eau commune is multi-dimensional, resulting from a lack of public investment, infrastructure and services, compounded by exposure to natural and man-made risks and social inequalities.

Nationally the education system is 85% to 90% controlled by the private sector. State investment in education has been sporadic and poor over recent decades, resulting in an inappropriate supply of state funded school buildings, and a large private sector which operates almost ungoverned and unsupervised by the Ministry of Basic Education (MENFP); in terms of workforce, there is a low percentage of properly qualified and appropriately experienced teachers, and a demoralized majority which receives a low salary, with few professional training and further education opportunities; in schools. The supply of teaching and learning materials is inappropriate and insufficient. Education is provided on a business model whereby only those who have the financial means to pay for quality school access are fulfilling their right to education, thus creating barriers to access and retention for students from poorer and vulnerable households.

Basic education which is available, accessible, and appropriate remains the key challenge of the government. The situation of Saut d'Eau is not an exception to this rule. The commune has 76 registered primary schools. Roughly 10% of these are state-funded and state-managed national schools.

Three particular zones of intervention were identified in the Contextual Analysis as falling in line with Concern Worldwide's mandate of working with the extreme poor; these are Riviere Canot, Montagne Terrible and specific sections of La Selle. Access to education for residents of these zones is a great challenge for the following reasons; financial barriers, poor availability of education infrastructure and facilities, classroom overcrowding, poor quality teaching and learning in schools, low value of the benefits of education among certain members of the community, high levels of risks of violence in schools, few employment opportunities in the formal sector after graduation from education. In terms of Ministerial support, the creation of a post for an inspector of MENFP based in and in charge of the 70 schools in Saut d'Eau was obtained a few years ago; and in recent months a second inspector was appointed. Unfortunately the inspectors are poorly resourced and find it challenging to fulfil their role of supervision of teaching and learning practices in schools. Visits are generally used for data gathering purposes rather than for providing pedagogical support to the teachers and school management.

For many residents, education is recognized as a means to escape poverty, to increase the personal economic and social opportunity of an individual and their dependents. Many adults appreciate the increased social capital of investing in their child or children's education for increased personal and social status and are prepared to make personal and financial sacrifices to enable their children to enrol and attend school.

Due to the large rural population and sparse supply of schools many adults in the zone have little if any formal education. Experts, skeptics and analysts from the field of education are united in their argument that literacy is the key to unlocking an individual to the world of learning. Literacy in mother tongue is the cornerstone of this process. Once this has been mastered, the teaching of literacy in additional languages can take place at a more succinct pace before widening the students learning opportunities through exposure to the national curriculum.

During a review of Concern's education programme in November 2011 it was decided that improving the quality of education was the highest priority. Extremely poor standards of quality teaching and learning were observed, particularly in literacy instruction in Creole and French. This analysis formed the basis for planning the Education component of the multi-sector Irish Aid program intervention.

1.2. PROGRAM GOAL AND EXPECTED OUTCOMES

The program was designed to address the multi-dimensional nature of poverty in Saut d'Eau, focusing simultaneously on assets and return on assets, inequality, risk and vulnerability. The key outcomes and outputs of the project per category are the following:

- Assets and return on assets:
    a. Improved literacy learning outcomes at primary school level
        i. Standardized Creole reading curriculum implemented in 30 target schools
        ii. Children in targeted schools have access to ability and gender[5] appropriate literacy education
    b. Improved capacity of representative associations to achieve better results for the extreme poor
        i. Improved management capacity of rural associations (PTAs, Parent Teacher Associations)
        ii. Inclusive primary education is promoted through active PTAs
- Inequality:
    a. Improved accountability of schools to provide quality education to the extreme poor
        i. Relevant School's Code of Conduct is operational
        ii. Parents have increased information regarding the education quality/teaching practices in targeted schools
- Risk and vulnerability:
    a. Increased resilience of rural communities to man-made risks
        i. Decreased levels of violence (including corporal punishment) in target schools
        ii. Improved knowledge of safe sexual practices and family planning methods
    b. Increased resilience of rural communities to natural disasters
        i. Improved capacity of target schools and education staff to appropriately respond in case of natural disaster

The impact of the program activities will be measured against the following indicators:

a. Increase in attendance rate of students (disaggregated by sex)[6]
b. **% increase in reading fluency in Creole in Grade 3 (disaggregated by sex) in targeted schools**
c. Number of positive changes introduced to the national curriculum for literacy education in primary schools
d. % of PTAs monitoring and reporting time-on-task
e. % of targeted schools with mechanisms in place to facilitate access for children from poor households
f. Increase in attendance rate of teachers (disaggregated by sex and school)
g. % increase in grade retention rates of children (tracking girls and extremely poor HH) each school year
h. % of children reporting experiencing corporal punishment at school in the last two weeks
i. % of schools with disaster preparedness and response plans

1.3. OBJECTIVE OF THIS EGRA

The main purpose of this study is to generate quantitative baseline information to measure progress against indicator (b) above. In addition to measuring children's reading fluency, sub-tasks of EGRA provide data on children's skills during the progressive steps towards reading fluency and comprehension. This is important for programme planning and for formative assessment – we can map children's progress through the stages of learning to read, and we can identify the skills that need more attention during each academic year.

[5] Gender appropriate refers to education that does not reinforce existing gender stereotypes
[6] Education is prioritised in Haitian society; therefore this indicator was added as a sign of improved income.

1.4. Early Grade Reading Assessment tool

The Early Grade Reading Assessment (EGRA) is a 15-20 minute test administered orally to students in the early grades of primary school. EGRA evaluates students' foundation literacy skills, including pre-reading skills like phonemic awareness and listening comprehension, which have been shown to predict later reading abilities. As this is an oral test, we can test young children who are not ready to independently sit a paper-and-pencil test. Their emergent literacy skills are tested and the intervention focuses on the foundations of literacy. The benefit of this is that we can address their learning needs at the right point in time, rather than waiting until the end of primary school to test children, and finding out that they cannot read and write at that stage.

Due to Concern's positive experience in using EGRA to demonstrate results in other contexts and the availability of EGRA in Creole and French for the Haitian context, EGRA was chosen as the tool for the baseline evaluation. Other institutions working in Haiti, notably RTI, in a USAID-funded program, and Catholic Relief Services used the same revised version of the test in late 2012 for their baseline studies. This version of the test is a revision of the initial one that was produced for a program involving the Ministry of Basic Education (MENFP), World Bank, Save the Children and Research Triangle Institute in 2008.

Tangerine™ is electronic data collection software designed by RTI for use on mobile computers, including netbooks, tablet computers and smartphones. Its primary use is to enable recording of students' responses in Early Grade Reading Assessments (EGRA) and Early Grade Mathematics Assessments (EGMA), and interview responses from students, teachers and principals on home and school context information. Concern Haiti decided to conduct EGRA with Tangerine because of the advantages of improved data precision and time saving in data entering and analysis.

1.5. Study Design and Methodology

Geographical Selection for the baseline

Aligned with Concern's programme management cycle, the Multi-Sectorial Rural Development Programme will be assessed at baseline, at mid-term and at the end of the intervention period. During the first year of implementation only twelve schools in Riviere Canot, Saut d'Eau, will participate in the programme. The second year will continue to work with the initial cohort of twelve schools, but will expand to a further eighteen, in Montagne Terrible. This baseline was conducted in the initial cohort of twelve schools (a second baseline will cover the second cohort in the 2013-2014 school year).

The study does not include non-intervention or control schools. The decision to include only programme schools was based on ethical and practical considerations. Concern has worked in Saut d'Eau for many years and the Contextual Analysis conducted in 2012 provides a rich data set from which target communities were selected. We have a strong evidence base that the schools selected are located in the poorest and most marginalised communities. The objective of this baseline is not to conduct research that is generalisable to the wider Haitian population, it is to assess the effectiveness of Concern's intervention in improving children's literacy levels in this particular cohort of extremely poor and disadvantaged communities. We decided not to test students in non-intervention schools as we would be gathering data on students' poor literacy levels without any resources to address the problems identified. This also has financial implications, leaving more funding available for the implementation of the programme.

Adaptation of the EGRA tools

The EGRA tools selected for this intervention were developed, field-tested, validated and used by RTI in the USAID-funded TOTAL programme. Concern maintained the literacy sub-tests as they were designed. Adaptations were as follows:

- The EGRA tools were developed for use in grades 2 and 3. We decided to use the tools in all grades (grade 1-6), due to the high levels of illiteracy observed in upper grades. For grade one students the full Creole EGRA was given, but only the listening comprehension sub-test of the French EGRA.
- Demographic survey questions at the beginning of the test were adapted to align with Concern's indicators. As a small-scale baseline assessement, some of the demographic information was not necessary.
- Survey questions at the end of the test were adapted and questions were added relating to other indicators. For example, questions were asked about children's knowledge about what to do in the event of an earthquake or a cholera outbreak. Findings from the additional survey questions are not included in this report – they are presented in Concern's overall programme baseline.

BASELINE EGRA SUBTASKS

These EGRA tools assess a set of skills critical to early literacy acquisition. The sub-tasks below were asessessed in both Creole and French. Each of the sub-tasks was clearly explained with explanations, examples and prompts in Creole scripted in the test for assessors to use.

Instrument Sub-task	Skill demonstrated by students' ability to:
1. *Letter-naming fluency*	Read the most commonly occurring letters of the alphabet. This is a timed test to record the number of letters correctly named per minute.
2. *Initial sound recognition*	Identify the first sound in a word – phonemic awareness. The assessor reads a word aloud and asks the child to say the sound of the first letter.
3. *Letter-sound fluency*	Say the sound of each letter fluently. Children were presented commonly occurring letters in a timed test. This was scored as the number of "letter sounds" said correctly per minute.
4. *Familiar word reading fluency*	Identify words that occur frequently and children have likely seen before. This is a timed test scored as number of familiar words read correctly per minute.
5. *Invented word oral reading fluency*	Process words that could exist in a given language but do not. These are made-up words and hence unfamiliar to children. The objective of using nonwords is to assess the child's ability to decode words fluently and efficiently. This subtask is measured by counting the number of invented words read correctly per minute.
6. Connected-text oral reading fluency:	Read a simple story. The story was presented on the student stimuli (large, simple font printed on a laminated page for the child to hold). This is a timed test measuring words read correctly per minute.
7. Reading comprehension in connected text:	Answer several comprehension questions based on the passage the pupil read in sub-task 6. Five questions are asked and the score is provided as the "percentage correct".
8. Dictation of a short sentence	Write a sentence read aloud to the child by the assessor. A six word sentence is read slowly and clearly three times, with extended pauses between words during the second reading. The score is presented as the % of words written correctly.
9. Listening comprehension in connected text	Answer several comprehension questions based on a passage read to the child by the assessor. Five questions are asked and the score is measured as "percentage correct"

SAMPLING

The sample design was based on enrolment data for the 12 schools, which is provided below, disaggregated by sex and grade:

	1st grade	2nd Grade	3rd grade	4th grade	5th grade	6th grade	Total
Female	302 (50.8%)	235 (48.2%)	234 (49.2%)	200 (46.8%)	145 (45.9%)	79 (49%)	**1195 (48.5%)**
Male	293 (49.2%)	253 (51.8%)	242 (50.8%)	227 (53.2%)	171 (54.1%)	82 (51%)	**1268 (51.5%)**
Total	**595**	**488**	**476**	**427**	**316**	**161**	**2463**

The sample size for each school was decided as 20% of students in grades 1-4, but for grades 5-6 100% of children were tested due to the small class sizes. The sample size intended was 500 students in total.

