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Tout Timoun Ap Li - ToTAL
(All Children Reading)

Final Report, REVISED
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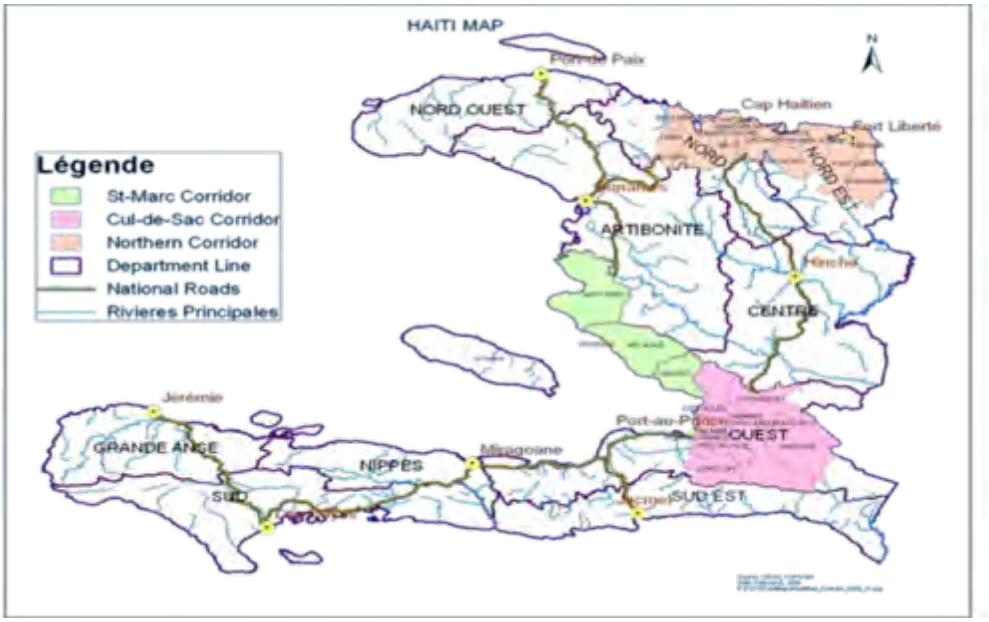

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(Cover page: Teacher at the *Institution Privée Mixte Gentils Nounours Scitech* implementing ToTAL curriculum. Photo by RTI.)

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Abbreviations

AMURT	Ananda Marga Universal Relief Team
BDS	*Bureau de District Scolaire* (School District Office)
CEEC	*Commission Episcopale pour l'Éducation Catholique*
COP	Chief of Party
COR	Contracting Officer's Representative
DAEPP	*Direction de l'Accréditation des Écoles Privées et du Partenariat* (Directorate for Private School Accreditation and for Partnership)
DCQ	*Direction du Curriculum de la Qualité* (Directorate of Curriculum and Quality)
DDE	*Directions Départementales d'Éducation* (Departmental Directorates of Education)
DEF	*Direction de l'Enseignement Fondamental* (Directorate of Basic Education)
DFP	*Direction de la Formation et du Perfectionnement* (Directorate for Training and Improvement)
DPCE	*Direction de la Planification de la Coopération Externe* (Directorate for Planning and External Cooperation)
EFACAP	*École Fondamentale d'Application, Centre d'Appui Pédagogique* (Basic Application School and Pedagogical Support Center)
EGRA	Early Grade Reading Assessment
FONHEP	*Fondation Haïtienne de l'Enseignement Privé* (Haitian Foundation for Private Education)
FY	Fiscal Year
GOH	Government of Haiti
IFOS	*Institute de Formation du Sud* (Institute of Training in the South)
IRC	International Rescue Committee
J/P HRO	J/P Haitian Relief Organization
LCIH	Lion's Club International in Haiti
M&E	Monitoring and Evaluation
MENFP	*Ministère de l'Education Nationale et de la Formation Professionelle* (Haitian Ministry of National Education and Vocational Training)
MOU	Memorandum of Understanding
NGO	Nongovernmental Organization
PDCL	*Plateforme de Développement des Compétences en Lecture* (Platform for the Development of Reading Skills)
SAP	*Service d'Appui Pédagogique* (Educational Support Service)
SSME	Snapshot of School Management Effectiveness
TOT	Training of Trainers
ToTAL	*Tout Timoun Ap Li* (All Children Reading)
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development