However, the discrepancy between the number of children enrolled and those present skewed the sampling process. For various reasons, including unofficial school closures and general poor attendance, it was difficult to fulfil the sample size at times. The sample size was further skewed by poor record-keeping at school level – children enrolled

in the PSUGO classes[7] were registered as grade 1, 2 or 3 students. There was an attempt to sample children in the mainstream classes only, but this was not possible due to the mixing of classes, so results include children from both systems.

The actual sample size of 366 students is presented below:

	1st grade	2nd Grade	3rd grade	4th grade	5th grade	6th grade	TOTAL
Female	32 (54.2%)	35 (42.2%)	39 (47%)	28 (43%)	20 (41%)	12 (44.4%)	**166 (45.4%)**
Male	27 (45.8%)	48 (57.8%)	44 (53%)	37 (57%)	29 (59%)	15 (55.6%)	**200 (54.6%)**
TOTAL	**59**	**83**	**83**	**65**	**49**	**27**	**366**

Gender parity ratio: It is important to note that the gender parity ratio becomes more disparate when attendance is taken into consideration. The enrolment figures indicate a gender parity ratio of 0.94. When sampling was based on those *present* in the classroom, the gender parity ratio in the sample size was 0.83. As part of the wider baseline and the programme monitoring system, the education programme will track student enrolment and student attendance rates each month. Improving attendance rates of girls and boys is a clear objective of the programme, and underlying reasons for lower attendance of girls will be examined.

Age range of students: The government of Haiti defines children as *overage* if they are older than the correct age for the grade in which they are registered by more than 24 months. For example, the official age for a grade 1 student is six years old, so a child aged nine or older is classified as 'overage' for that grade. The sample in this study were asked their age (and their year of birth separately). The sample ranged from 6 years old (12 students) to 20 years old (3 students). Nineteen year old students were found in classes from grade 2 upwards. The table below shows the age range of students per grade:

TABLE 1: AGE OF CHILDREN TESTED BY GRADE

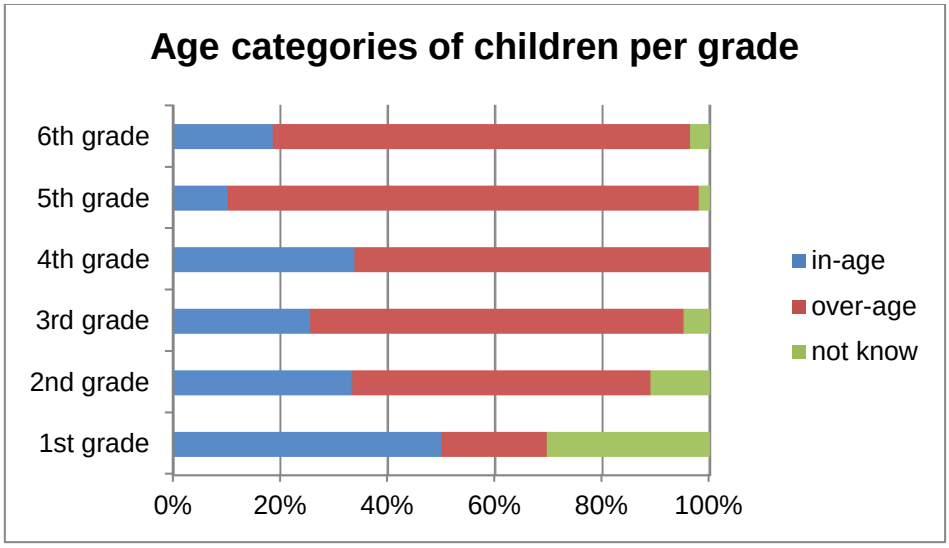
Age in years	1st grade	2nd grade	3rd grade	4th grade	5th grade	6th grade	TOTAL
6	10	2	-	-	-	-	**12**
7	10	7	2	-	-	-	**19**
8	8	10	6	1	-	-	**25**
9	3	8	6	3	-	-	**20**
10	5	14	7	10	2	-	**38**
11	3	2	9	8	2	2	**26**
12	-	7	19	8	1	1	**36**
13	-	8	7	7	8	2	**32**
14	-	6	8	6	6	3	**29**
15	-	3	10	12	3	2	**30**
16	-	2	-	2	12	2	**18**
17	-	2	1	4	8	3	**18**
18	-	-	2	2	4	8	**16**
19	-	1	1	2	1	1	**6**
20	-	-	-	-	1	2	**3**
Do Not know	17	9	4	-	1	1	**32**
TOTAL	**56**	**81**	**82**	**65**	**49**	**27**	**360**[8]

In grade 1 almost 20% of students are overage. This increases significantly in grade 2 to 55%, and then 74% in grade 3. This indicates very high repetition rates in lower primary school – repetition rates will be monitored within the

[7] PSUGO = Programme de Scolarisation Universale Gratuit et Obligatoire. This is an initiative of President Martelly to provide government-funded free basic education to extremely poor children previously outside of the education system. The initiative started in 2011/2012 and usually involves one additional class per school in Concern's target communities.

[8] Age profiles of six students in grades 1-3 were removed during data cleaning as invalid.

programme monitoring system. The graph below categorises children into three categories – those within the official age for their grade, those classified as 'overage' and those who did not know their age:



Language: Out of a total of 360 respondents, 343 (95.3%) use Creole as the language of communication at home. 13 children said they speak French at home (3.6%) and only 4 children reported speaking another language.

Home background: Data was collected relating to assets and practices in the home that can contribute to a more literate environment. Data below was reported by children, and may not be very reliable (they may not know the literacy skills of their parents, for example). However, it does provide contextual data for programme design:

- 69% of children reported that their parents can read; 29% said their parents cannot read; 1.4% no response
- 71% of children said there are no books (other than textbooks) available at home; 28% said there are books available at home; 1% no response
- 64% of children reported that there is a radio in their home

Data Collection

Concern data collectors included four Teacher Trainers and a Protection Officer. The Education Manager, Education Adviser and Assistant Country Director-Program served as Supervisors. Three staff from the Ministry of Education (MENFP) (inspectors/pedagogical advisors) were involved in the data collection along with Concern's staff. Two of the inspectors are based in the Mirebalais District Education Office, and the third is based in Saut d'Eau. The inspectors participated in the data collection for eight days. Three education inspectors from the Central Department Education Office in Hinche also participated in the EGRA training, but they were not involved in the data collection because the purpose of their participation in the training was only to introduce them to EGRA methodology.

Training was provided by RTI for management staff within Concern on the use of Tangerine when conducting an EGRA. Training content focused on the use of the Tangerine online wizard, creating and editing the test, uploading and synchronizing data on the Tangerine server, data cleaning and analysis. A 4.5 day assessor training was conducted in Saut d'Eau for all data collectors, which included training in the content of EGRA (early grade literacy training) and training in the use of Tangerine to conduct an EGRA. Two field tests were conducted in non-programme schools to identify problems with assessors, tools and digital gathering devices.

The initial timetable for the data collection was November 27th - Friday December 7th. This timeline was later extended as it was not feasible to complete all the tests in this period. The final day of testing was December 14th. As per the timetable, the group worked either as a party of eight people or as two separate groups in two different schools. The enumerators arrived in the target school before the beginning of the school day, to be able to identify a quiet, shaded spot where the test could take place, so that the student sampling process could begin as promptly as possible after the beginning of the first class. In schools where teachers reported that children regularly arrive late, the supervisor would delay the sampling process by 15-20 min, to avoid under-sampling.

2. CREOLE TEST RESULTS

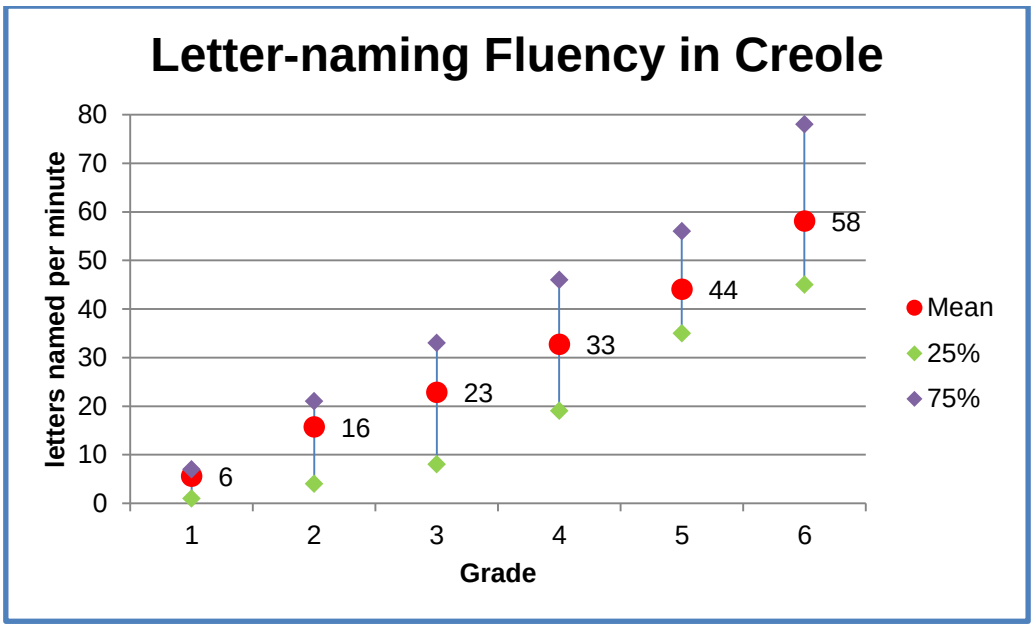
2.1. LETTER-NAMING FLUENCY

Testing the ability to read the most commonly occurring letters of the alphabet. This is a timed test to record the number of letters correctly named per minute.

Table 1: Number of letters correctly named per minute, by grade and sex

Sample: 366	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	5.56	15.73	22.83	32.74	44.06	58.07
Mean – Fem.	5.84	16.6	21.64	28.89	42.45	64
Mean - Male	5.22	15.1	23.88	35.65	45.17	53.26
Minimum	0	0	0	0	8	18
Maximum	32	82	67	77	79	92
1st Quartile	1	4	8	19	35	45
3rd Quartile	7	21	33	46	56	78
Stand. Dev.	6.05	17.40	17.19	18.74	19.31	19.99

Chart 1: Letter-naming fluency by grade:



There is clear progression in the speed of children's letter identification as they move through each grade. However, scores are very low. Letter-name identification is a pre-reading skill that should be learnt in the first year of formal schooling and mastered by the second year. Scores demonstrated in Grade 6 are acceptable in average, while scores for Grade 2 students are extremely low – in other words children are not mastering letter-name recognition until the end of primary school.

Note: scores for Grade 1 are expected to be low as these children are just starting formal education (term 1 of year 1).