1 Introduction

This final report for the United States Agency for International Development (USAID)/Haiti *Tout Timoun Ap Li* (ToTAL – All Children Reading) Applied Research Activity describes the activities and accomplishments of the program from start-up in August 2012 to completion in December 2014. This report serves as documentation of ToTAL's accomplishments in curriculum development, teacher training, classroom coaching, and applied research. Importantly, this report examines the quantifiable improvements that ToTAL made in the reading abilities of treatment students, as well as challenges that were encountered, and it is intended to inform upcoming USAID-funded projects as well as partners who work toward the important goal of improving education in Haiti.

ToTAL, a 29-month USAID-funded applied research project, was launched in August 2012 and simultaneously addressed two pressing concerns for Haiti: education and literacy. Early grade reading is not only a priority for the *Ministère de l'Education Nationale et de la Formation Professionnelle* (Ministry of National Education and Vocational Training [MENFP]) but also the primary focus of USAID basic education efforts worldwide. Many donors, including the World Bank and the United Nations Children's Fund (UNICEF), operate in Haiti and support the government efforts, and they are collaborating with the Government of Haiti (GOH) to promote access to and quality of education. The USAID mission in Haiti is leading this effort to work with and reinforce the capacity of the MENFP to promote early grade reading for the majority of Haitian children.

1.1 Context

The Republic of Haiti is one of the poorest countries in the world. According to numerous statistics, the country has one of the highest global rates of illiteracy among its young population: the United Nations Educational, Scientific and Cultural Organisation (UNESCO) 2005 data indicate that only 66% of youth between 15 and 24 years old are literate, compared to 95.5% for the Latin American and the Caribbean region as a whole. The ramifications of the 2010 earthquake continue to present huge policy and logistic difficulties for the government in overcoming the educational challenges the country is facing.

The MENFP is committed to addressing these deficiencies and to establishing and reinforcing quality standards for all schools, focusing on the implementation of instructional programs to help Haitian children acquire the language and reading skills necessary for their future achievements. However, despite the efforts of the MENFP and its partners, the state of the Haitian basic education system is still underdeveloped. Overall, Haitian children spend less than four years in school, with a high dropout rate at the primary level. In addition, the country's repetition rate is among the highest in the region (more than 17%). Consequently, many Haitian children perform very poorly in reading at the early stage of their schooling, and more than 600,000 out-of-school children and youth are illiterate. The result is that these members of Haiti's "next" generation are

unable to develop basic skills needed to compete in the labor market and are not prepared to contribute to national development efforts.[1]

Haiti is historically a bilingual nation, which introduces distinct challenges in efforts to bolster the education system. The national education policy requires that children begin reading instruction in Haitian Creole, with French oral language introduced in the first year of primary school and French literacy taught starting in the second year; however, many parents and communities discourage this policy in favor of full instruction in French, which is considered the language of commerce and politics. Equally problematic is limited availability of adequate and reliable curricular materials using the Creole language as a medium of instruction in schools. The Haitian education system is highly privatized, with public schools accounting for less than 10% of Haiti's 15,200 primary schools (USAID, 2007),[2] and while some private schools are well-financed, high-functioning, and effective, many are chronically under-resourced and struggling community schools. In both public and private schools, teachers are, to a significant degree, inadequately prepared, poorly qualified, and lacking required experience. The majority of the teachers have completed, at most, a secondary school education and have not mastered the competencies needed to teach, especially regarding reading and writing in the Creole language. These situations remain key factors in explaining the poor quality of instruction at the primary level in public and private schools.

1.2 Project Goal, Objectives, and Results

The main objective of the ToTAL project was to assist the MENFP in developing and testing an instructional model to improve the reading skills of children in Grades 1, 2, and 3 in USAID/Haiti "development corridors."