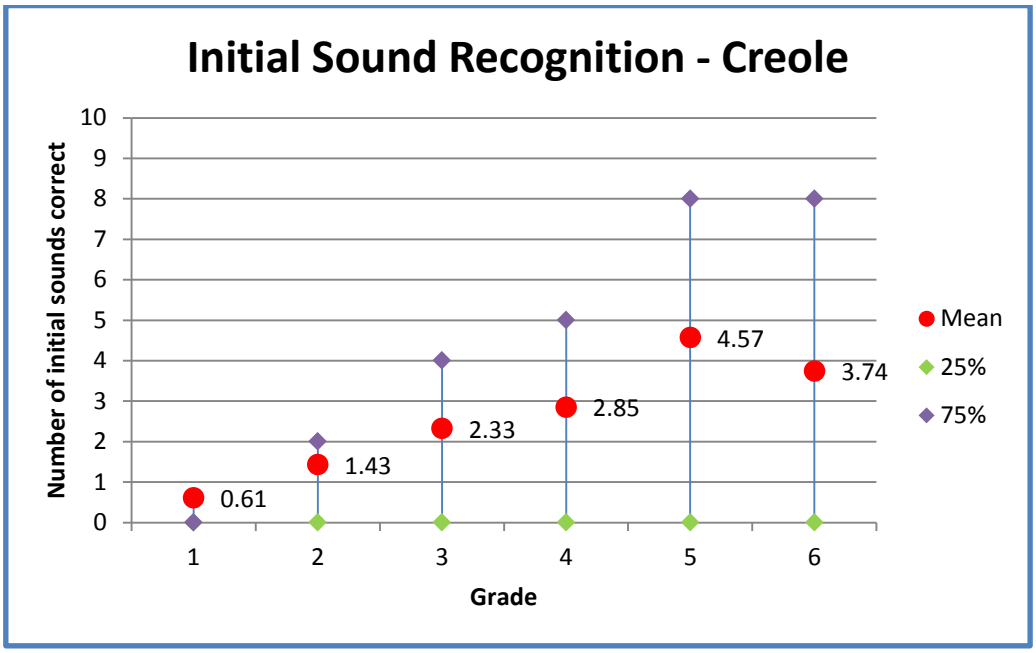
2.2. INITIAL SOUND RECOGNITION

Testing the ability to identify the first sound in a work – phonemic awareness. The assessor reads a word aloud and asks the child to say the sound of the first letter. This is scored as the number of initial sounds correctly identified out of ten.

Table 2: Initial sound recognition (out of 10) by grade and sex

Sample:366	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.61	1.43	2.32	2.85	4.57	3.74
Mean F	0.59	1.6	2.87	3.21	4.45	3.92
Mean M	0.63	1.31	1.84	2.57	4.66	3.6
Minimum	0	0	0	0	0	0
Maximum	9	10	10	10	10	10
1st Quartile	0	0	0	0	0	0
3rd Quartile	0	2	4	5	8	8
Stand. Dev.	1.93	2.76	3.7	3.48	3.86	4.06

Chart 2: Initial sound recognition (out of 10) by grade:



Most children in grades 1-3 scored zero on this test – 88% of grade 1 students; 65% of grade 2 students; and 61% of grade 3 students could not identify the first sound correctly in any of the words provided. Even towards the end of primary school many children have not learnt this skill – 48% of grade 4 students; 27% of grade 5 students and 37% of grade 6 students had zero scores. Although there is progression through the grades, it is slow and the data suggests that children, in general, do not learn pre-reading skills in phonemic awareness in the early grades of school. There is no statistically significant difference between girls and boys.

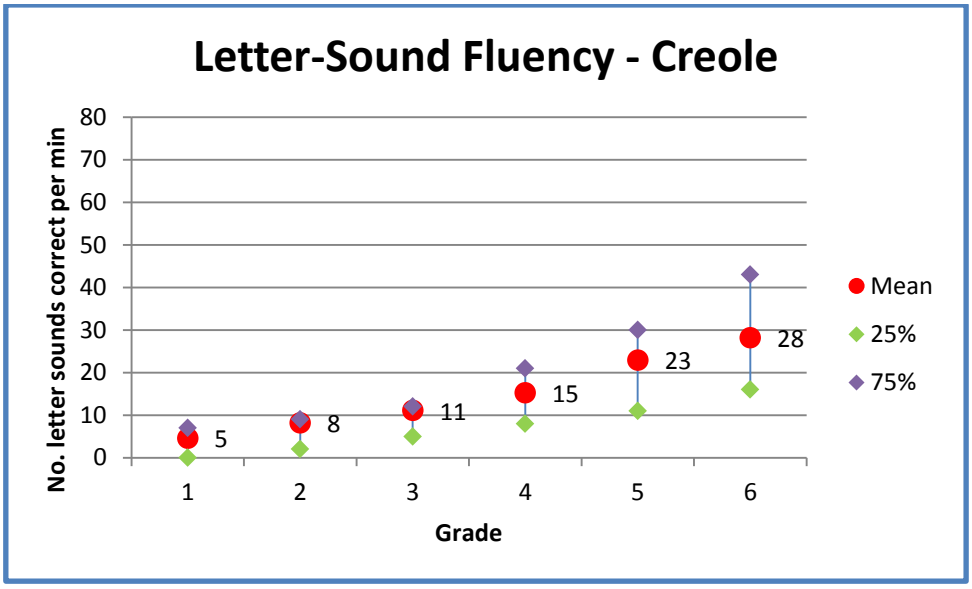
2.3. LETTER-SOUND FLUENCY

Testing the ability to say the sound of each letter fluently. Children were presented commonly occurring letters in a timed test. This was scored as the number of "letter sounds" said correctly per minute.

Table 3: Number of letter sounds said correctly per minute by grade and sex

Sample: 365	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	4.6	8.2	11.1	15.3	22.9	28.2
Mean Fem.	5.34	9.51	11.66	16.32	21.55	25.66
Mean Male	3.66	7.25	12.66	14.48	23.9	30.2
Minimum	0	0	0	0	0	7
Maximum	26	65	99	66	96	73
1st Quartile	0	2	5	8	11	16
3rd Quartile	7	9	12	21	30	43
Stand. Dev.	4.55	10.48	11.33	10.93	17.56	19.09

Chart 3: Number of letter sounds said correctly per minute by grade



This sub-task measures a child's ability to link each to the sound that it represents. Scores are very low across all grades for this task, indicating that individual letter sound recognition is not a skill acquired during the early stages of literacy acquisition. This may be linked to the tradition of syllabic instruction in Haiti (learning a consonant-vowel combination, rather than learning individual letter sounds) or may be indicative of a deeper problem of a lack of phonetic instruction at all. When compared to scores for letter naming fluency (sub-test 1) it is clear that children are more skilful at naming the letter than providing the letter sound.

While progression is visible as children move through grades, the rate of progression is slow and grade 6 students are under-performing at an early literacy skill. There is no statistically significant difference when disaggregated by sex.

2.4. FAMILIAR WORD READING FLUENCY

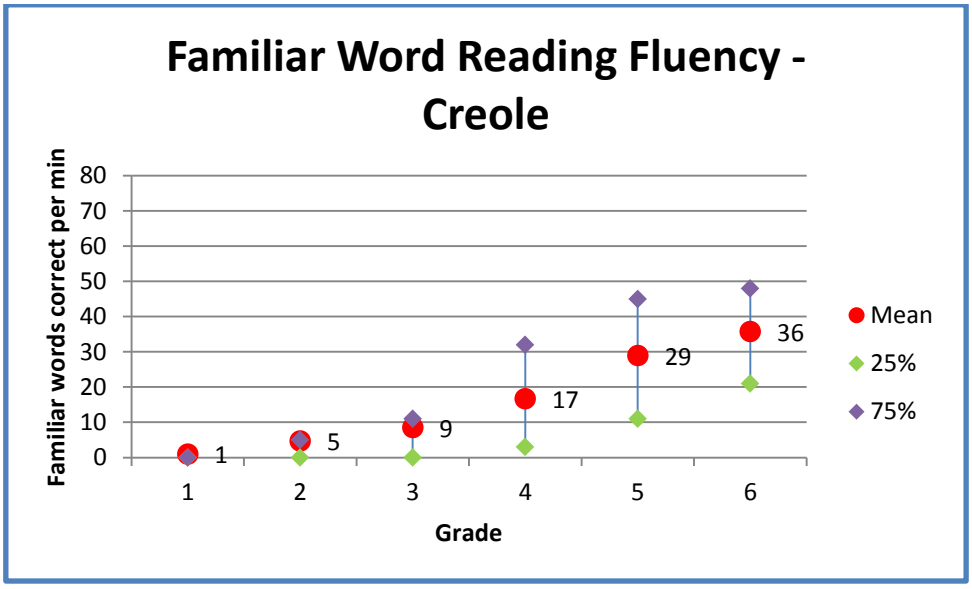
Testing the ability to identify words that occur frequently and children have likely seen before. This is a timed test scored as number of familiar words read correctly per minute. The words listed are not connected in any meaningful way – they are individual words randomly displayed in a table.

Table 4: Number of familiar words read correctly per minute, by grade and sex

Sample: 365	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.96	4.69	8.53	16.7	29	35.8
Mean F	1.06	6.69	7.51	14.75	26.69	40.37
Mean M	0.85	3.23	9.43	18.19	30.57	32.15

Minimum	0	0	0	0	0	0
Maximum	11	49	46	77	75	73.17
1st Quartile	0	0	0	3	11	21
3rd Quartile	0	5	11	32	45	48
Stand. Dev.	2.56	10	11.96	17.49	19.87	18.31

Chart 4: Number of familiar words read correctly per minute, by grade



Again, clear progression can be seen as children move up through each grade. In grade 2, 59% of students score zero – more than half of the students tested could not read a single word correctly and only 2% of students can read more than 40 words correctly per minute. In grade 3 more than a third of students (37%) still score zero, and only 2% can read more than 40 words correctly per minute. By the end of primary school the balance shifts – in grade 6 only 4% of students score zero and 48% can read more than 40 words correctly per minute. However, that is less than half of grade 6 students and is still very low, with a mean score of just 36 cwpm (standard deviation 18.31). Considering the simplicity of the words provided (words found frequently in a grade 2 textbook), it is clear that the majority of students in primary school do not have grade-level appropriate sight vocabulary.

There is no statistically significant difference when disaggregated by sex.