The ToTAL research activity directly responded to MENFP and USAID requests for policy-relevant information as they consider how best to organize and implement an early grade reading instruction program among schools in Haiti that is specifically adapted to Haiti's culture and the educational needs of Haitian children. In addition, best practices and lessons learned from this applied research activity are available to inform the design of future USAID/Haiti education activities.

Key ToTAL Activities

- The development of evidenced-based reading curricula for Grades 1, 2, and 3 that meet international standards for best practice literacy instruction and are relevant to Haiti's development context and the educational needs of Haitian children
- The development and implementation of innovative and relevant teacher training opportunities and community literacy activities
- The identification and evaluation of the effects of the implemented reading materials, teacher education models, and community literacy strategies, based on a research framework focused on long-term impact

[1] U.S. State Department. (2012). *Fast Facts on the U.S. Government's Work in Haiti: Education.* Retrieved from http://m.state.gov/md194161.htm

[2] USAID. (2007). *Education: Overview.* Archived from the original on 17 October 2007. Retrieved from http://web.archive.org/web/20071017050613/http://www.usaid.gov/ht/education.htm

The project was carried out in more than 300 schools within the three development corridors: targeting 150 schools in the Cap-Haitien corridor, 50 in the Saint-Marc corridor, and 150 in the Port-au-Prince corridor. The objectives of the project were to accomplish the following:

1. Conduct applied research to assess student reading skills;
2. Design innovative and evidence-based learning materials that meet international standards for best practice literacy instruction and that respond and are relevant to the Haitian culture, development context, and children's educational needs;
3. Draft relevant and responsive "best practice" standard curricula and materials for Grade 1–3 teachers that will be piloted by the MENFP;
4. Develop an instructional model and design and test community literacy strategies to improve children's reading;
5. Develop and implement a comprehensive teacher training approach that includes instruction and coaching; and
6. Assess school management effectiveness.

To achieve the project objectives, ToTAL worked toward attaining eight expected results:

1. Applied research activity successfully launched;
2. Capacity of organizations currently operating in Haiti to implement applied research activity, ToTAL reading program, and future reading programs assessed in USAID/Haiti development corridors, and local partners invited to participate in project design, implementation, and/or performance monitoring;
3. Student reading performance assessed;
4. School management effectiveness assessed;
5. Reading curriculum developed, implemented, and evaluated;
6. Community literacy strategies that improve early grade reading developed;
7. Reading instruments improved; and
8. Capacity of GOH to conduct applied research, as well as capacity to design, implement, and evaluate a future early grade reading program, strengthened.

ToTAL's beneficiaries were students, teachers, partners, and MENFP staff, and, like many effective development projects, ToTAL kept pace with local political and contextual changes and worked in close alignment with USAID and MENFP priorities. This included support of MENFP literacy initiatives, such as the Reading Championship and reading caravans. ToTAL achieved its goals of developing curriculum for three grades in both Haitian Creole and French within the 29 months of the project, despite unexpected challenges. It also exceeded many of its performance indicators—including key student performance indicators—as will be presented in detail later in this report.

Under the ToTAL contract, RTI had subcontracts with two Haitian local nongovernmental organizations (NGOs): *Institut de Formation du Sud* (Institute of Training in the South [IFOS])

and *Fondation Haïtienne de l'Enseignement Privé* (Haitian Foundation for Private Education [FONHEP]).

***Institut de Formation du Sud* (IFOS):** RTI partnered with IFOS to help with implementation of the Early Grade Reading Assessment (EGRA) at the beginning (baseline) and end (endline) of the school year as part of the randomized control trial component of this project. RTI has found IFOS to be a highly efficient, effective, and competent partner, providing excellent support to the training, assessor selection, school-based enumeration, and provision of data. In the three large-scale assessments conducted under the project, IFOS implemented the assessments at the school level, competently managing, in the Year 2 baseline for example, 57 EGRA assessors who tested 4,447 children in 240 schools across all three corridors. IFOS submitted detailed reports and quality data on time. As a result, RTI was able to submit quality baseline and endline EGRA reports to USAID.

***Fondation Haïtienne de l'Enseignement Privé* (FONHEP):** FONHEP was responsible for the school-based monitoring and support to teachers, community mobilization activities, and other school-based data gathering. While the *Commission Épiscopale pour l'Éducation Catholique* (CEEC) coaches and supervisors displayed capacity and commitment, due to capacity issues in implementation, reporting, and data management, FONHEP was unable to satisfactorily uphold its contractual responsibilities. FONHEP may have been a more essential partner in past decades when it was stronger and the MENFP was weaker. However, its performance on ToTAL suggests that it is time to move from partnering with FONHEP to partnering with the MENFP on implementing large-scale education projects and to focus on building public rather than private capacity.

2 Project Research Design

To address the project objectives, a research design was developed that consisted of three treatment conditions. Treatment A schools were supported to implement the improved ToTAL early grade reading program (receiving all the necessary materials, teacher training, and ongoing support). Treatment B schools received the same assistance as Treatment A schools and, in addition, were supported in carrying out community-based activities to encourage reading. Control schools were comparable schools that received neither the ToTAL program nor the community mobilization support.

2.1 Research Design

Figure 1 shows this initial design and the rollout of the ToTAL program from two corridors in the first year to three corridors in the second year.

Figure 1. Initial Research Design

	School Year 2012-13			
Cap-Haitien Corridor	Baseline EGRA and SSME	Reading Program	Community Strategies	End-of-year EGRA
Treatment 1	40 schools	100 schools: Gr1 Creole in Gr1 and Gr2 Gr1 French in Gr1 and Gr2		40 schools
Treatment 2	40 schools	50 schools: Gr1 Creole in Gr1 and Gr2 Gr1 French in Gr1 and Gr2	50 school communities	40 schools
Control	40 schools			
Saint-Marc Corridor	Baseline EGRA and SSME	Reading Program	Community Strategies	End-of-year EGRA
Treatment 1	20 schools	25 schools: Gr1 Creole in Gr1 and Gr2 Gr1 French in Gr1 and Gr2		20 schools
Treatment 2	20 schools	25 schools: Gr1 Creole in Gr1 and Gr2 Gr1 French in Gr1 and Gr2	25 school communities	20 schools

	School Year 2013-14			
Cap-Haitien Corridor	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	40 schools	100 schools: Gr1 Creole in Gr1 Gr2 Creole in Gr2 and Gr3 Gr1 French in Gr1 Gr2 French in Gr2 and Gr3		40 schools
Treatment 2	40 schools	50 schools: Gr1 Creole in Gr1 Gr2 Creole in Gr2 and Gr3 Gr1 French in Gr1 Gr2 French in Gr2 and Gr3	50 school communities	40 schools
Control				40 schools
Saint-Marc Corridor	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	20 schools	25 schools: Gr1 Creole in Gr1 Gr2 Creole in Gr2 and Gr3 Gr1 French in Gr1 Gr2 French in Gr2 and Gr3		20 schools
Treatment 2	20 schools	25 schools: Gr1 Creole in Gr1 Gr2 Creole in Gr2 and Gr3 Gr1 French in Gr1 Gr2 French in Gr2 and Gr3	25 school communities	20 schools
Port-au-Prince	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	40 schools	100 schools: Gr1 Creole in Gr1 and Gr2 Gr1 French in Gr1 and Gr2		40 schools (EGRA only)

Over the course of the first year of the project, delays in finalizing Grade 1 materials (which are discussed in greater detail later in this report) resulted in a shift in implementation during the

2013–2014 school year. Rather than implementing Grade 2 Creole materials in Grade 2 and Grade 3 treatment classrooms in the North (hereafter referred to as Cap-Haitien[3]) and Saint-Marc corridors, Grade 1 materials were implemented in all Grade 1 and 2 treatment classrooms and no materials were implemented in Grade 3 treatment classrooms. Grade 2 Creole and French materials were pilot tested in a smaller number of non-project schools in order to inform development and refinement.