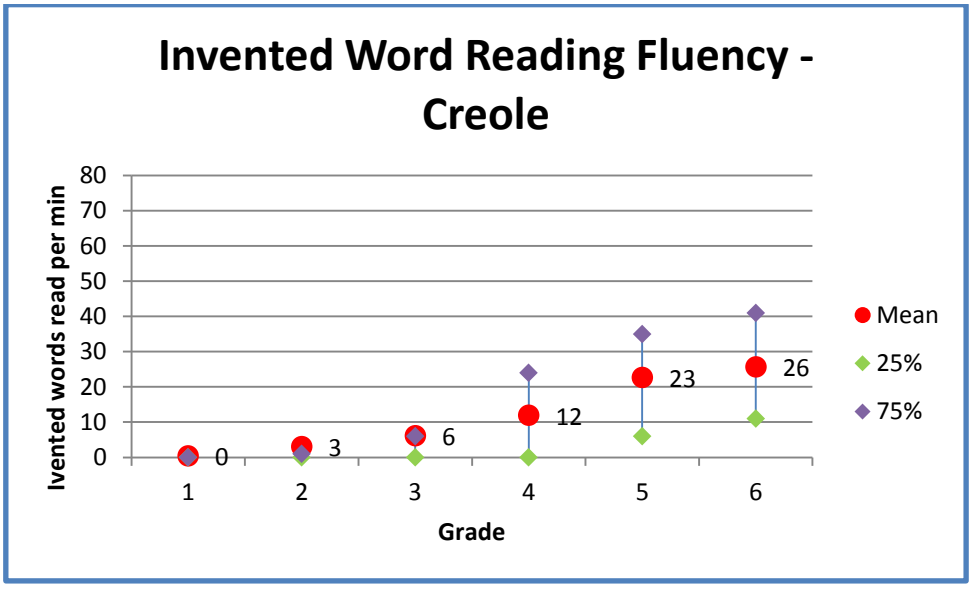
2.5. INVENTED WORD ORAL READING FLUENCY

Testing the ability to process words that could exist in a given language but do not. These are made-up words and hence unfamiliar to children. The objective of using nonwords is to assess the child's ability to decode words fluently and efficiently. This subtask is measured by counting the number of invented words read correctly per minute.

Table 5: Number of invented words read correctly per minute, by grade and sex

Sample: 366	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.42	3.13	6.14	11.95	22.69	25.74
Mean F	0.43	3.71	5.1	10.21	20.35	29.41
Mean M	0.4	2.7	7.07	13.27	23.82	22.8
Minimum	0	0	0	0	0	0
Maximum	10	38	45	49	63.82	49
1st Quartile	0	0	0	0	6	11
3rd Quartile	0	1	6	24	35	41
Stand. Dev.	1.83	8.08	10.23	14.9	16.81	16.2

Chart 5: Number of invented words read correctly per minute, by grade



This sub-test is indicative of a child's "de-coding" skills – they are presented with a word they have never learnt to read, and they use the skills of letter-sound matching to work out how to read this word. The progression rate through the grades is aligned with results for sub-test 3 (letter-sound fluency) – the ability to de-code new words is limited to by students' poor skills at linking individual letters to sounds.

In grade 2, 75% of children scored zero and no students (0%) scored 40 cwpm or higher. In grade 3, 47% of students scored zero and only 2% scored 40 cwpm or higher. By grade 6 the balance shifted but one in ten students still scored zero, while 26% scored 40 cwpm or higher. There is no statistically significant difference when disaggregated by sex.

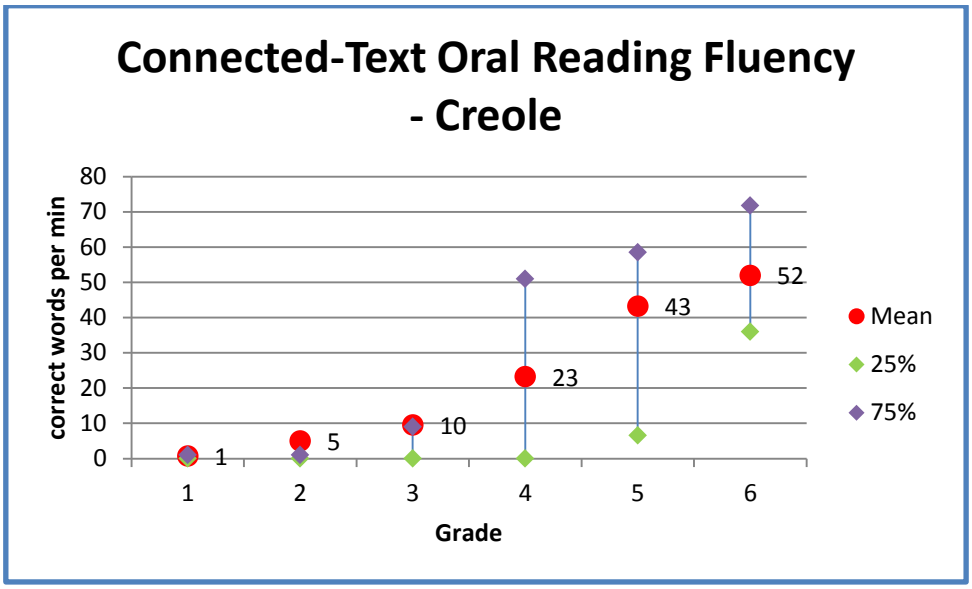
2.6. CONNECTED-TEXT ORAL READING FLUENCY

Testing the ability to read a simple story. The story was presented on the student stimuli (large, simple font printed on a laminated page for the child to hold). This is a timed test measuring words read correctly per minute.This is a key sub-test in terms of measuring reading levels.

Table 6: Number of words read correctly per minute, by grade and sex

Sample: 364	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.7	5	9.56	23.22	43.22	52
Mean F	0.69	5.80	7.62	19.42	38.56	66.28
Mean M	0.7	4.40	11.29	26.1	46.57	41.54
Minimum	0	0	0	0	0	0
Maximum	10	63.1	87.14	87.14	104.57	107.64
1st Quartile	0	0	0	0	6.5	36
3rd Quartile	1	1	9	51	58.5	71.76
Stand. Dev.	1.86	13.87	19.08	27.12	31.26	30.56

Chart 6: Number of words read correctly per minute



It is important to remember the level of text used for this test. Below is the Creole text that children were asked to read, with a short story about two boys playing football[9]:

> "Nan lekòl la, timoun yo renmen jwe foutbòl. Lè kon sa, yo fè de kan nan lakou a. Jozèf ak Mak toujou jwe nan menm ekip. Jedi pase, lòt ekip la bat yo twa gòl a zewo. Sa fè Mak fache. Jozèf bat do Mak, epi li di Mak, "pa fache, ekip nou an konn genyen tou". Mak dakò. Li souri"

The text in this passage is aligned to grade 2 or grade 3 standard, in which we would expect scores of 45-60 cwpm. Mean scores from grades 1-4 are very low – the mean for grades 2, 3 and 4 respectively are 5; 10; and 23 cwpm. This implies that the average child in grades 2-4 cannot read a simple text with fluency. Mean scores for grades 5 and 6 are higher, at 43 and 52 cwpm respectively. However, these scores are in the low range for fluency and they must be considered relative to the standard of the text. If the average grade 6 student reads grade 2 text at just 52 cwpm it is very unlikely that he/she can read a grade 6 level text with fluency or comprehension.

There was a significant range of scores across grades 2-6, which should be considered when interpreting these results. There were students that scored zero in all grades – 70% of grade 2 students; 50% of grade 3 students; and 35% of grade 4 students scored zero cwpm. However, there were also scores above 50 cwpm in grades 2-6. The table below provides the range of scores – it is clear from the graph that most students fall into the category of reading 0-9 cwpm or >50 cwpm. This implies that there is a cohort of students who read with good levels of fluency in each grade from grade 2 (growing each year as class sizes become smaller) and in grades 5 and 6, the majority of children can read more than 50 cwpm. However, there is a cohort of students who do not progress beyond 0-9 cwpm despite moving up through the grade system.

One possible explanation is that the quality of teaching is too low for the majority of students to learn basic reading skills. There is a small group of children who do manage to learn to read, and the teacher focuses on that cohort, rather than differentiating for the range of abilities. That cohort continues through school while many non-readers drop out, repeat, or manage to move up through the system without having their learning needs addressed.

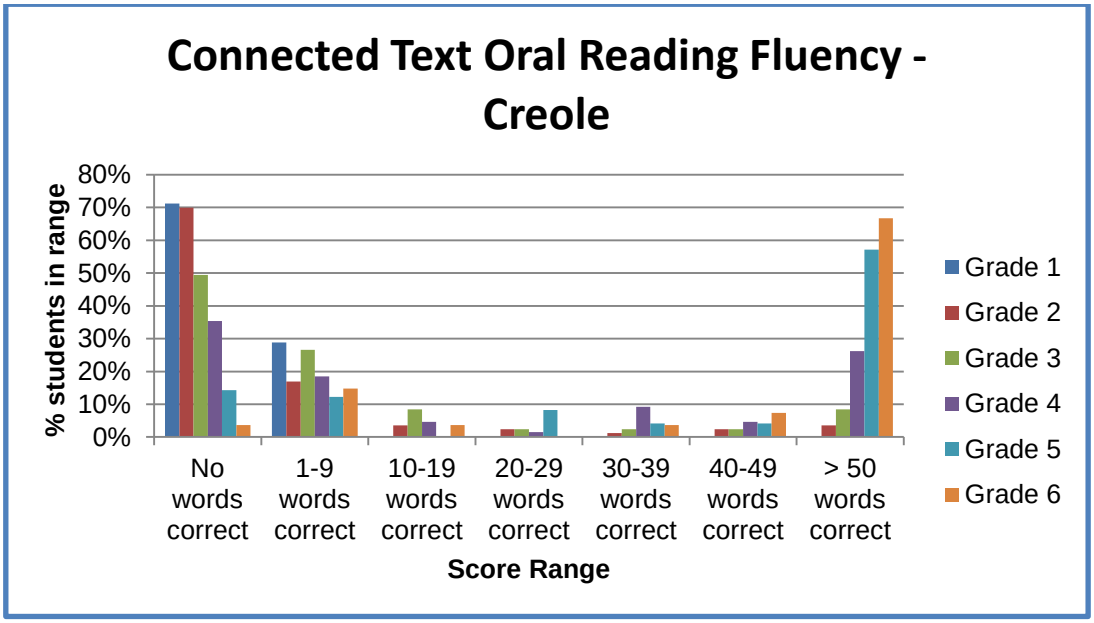
When disaggregated by sex, girls' scores were lower than boys' for grades 1, 3, 4 and 5; boys' scores were lower than girls' for grades 2 and 6. None of these differences were statistically significant, with the exception of grade 6, where boys' mean scores were 42 cwpm and girls' were 66 cwpm.

[9] The story is about two boys, Josef and Mark, who play football on the same team. One day they lose their match and Mark is angry. Joseph pats Mark on the back and tells him not to be angry, they also win sometimes. Mark agrees and smiles.