Figure 2 presents the revised research design for the 2013–2014 school year.

Figure 2. Revised Research Design for School Year 2013–2014

	School Year 2013-14			
Cap-Haitien Corridor	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	40 schools	100 schools: Gr1 Creole in Gr1 and Gr2 Gr2 Creole in Gr2 pilot classrooms* Gr1 French in Gr1 and Gr2 Gr2 French in Gr2 pilot classrooms*		40 schools
Treatment 2	40 schools	50 schools: Gr1 Creole in Gr1 and Gr2 Gr2 Creole in Gr2 pilot classrooms* Gr1 French in Gr1 and Gr2 Gr2 French in Gr2 pilot classrooms*	50 school communities	40 schools
Control	40 schools			40 schools
Saint-Marc Corridor	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	20 schools	25 schools: Gr1 Creole in Gr1 and Gr2 Gr2 Creole in Gr2 pilot classrooms* Gr1 French in Gr1 and Gr2 Gr2 French in Gr2 pilot classrooms*		20 schools
Treatment 2	20 schools	25 schools: Gr1 Creole in Gr1 and Gr2 Gr2 Creole in Gr2 pilot classrooms* Gr2 French in Gr1 and Gr2 Gr2 French in Gr2 pilot classrooms*	25 school communities	20 schools

[3] In 2014, USAID changed how it refers to this corridor from Northern to Cap-Haitien.

	School Year 2013-14			
Port-au-Prince	Beginning-of-Year EGRA	Reading Program	Community Strategies	Endline EGRA and SSME
Treatment 1	40 schools	100 schools: Gr1 Creole in Gr1 and Gr2 Gr2 Creole in Gr2 pilot classrooms* Gr1 French in Gr1 and Gr2 Gr2 French in Gr2 pilot classrooms*[4]		40 schools (EGRA only)
Control	40 schools			40 schools

2.2 School and Student Sample

Schools in each of the three development corridors were selected for participation in the applied research activity through a randomized, multi-stage stratified sampling design, after de-selection of schools for which a reading program using phonics instruction would be inappropriate, such as schools for the deaf. Within target communes in each corridor, remaining schools were grouped into clusters according to their location by communal section. Clusters of schools were then randomly assigned to Treatment A, Treatment B, and control groups to minimize spillover risks.[5] Per the ToTAL contract and corresponding research design, the Cap-Haitien corridor had schools in both Treatment A and B groups and in the control group, while Saint-Marc corridor had schools in Treatment A and Treatment B groups but no control group. Both corridors began in Year 1. Port-au-Prince corridor included Treatment A and control groups only, with project activities in Year 2 only.

An important feature of the ToTAL project was the use of specific assessment approaches—one for evaluating student performance in reading, the other for appraising school management effectiveness. Two specific methodologies, which were developed under USAID's Education Data for Decision Making project (EdData II), were employed: the Early Grade Reading Assessment (EGRA), and the Snapshot of School Management Effectiveness (SSME). From the population of schools in each of the three treatment conditions, the designated number of schools was randomly selected to participate in EGRA and SSME assessments. A random sample of approximately ten Grade 1 and ten Grade 2 students in each of these assessment-sample schools was assessed at the beginning and at the end of each school year, with additional assessments of teachers, classrooms, and schools carried out at two points in time (baseline of the 2012–2013 school year and endline of the 2013–2014 school year).

*Between 10-20 non-ToTAL schools were selected to pilot test Gr2 Creole and French materials, using selection criteria agreed upon by USAID.

[5] See RTI International, *Tout Timoun Ap Li (ToTAL) Randomized Controlled Trial (RCT) Research Design Plan, Revised* (August 2014) for further detail on the full research design.

The Year 1 (2012–2013 school year) *baseline* sample[6] included 148 schools in two corridors: 62 Treatment A schools, 58 Treatment B schools, and 28 control schools. The Year 1 *endline* sample, however, included only 67 schools in the two corridors: 17 Treatment A schools, 24 Treatment B schools, and 26 control schools. The difference in numbers occurred when a total of 58 treatment schools in the Cap-Haitien corridor and 28 treatment schools in the Saint-Marc corridor were not assessed at endline, because they either did not attend the first training session and/or did not receive sufficient quantities of program materials during the first distribution of ToTAL teaching and learning materials. Five control schools in the Cap-Haitien corridor were not assessed because they were determined to have been exposed to the treatment program.

A comparison between control schools that were dropped and control schools that remained in the sample was inconclusive, suggesting that there was no meaningful difference between the two sets of schools that might impact study outcomes. Similarly, a comparison between treatment schools that were dropped and treatment schools that remained in the sample was inconclusive, again suggesting no meaningful difference between the two sets of schools that might impact study outcomes. In addition, an analysis of the endline sample size itself suggests that it has sufficient power to ensure an acceptable level of precision. Although RTI usually recommends a student sample size of 400 students to achieve a 10-point margin of error, the low variability of student scores in this population required a smaller sample size to reach the same precision. The student scores with the highest variability were on the Oral Reading Fluency subtask, which required a sample of approximately 340 students to achieve a 10-point margin of error with these student data. Student scores on all other EGRA subtasks had less variability and thus required sample sizes less than 340.

The Year 2 (2013–2014 school year) baseline sample included 233 schools across three corridors: 99 Treatment A schools, 64 Treatment B schools, and 70 control schools. Little attrition occurred over the school year, with 228 schools sampled at endline: 98 Treatment A schools, 63 Treatment B schools, and 67 control schools.

Table 1 summarizes the sampling and treatment frame by study year, corridor, and treatment group.

[6] The number of schools reported at endline of Year 1 (2012–2013) does not match the number of schools reported in this project's Year 1 Baseline report, as the analyses included at endline only include those schools present at both baseline and endline. Because a number of schools were excluded from endline testing, these schools were removed from the baseline sample for purposes of analysis in the endline report.

Table 1. Treatment Frame and Realized Assessment Samples by Study Year, Corridor, and Treatment group

STUDY YEAR / CORRIDOR	TREATMENT A (Reading Program)	TREATMENT B (Reading Program & Community Mobilization)	CONTROL
YEAR 1 (School Year 2012–2013)			
CAP-HAITIEN CORRIDOR	**Receiving treatment:** 100 schools; G1 & G2 classes **Assessment sample:** 45 (baseline) ; 16 (endline) schools (EGRA baseline & endline; SSME baseline)	**Receiving treatment:** 50 schools; G1 & G2 classes **Assessment sample:** 38 (baseline); 15 (endline) schools (EGRA baseline & endline; SSME baseline)	**Assessment sample: 28 (baseline)**; 26 (endline) schools (EGRA baseline & endline; SSME baseline)
SAINT-MARC CORRIDOR	**Receiving treatment:** 25 schools; G1 & G2 classes **Assessment sample:** 17 (baseline); 1 (endline) schools (EGRA only)[7]	**Receiving treatment:** 25 schools; G1 & G2 classes **Assessment sample:** 20 (baseline); 9 (endline) schools (EGRA only)	- - -
YEAR 2 (School Year 2013–2014)			
CAP-HAITIEN CORRIDOR	**Receiving treatment:** 100 schools; G1 & G2 classes **Assessment sample:** 42 schools (EGRA baseline & endline; SSME endline)	**Receiving treatment:** 50 schools; G1 & G2 classes **Assessment sample:** 39 schools (EGRA baseline & endline; SSME endline)	**Assessment sample:** 39 schools (EGRA baseline & endline; SSME endline)
SAINT-MARC CORRIDOR	**Receiving treatment:** 25 schools; G1 & G2 classes **Assessment sample:** 19 schools (EGRA only)	**Receiving treatment:** 25 schools; G1 & G2 classes **Assessment sample:** 21 schools (EGRA only)	- - -
PORT-AU-PRINCE CORRIDOR	**Receiving treatment:** 100 schools; G1 & G2 classes **Assessment sample:** 43 schools (EGRA only)	- - -	**Assessment sample:** 37 schools (EGRA only)

In the assessment subsample of program schools and control schools, ToTAL systematically collected data at the beginning and end of each of the two school years. These data allowed the monitoring of students' progress in reading in each grade, in each school year. They also permitted an evaluation of the overall impact of the reading program and community reading strategies at the end of two school years. Comparing baseline (Y1) and endline (Y2) school management effectiveness surveys (SSME) in the Cap-Haitien corridor also enabled an evaluation of project impact on key features of school management.