Table 7: Range of student scores in correct words per minute, by grade

Number of cwpm	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
No correct word	71%	70%	49.4%	35%	14.3%	3.7%
1-9 correct words	28.8%	16.9%	26.6%	18.5%	12.2%	14.8%
10-19 correct words	-	3.6%	8.4%	4.6%	-	3.7%
20-29 correct words	-	2.4%	2.4%	1.5%	8.2%	=
30-39 correct words		1.2%	2.4%	9.2%	4.1%	3.7%
40-49 correct words		2.4%	2%	4.6%	4.1%	7.4%
>50 corrected words		3.6%	8.4%	26.2%	57.1%	66.7%

Chart 7: Range of student scores in correct words read per minute, by grade



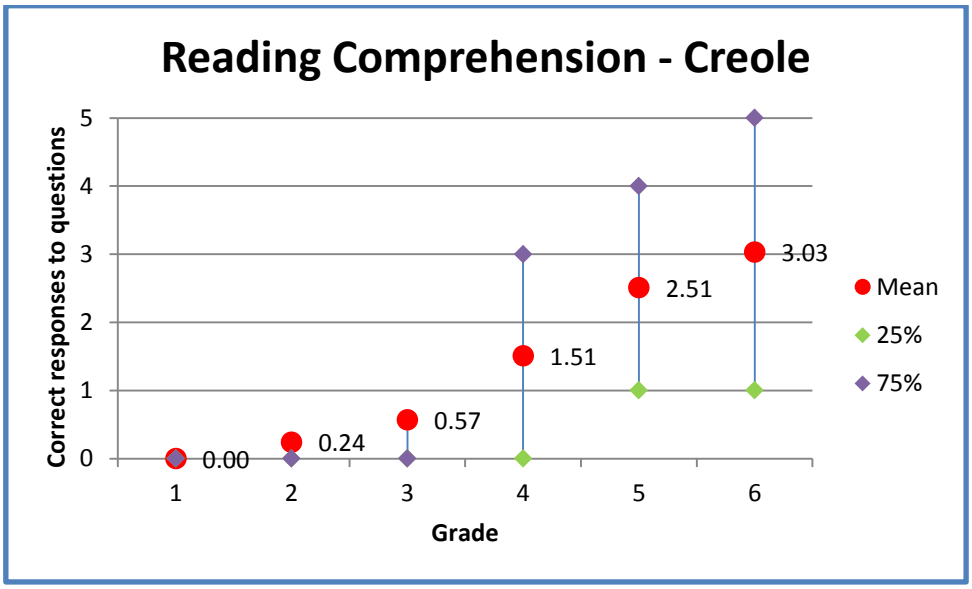
2.7. READING COMPREHENSION IN CONNECTED TEXT

Testing the ability to answer several comprehension questions based on the passage the pupil read in sub-task 6. Five questions are asked and the score is provided as the number of questions correct out of 5

Table 8: Number of correct responses (out of 5) to reading comprehension, by grade and sex

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0	0.24	0.57	1.5	2.51	3.03
Mean Fem.	0	0.34	0.41	1.32	1.9	3.92
Mean Male	0	0.17	0.73	1.65	2.93	2.33
Minimum	0	0	0	0	0	0
Maximum	0	5	5	5	5	5
1st Quartile	0	0	0	0	1	1
3rd Quartile	0	0	0	3	4	5
Stand. Dev.	0	0.89	1.23	1.88	1.86	2

Chart 8: Number of correct responses (out of 5) to reading comprehension, by grade



Based on the connected text, students were asked five comprehension questions. The questions are closed, lower-order questions directly linked to the text. The Tangerine system allowed assessors to ask questions only if a child reached a point in the text relevant to that question – if the child was unable to read any of the text, he/she was not asked the comprehension questions. Most grade 1 and 2 students could not read any of the text (scores from zero to 9 cwpm), which meant that 100% and 92% respectively were not asked any questions. These count as zero scores in the analysis above.

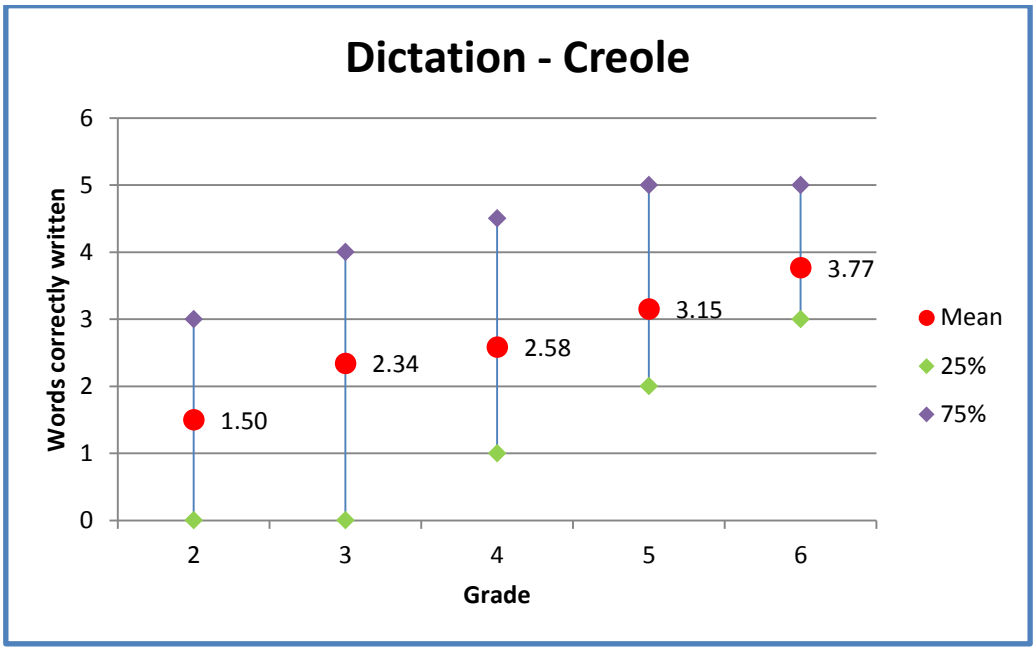
2.8. DICTATION OF A SHORT SENTENCE

Testing the ability to write a sentence read aloud to the child by the assessor. A six word sentence is read slowly and clearly three times, with extended pauses between words during the second reading. The score is presented as the number of words written correctly out of a possible 6.

Table 9: Number of words written correctly (out of 6) by grade and sex

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	-	1.5	2.34	2.58	3.15	3.77
Mean F	0	0.26	1	1.5	2.45	4.25
Mean M	0	0.38	1.14	2.22	3.31	3.13
Minimum	-	0	0	0	0	0
Maximum	-	6	6	6	6	6
1st Quartile	-	0	0	1	2	3
3rd Quartile	-	3	4	4.5	5	5
Stand. Dev.	-	2.09	2.01	1.98	1.77	1.70

Chart 9: Number of words written correctly (out of 6) by grade



For this task children are asked to write a six-word sentence (Jozèf ap danse bò lari a). If a word is misspelled, or if an accent is incorrect or missing, that word is scored as incorrect. The assessor clearly and slowly reads the sentence, then reads it a second time, pausing between each word. When the child has finished writing, the assessor reads the sentence a third time and leaves approximately 30 seconds to allow the child to make changes.

100% of grade 1 students and 78% of grade 2 students scored zero on this test. By grade 3, only one third (33%) of the sample were able write at least one word. Scores increased progressively through each grade, but results are low even in grade 6. For the entire sample (across all grades) only ten students wrote the full sentence correctly. Girls scored lower in grades 1-5, but the differences are not statistically significant. Assessors reported that some children did write random words, unrelated to the sentence read to them, indicating that they have learned some letter formation and practiced writing without linking this to the meaning of the text (e.g. copying text from the blackboard).

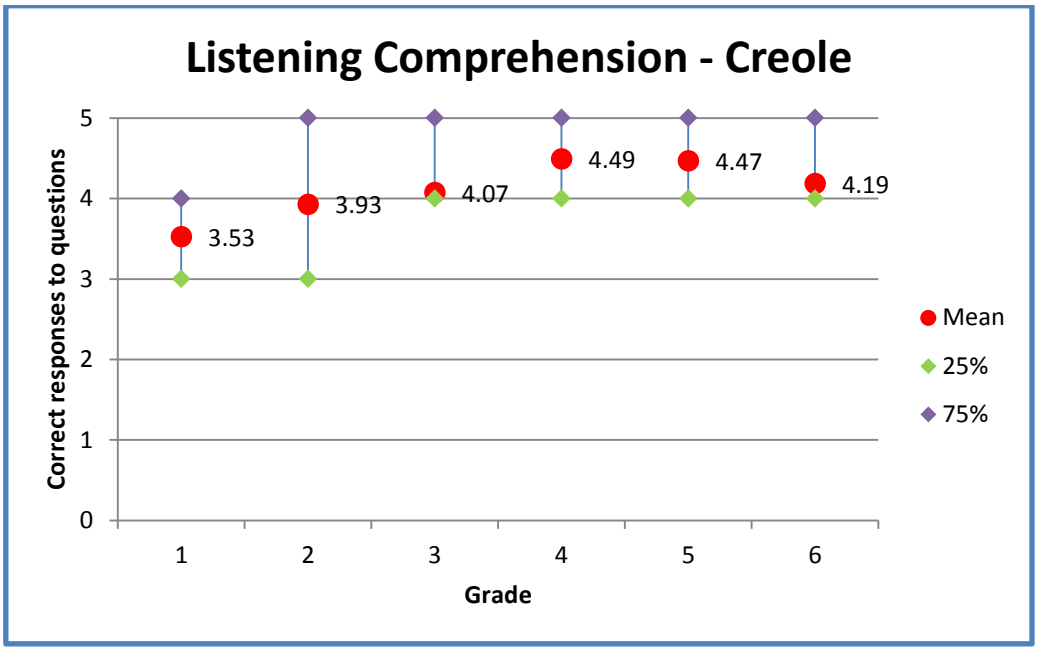
2.9. LISTENING COMPREHENSION IN CONNECTED TEXT

Testing the ability to answer several comprehension questions based on a passage read to the child by the assessor. Five questions are asked and the score is as the number of correct responses

Table 10: Number of correct responses disaggregated by grade and sex

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	3.52	3.92	4.07	4.49	4.46	4.18
Mean F	3.5	3.94	3.85	4.36	4.5	4.67
Mean M	3.56	3.92	4.27	4.59	4.45	3.8
Minimum	0	0	0	2	2	0
Maximum	5	5	5	5	5	5
1st Quartile	3	3	4	4	4	4
3rd Quartile	4	5	5	5	5	5
Stand. Dev.	1.39	1.19	1.06	0.7	0.73	1.11

Chart 10: Number of correct responses disaggregated by grade



Test scores were high for all grades in the listening comprehension test. Across the whole sample 44% of children tested scored 5 and 34% scored 4. High scores in this test are expected as Creole is the mother-tongue language of 95% of the children tested, and 100% of the sample speak Creole. This demonstrates that the children tested have language skills in Creole, but these skills have not been developed into reading and writing skills. Girls scored lower than boys across grades 1-5, boys scored lower than girls in grade 6, but only differences for grades 4 and 6 are statistically significant.