Performance indicators related to all results are presented in ***Annex A***.

[7] The much smaller sample of schools effectively assessed at Year 1 endline was examined and determined to be adequate to detect statistically significant differences between treatment and control groups and against baseline. See RTI International, *Tout Timoun Ap Li (ToTAL) Year 1 EGRA Endline Report, Revised* (November 2013), pages 9-10, for details regarding the sharp reduction in school sample at Year 1 endline and the tests conducted to determine its adequacy.

3 Project Achievements

This final report is structured around the eight contractual results; within each result is described the accomplishments and challenges faced, along with implications for future education-based initiatives in Haiti.

3.1 Result 1: Applied Research Activity Successfully Launched

3.1.1 Collaboration with MENFP

A plan for consulting and collaborating with stakeholder groups to obtain stakeholder input, engage with stakeholders in key discussions, and communicate project information to stakeholders was submitted to and approved by USAID in the early stages of the project.

From the start, the ToTAL project worked collaboratively with MENFP to implement this applied research activity in close coordination and partnership. On September 13, 2012, the Director General of MENFP issued a letter to all MENFP Technical Directors and relevant Departmental Directors to inform them of the implementation of ToTAL and to request their full participation in the project. By means of this formal notice, all officials, both at the central level (Technical Directorates) and local level (Departmental Directorates, *Bureaux de District Scolaire* [BDS, School District Offices]), were authorized to lend their full cooperation for the implementation of ToTAL activities. To further institutionalize the exchange of technical information and promote joint planning, ToTAL provided robust support to the standing interdepartmental meeting of the *Comité de Pilotage* (Steering Committee) during the first year of the project, which included representatives from the *Direction de l'Enseignement Fondamental* (Directorate for Basic Education [DEF]), *Direction de la Formation et du Perfectionnement* (Directorate for Training and Improvement [DFP]), and *Direction de Curriculum et de Qualité* (Directorate for Curriculum and Quality [DCQ]), and meet each six to eight weeks at the ToTAL office.

Further official communication helped to strengthen the relationship and formalize the partnership between ToTAL and the MENFP. ToTAL dispatched a request December 14, 2012, to the DEF to validate the title of the Creole student handbook, *Tout Timoun Ap Li*. In response, DEF issued a letter on December 21, 2012, requesting that ToTAL rename its method *M ap li nèt ale* and approving a two-year implementation of the program with the goal of eventually standardizing and scaling up the early grade reading approach in the Haitian educational system. On August 5, 2013, the DEF issued a letter giving official approval for the materials and approach for ToTAL's experimental curriculum, including the materials and pedagogy of the *M ap li nèt ale* Creole early grade reading curriculum and the *M ap pale fransè nèt ale* French oral language curriculum.

Co-location between ToTAL staff and MENFP staff was critical to this important partnership. ToTAL staff co-located with staff from the MENFP's *Plateforme de Développement des Compétences en Lecture* (Platform for the Development of Reading Skills [PDCL]) at the ToTAL office at 26 Rue Sapotille in Port-au-Prince for much of the project. In addition, the PDCL and other MENFP units held meetings in the ToTAL conference room. By request of the Minister of Education, a member of his cabinet was installed temporarily in the project offices from

September 2012 to January 2013. Various meetings convened by the Minister or by the Director General were organized at the project office.