3. FRENCH TEST RESULTS

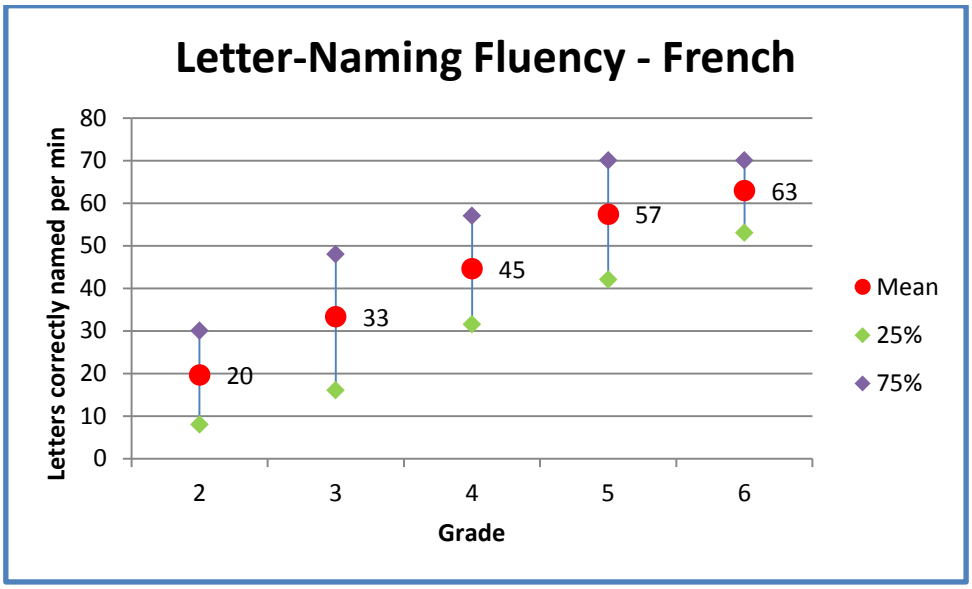
Note: Children in Grade 1 were not tested on French, with the exception of the Listening comprehension. For this reason the sample for French tests is 307 children.

3.1. LETTER-NAMING FLUENCY

Table 11: Number of letters correctly named per minute, by grade and sex

Sample: 305	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	19.6	33.33	44.61	57.36	62.92
Mean F	19.6	31.41	39.85	53	66.82
Mean M	19.6	35.04	48.21	60.38	60.06
Minimum	0	0	2	16	31
Maximum	68	93	86	99	97
1st Quartile	8	16	32	42	53
3rd Quartile	30	48	57	70	70
Stand. Dev.	16.33	21.76	19.71	19.76	15.53

Chart 11: Number of letters correctly named per minute, by grade



Scores were higher for the letter naming test in French than in Creole for all grades. Scores increased progressively through the grades, but are low for grades 2-4. This is a skill that should be mastered in year one of primary school (if in French-language medium) or in the first year of reading instruction in French. Children should not be acquiring this skill throughout their primary school education, it should be a pre-literacy skill taught fully in one year.

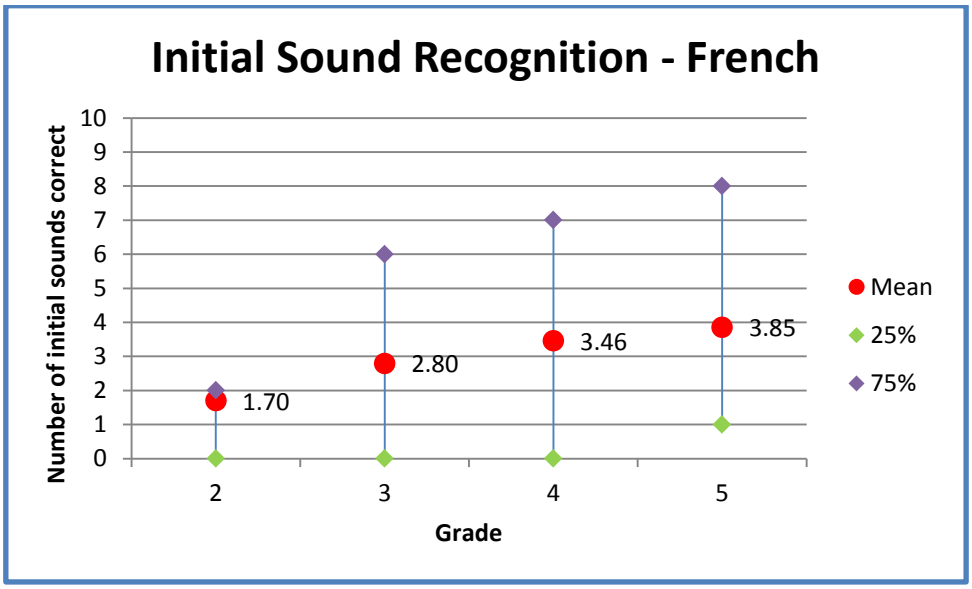
When disaggregated by sex the differences were not statistically significant, with the exception of grade 4 in which boys outperformed girls.

3.2. INITIAL SOUND RECOGNITION

Table 12: Initial sound recognition, by sex and grade

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	1.7	2.8	3.46	3.85	5.11
Mean F	1.74	3.03	3.5	5.5	5.83
Mean M	1.67	2.59	3.43	4.41	4.53
Minimum	0	0	0	0	0
Maximum	10	10	10	10	10
1st Quartile	0	0	0	1	1
3rd Quartile	2	6	7	8	9
Stand. Dev.	2.92	3.8	3.8	3.81	3.82

Chart 12: Initial sound recognition, by grade



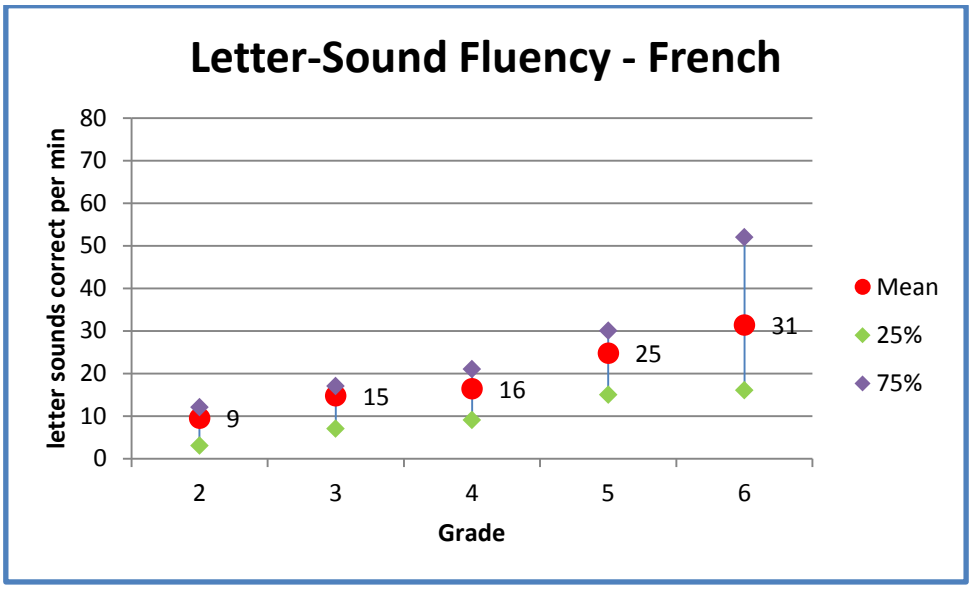
Most children in grades 2 and 3 scored zero in this test (59% and 53%). In all grades there were children who could not identify any of the initial sounds – 40% in grade 4; 23% in grade 5; and 19% in grade 6. Scores in this test were slightly higher than the same test in Creole, although they are still far too low to indicate that children are learning phonemic awareness skills effectively. When disaggregated by sex there are no statistically significant differences.

3.3. LETTER-SOUND FLUENCY

Table 13: Number of letter sounds said correctly per minute, by grade and sex

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	9.47	14.71	16.37	24.75	31.33
Mean F	11.51	14.87	15.29	22.15	32
Mean M	7.96	14.57	17.19	26.55	30.8
Minimum	0	0	0	0	9
Maximum	60	62	44	66	69
1st Quartile	3	7	9	15	16
3rd Quartile	12	17	21	30	52
Stand. Dev.	11.45	12.51	10.06	16.97	19.15

Chart 13: Number of letter sounds said correctly per minute, by grade



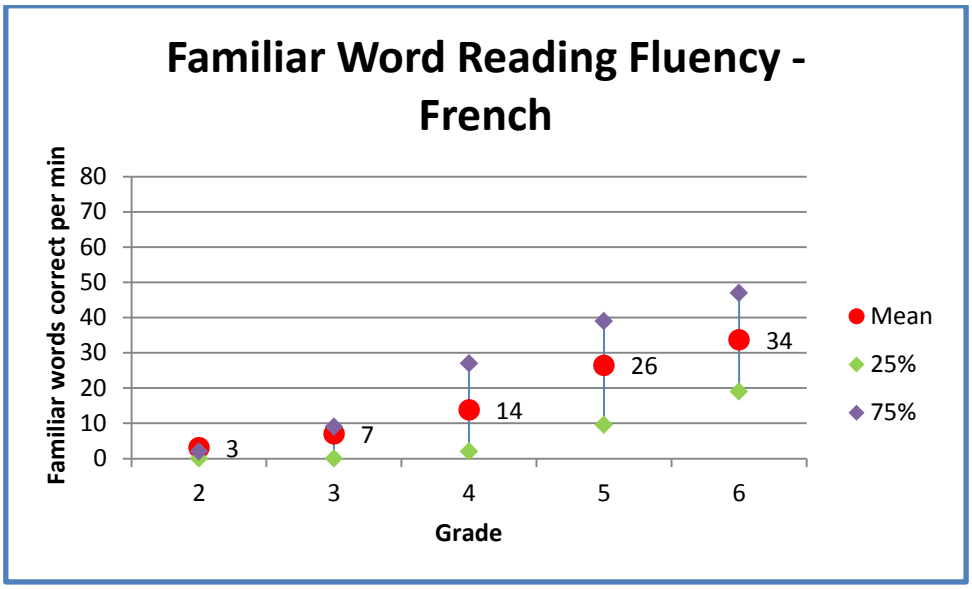
Scores were slightly higher in this test in French than in Creole, but they are still low scores. In grade 2, 17% of children scored zero and 68% scored between 1-9 correct letter sounds. Each grade the scores increased, but scores are low in all grades. This is a pre-reading skill and should be mastered in the first year of reading instruction, not learnt at a slow pace over six years of education. In grade 6, 60% of students scored between 19-29 letter sounds, indicating that they have still not mastered letter-sound identification by the end of primary school. When disaggregated by sex there are no statistically significant differences.

3.4. FAMILIAR WORD READING FLUENCY

Table 14: Number of familiar words read correctly per minute, by grade and sex

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	3.12	7	13.85	26.46	33.69
Mean F	3.77	5.28	12.21	23.53	38.29
Mean M	2.64	8.55	15.08	28.48	30
Minimum	0	0	0	0	0
Maximum	34	38	49	75	62.5
1st Quartile	0	0	2	10	19
3rd Quartile	2	9	27	39	47
Stand. Dev.	6.74	9.38	13.77	17.56	16.76

Chart 14: Number of familiar words read correctly per minute, by grade and sex



Scores for this test are slightly lower in French than Creole. While there is grade progression, scores are low across all grades and by the end of primary school the mean number of familiar words recognised was just 34 cwpm. This indicates that children are not building up a basic vocabulary of the most frequently used words in early grades, which is essential for reading fluency and comprehension. Zero scores for grades 1, 2 and 3 were 69%; 41% and 25% respectively. In grades 4,5 and 6 significant groups of children can only read 0-9 familiar words (55%; 27% and 11% respectively).

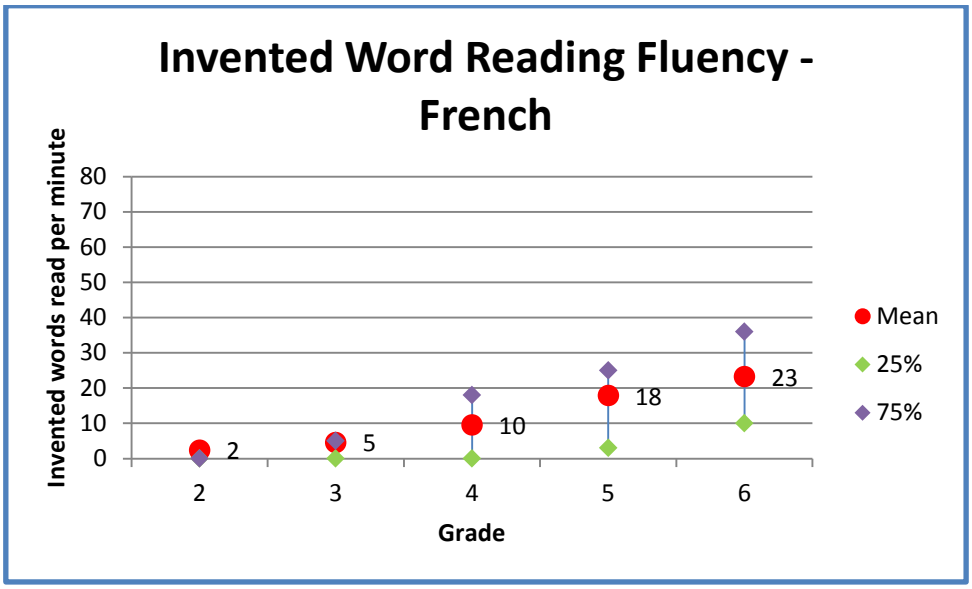
When disaggregated by sex there were no statistically significant differences.

3.5. INVENTED WORD ORAL READING FLUENCY

Table 15: Number of invented words read correctly, by sex and grade

Sample: 306	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	2.35	4.58	9.54	17.88	23.26
Mean Fem.	2.69	3.72	8.54	15.7	25.67
Mean Male	2.11	5.34	10.3	19.38	21.33
Minimum	0	0	0	0	0
Maximum	31	37	48	49	46
1st Quartile	0	0	0	3	10
3rd Quartile	0	5	18	25	36
Stand. Dev.	6.47	7.82	11.97	14.08	14.96

Chart 15: Number of invented words read correctly



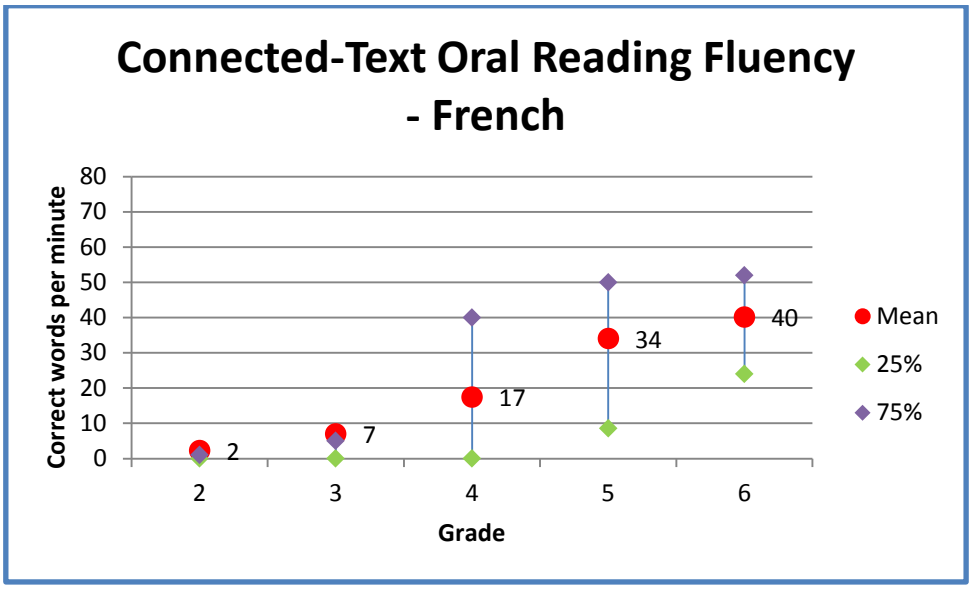
Scores for this test were slightly lower in French than in Creole. De-coding skills, linked to phonics, are weak across all grades, although scores increase progressively through each grade. In grades 1, 2 and 3 there were large cohorts of students that could not read any words – 81%, 53% and 40% of students scored zero in these grades respectively. Even in grade six, one in ten students scored zero, and only 15% could read 40-50 cwpm. When disaggregated by sex there were no statistically significant differences.

3.6. CONNECTED-TEXT ORAL READING FLUENCY

Table 16: Number of words read correctly per minute, by grade and sex

Sample: 307	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	2.23	6.99	17.48	34.02	40.13
Mean F	3.34	5.33	15.11	29.27	43
Mean M	1.4	8.45	19.27	37.31	37.85
Minimum	0	0	0	0	0
Maximum	35	54	54	56	96
1st Quartile	0	0	0	9	24
3rd Quartile	1	5	40	50	52
Stand. Dev.	6.44	12.98	19.85	23.84	21.28

Chart 16: Words of connected text identified per minute



This test was based on grade 2/3 standard French, in which we would expect scores of 45-60 cwpm for children. The full text is provided below.

« Marie va au marché avec son beau sac blanc. Chez le marchand de mangue, Marie prend six fruits. Elle se penche pour prendre les mangues et son sac tombe par terre. Elle ramasse son sac mais son argent n'est plus dedans. Le marchand regarde sous sa table et trouve l'argent. Il rend son argent à Marie.[1] »

Mean scores across all grades were lower than scores for the same test in Creole. Mean scores for grades 1-6 are very low. For children in grades 2, 3 and 4, means were just 2, 7 and 17 cwpm respectively. For grades 5 and 6 the mean scores are just 34 and 40 cwpm – which is very low when we consider that the text is suitable for grade 2 or 3. This indicates that, on average, children are not reading with fluency in French at any level in primary school.

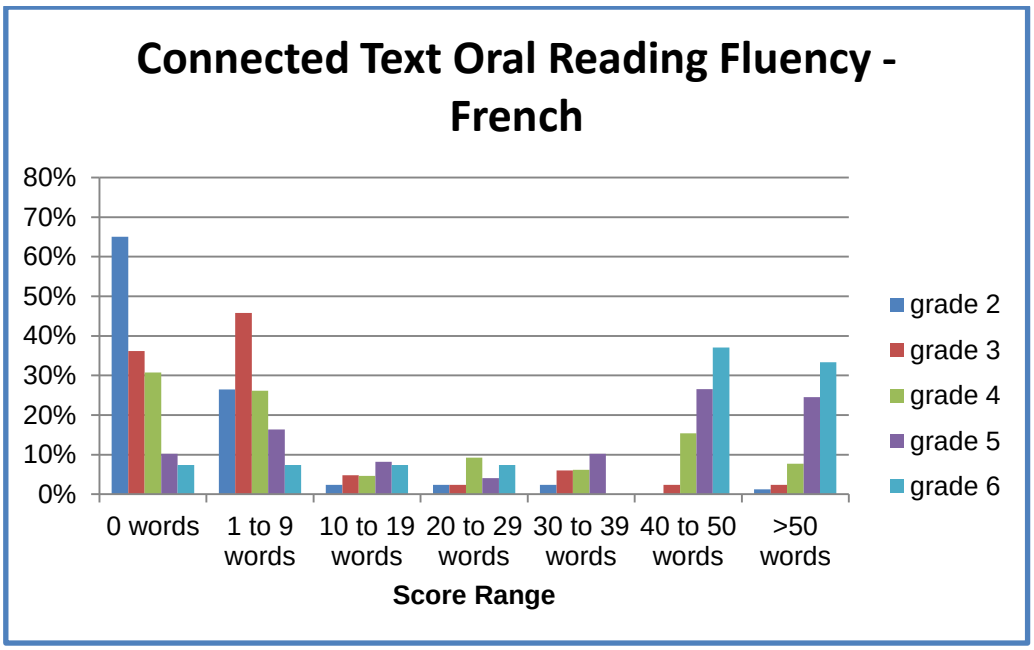
Similarly to the Creole test, there is a significant range in scores for the test, mostly visible in higher grades. In grade 2, 3 and 4, 65%, 36% and 31% of students scored zero in the test. That indicates that one third of students in grade 4 cannot read in French at all. This is particularly concerning when we consider that most of their textbooks for other subjects are written in French. There are few children in grades 2-4 reading more than 50 cwpm (1%, 2% and 8% respectively). However, by grade 5 and 6, where class sizes are smaller, a larger proportion of students have learnt to read with some level of fluency – one quarter (25%) of grade 5 and one third (33%) of grade 6 students can read >50 cwpm. While this is still the minority of students, it indicates that some students are beginning to learn to read in French, but not until the end of primary school.

The range of scores is provided in the table and chart below. When disaggregated by sex, differences are not statistically significant across grades.

Table 17: Range of student scores in correct words read per minute, by grade

Number of cwpm	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
No correct word	65.06%	36.14%	30.77%	10.2%	7.41%
1-9 correct words	26.51%	45.78%	26.15%	16.33%	7.41%
10-19 correct words	2.41%	4.82%	4.62%	8.16%	7.41%
20-29 correct words	2.41%	2.41%	9.23%	4.08%	7.41%
30-39 correct words	2.41%	6.02%	6.15%	10.2%	-
40-50 correct words	-	2.41%	15.38%	26.53%	37.04%
>50 correct words	1.20%	2.41%	7.69%	24.49%	33.33%

Chart 17: Range of student scores in correct words read per minute, by grade

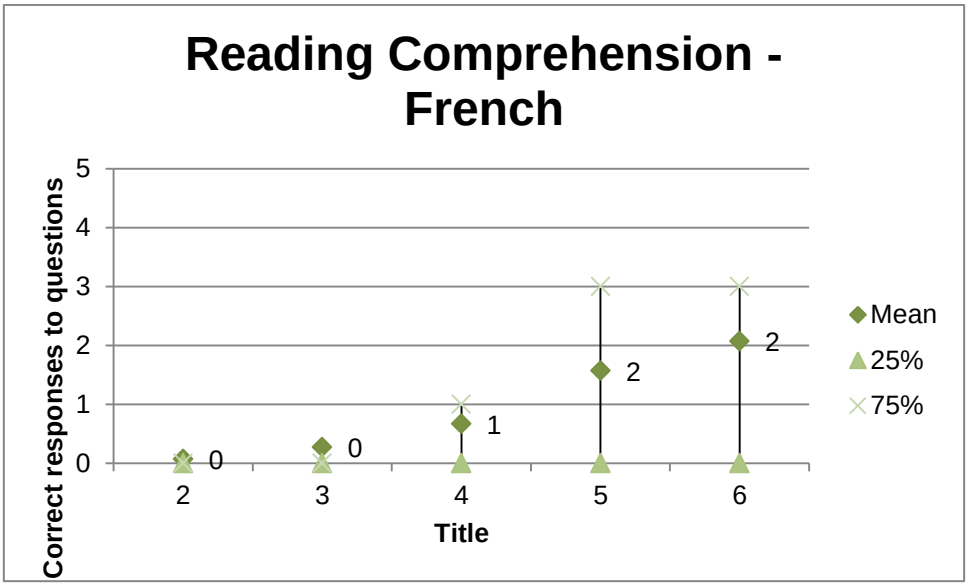


3.7. READING COMPREHENSION IN CONNECTED TEXT

Table 18: Number of correct responses to reading comprehension (out of 5), by grade and sex

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.07	0.27	0.67	1.57	2.07
Mean Fem.	0.11	0.221	0.46	1.3	2.08
Mean Male	0.04	0.34	0.84	1.76	2.07
Minimum	0	0	0	0	0
Maximum	2	2	4	4	5
1st Quartile	0	0	0	0	0
3rd Quartile	0	0	1	3	3
Stand. Dev.	0.30	0.6	0.93	1.32	1.41

Chart 18: Number of correct responses (out of 5) to reading comprehension, by grade



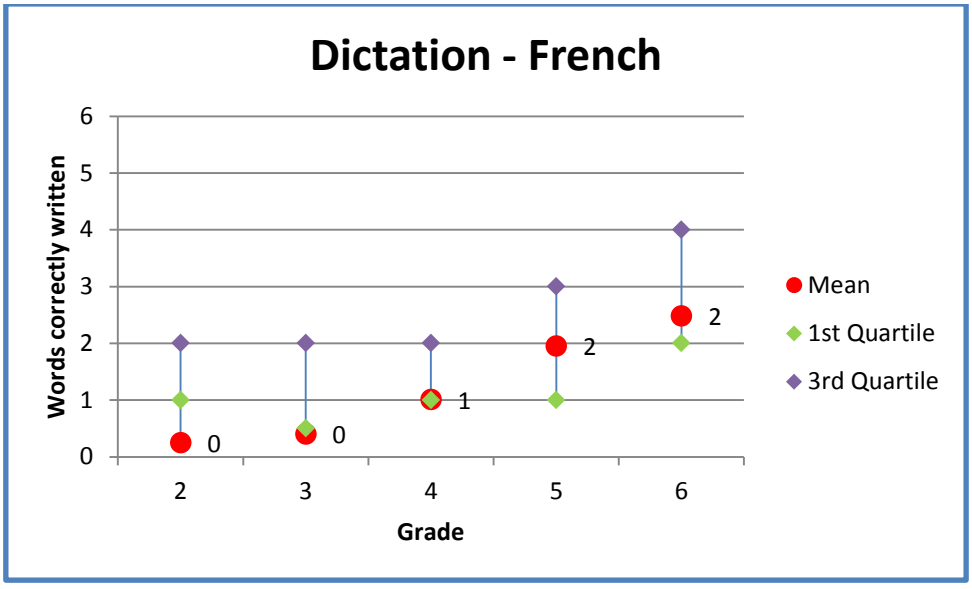
Based on the connected text, students were asked five comprehension questions. The questions are closed, lower-order questions directly linked to the text. The Tangerine system allowed assessors to ask questions only if a child reached a point in the text relevant to that question – if the child was unable to read any of the text, he/she was not asked the comprehension questions. 94% of grade 2, 78% of grade 3, and 55% of grade 4 students were not asked any of the questions, as they did not read sufficient parts of the text. No child in grades 1-5 answered all five questions correctly, and the maximum score for grades 2 and 3 was just 2 correct responses out of 5.

3.8. DICTATION OF A SHORT SENTENCE

Table 19: Number of words written correctly (out of 6) by grade and sex

	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.25	0.4	1.01	1.95	2.48
Mean Fem.	0.09	0.36	0.96	1.85	2.58
Mean Male	0.38	0.45	1.05	2.03	2.4
Minimum	0	0	0	0	0
Maximum	2	3	6	5	6
1st Quartile	1	0.5	1	1	2
3rd Quartile	2	2	2	3	4
Stand. Dev.	0.73	0.8	1.29	1.94	2.39

Chart 19: Number of words written correctly (out of 6) by grade



For this test children are asked to write a six-word sentence (*Souvent je saute à la corde).* The assessor clearly and slowly reads the sentence, then reads it a second time, pausing between each word. When the child has finished writing, the assessor reads the sentence a third time and leaves approximately 30 seconds to allow the child to make changes. If a word is misspelled, or if an accent is incorrect or missing, that word is scored as incorrect.

Scores were lower in this test in French than in Creole. In grades 2 and 3 most children scored zero (82% and 71% respectively). Out of these some did *attempt* to write the sentence, but none of the words written were correct (5% and 10% respectively). The maximum scores for these grades were very low – in grade 2 the maximum was 2 correct words; in grade 3 the maximum was 3 correct words. In grades 4, 5 and 6 many children could not write any words of the sentence correctly (zero scores – 46%, 18% and 15% respectively).

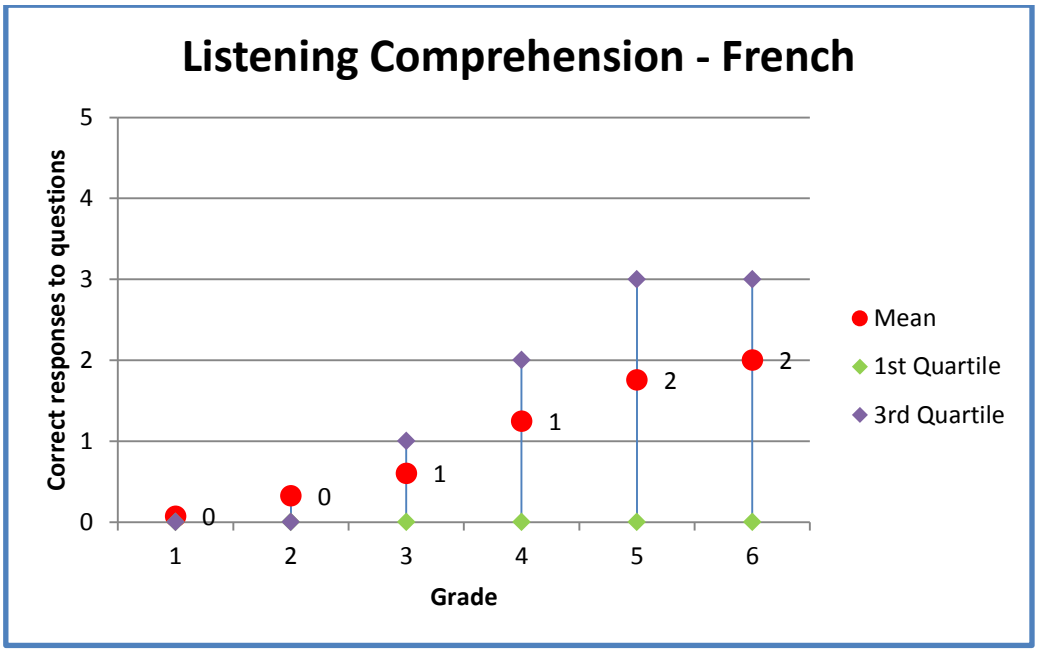
When disaggregated by sex, there are no statistically significant differences.

3.9. LISTENING COMPREHENSION IN CONNECTED TEXT

Table 20: Number of correct responses (out of 5) to listening comprehension, by sex and grade

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Mean	0.07	0.32	0.6	1.24	1.75	2
Mean Fem.	0.1	0.4	0.49	1.54	1.45	2.25
Mean Male	0.04	0.27	0.7	1.03	1.97	1.8
Minimum	0	0	0	0	0	0
Maximum	5	5	5	5	5	5
1st Quartile	0	0	0	0	0	0
3rd Quartile	0	0	1	2	3	3
Stand. Dev.	0.32	0.84	1.11	1.35	1.4	1.66

Chart 20: Number of correct responses (out of 5) to listening comprehension, by grade



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For this test a data collector read a brief text in French to the child, and then asks five simple, closed questions based on the text. All children (including grade 1) in the sample participated in this test.

Scores are significantly lower for this test in French than in Creole. Mean scores are <1 for grades 1-3, indicating a very low level of oral language comprehension in French. Scores do increase progressively for each grade, but the increases are minimal each year and by grade 6 the mean score is just 2 correct responses out of 5. Officially, French is the medium of instruction in upper primary school, but it is clear from these results that students do not have sufficient language skills to take information from a simple (grade 2/3 level) story.

When disaggregated by sex there are no statistically significant differences.

4. CONCLUSION

Results of this EGRA demonstrate extremely low literacy levels for students in all grades of the 12 schools tested. Concern Worldwide expected low scores, based on school selection (in marginalised communities where the extreme poor live) and based on previous programme data. However, the unacceptability of these literacy scores cannot be understated – the quality of teaching and learning is clearly too low to constitute meaningful education.

Key findings:

- Scores are very low in both Creole and French. In pre-reading skills (phonemic awareness, letter name knowledge, letter sound knowledge) scores are slightly higher in French. In emerging literacy skills (reading fluency, comprehension, dictation) scores are higher in Creole. The only test for which we found high scores was listening comprehension in Creole.
    - Concern will concentrate on literacy instruction in Creole, as this is the mother-tongue language of students and they have demonstrated oral comprehension skills in this.
    - Concern will teach French as a second language in the early grades, so that oral comprehension skills can be improved. From here, students will be better skilled to transition to reading and writing in French in later grades.
- A phonics-based literacy intervention is needed, with clear scope-and-sequenced lesson plans and teaching and learning materials aligned with the lessons. Teachers will need intensive training and in-classroom coaching and monitoring to apply the literacy intervention correctly.
    - Concern will identify and apply a 1-3 year literacy curriculum, aligned with Ministry of Education curriculum competencies and policies.
    - The intervention be three pronged at school-level: teacher training; in-classroom coaching and monitoring; provision of teaching and learning materials.
    - Formative assessment will include annual EGRAs, classroom observations and an annual review based on Concern's monitoring and evaluation framework. Teachers will be provided with tools and trained in simple mechanisms for monitoring literacy learning within their own classrooms.
- The skewed age-range of students must be addressed through long-term interventions. Despite the higher age of students in primary school, literacy levels are chronically low in the population tested.
    - By improving the quality of teaching and learning, Concern should influence improved grade progression of students (moving up through the grades each year, without repetition).
    - Concern will monitor and respond to Time-on-Task, including student attendance rates each month. Improving time-on-task will reduce the likelihood of students failing/repeating/dropping out due to poor performance in end-of-grade tests.
- Specific mechanisms are needed to address the needs of extremely poor and vulnerable children within the programme. The results of this assessment should be compared to overall findings for Haiti (from TOTAL's EGRA) to see how children in marginalised areas are more disadvantaged than their peers.
    - Concern will address education needs within the wider *Muliti-Sectoral Rural Development Programme* in Saut d'Eau. In this way the Food, Income and Markets programme will directly target extremely poor households for income-generating activities, benefiting children within the household and supporting their education.
    - The literacy intervention is situated within a holistic education programme which addresses the risks and vulnerabilities children face – corporal punishment, gender-based violence, poverty-related barriers to school attendance, early pregnancy etc. In this way the well-being needs of children are addressed concurrently to the literacy intervention, providing them with better opportunities for learning success.