ToTAL staff were in daily contact with members of the MENFP; teaching and learning materials were developed with extensive guidance and collaboration from the MENFP. ToTAL benefitted from collaboration and communication mechanisms that included Steering Committee meetings; work sessions and material validation workshops; formal reading material validation and approval of teacher-training modules; and other exchanges and discussions, both formal and informal.

- ToTAL management worked closely with MENFP to determine the optimal structure and content of curricular materials and of student and school environment assessments (see discussion in Section 3.3). In early 2013, ToTAL engaged with MENFP to ensure ToTAL's communication and coordination with the Ministry's central and decentralized departments and units. These meetings included two workshops for managers and technicians from technical directorates of the MENFP (DEF, DFP) for the development of methods of teaching/learning of reading in Creole and oral communication in French. This workshop was essential in clarifying the structure of ToTAL materials (e.g., limiting French instruction to oral language in Grade 1[8]). ToTAL also held meetings with the PDCL and the Director of the DEF in February and a meeting of the Steering Committee with the DEF, DFP, and DCQ on March 1, 2013. ToTAL organized a subsequent workshop in May 2013, under the direction of Massachusetts Institute of Technology linguistics professor Michel DeGraff, for review of the pedagogy and the relationship between a large-scale early grade reading program and the continued development of Haitian Creole as a language.
- Collaboration among local organizations of the MENFP (*Directions Départementales d'Education* [Departmental Directorates of Education, DDE], BDS, and *École Fondamentale d'Application, Centre d'Appui Pédagogique* [Basic Application School and Pedagogical Support Center, EFACAP]) was crucial to the organization of the project's teacher and coach training plans and approach. Training development working sessions with MENFP staff were held in February and March 2013, and training sessions for Chief Inspectors and Educational Support Services (*Services d'Appui Pédagogique* [SAP]) of the Departmental Directorates were held at the BDS in Fort-Liberté, March 21–23, 2013; in Saint-Marc; April 1–4, 2013; and in Port-au-Prince, October 14–16, 2013. As part of its efforts to coordinate with the BDS, ToTAL staff held coordination meetings with BDS Inspectors in both the Saint-Marc corridor at the Saint-Marc BDS on April 4, 2013, and in the Cap-Haitien corridor at the Fort-Liberté BDS on April 5, 2013. These training sessions, aimed at principals and teachers from ToTAL sample schools, were organized with the invaluable assistance of senior and area inspectors and area offices of the various

[8] These decisions were made after the 2012–2013 school year EGRA assessments were adapted, however, which resulted in students being tested in French reading during the 2012–2013 school year; this is discussed in greater detail later in this report, and this disconnect between the materials and assessment was rectified during the 2013–2014 school year EGRA administrations.

BDSs. Some of the sessions took place in the EFACAP (Fort-Liberté, Ouanaminthe) and some in the Saint-Marc BDS.

- To help plan, organize, and coordinate programming at the start of the 2013–2014 school year, ToTAL's senior leadership held new coordination meetings at the BDSs in Fort-Liberté on September 18, 2013; in Saint-Marc on September 20, 2013; and in Port-au-Prince on October 18, 2013 to prepare for the 2013–2014 school year.
- ToTAL held high-level Strategic Policy Dialogue Workshops for the MENFP and partners in August 2013 and in November 2014 to present endline EGRA findings of the 2012–2013 and 2013–2014 schools years respectively. The workshops were both two-day events that were well attended by MENFP leadership and by leading local and international agencies active in early grade reading. At the 2013 Strategic Policy Dialogue Workshop, the MENFP announced that the coming school year would be the "Year of Reading" and unveiled important programs such as Reading Fridays and Reading Caravans. Representatives from the MENFP, USAID, UNICEF, Save the Children, Care, and Concern were present at both Strategic Policy Dialogue Workshops.

Although turnover among senior MENFP staff in the DEF and PDCL and competing commitments among mid-level staff over the course of the project hindered the establishment of a cohesive team that could participate in the materials development process from start to finish, ToTAL staff sought to encourage and facilitate MENFP participation. An important barrier to greater MENFP participation, however, was the aggressive materials development schedule that the project followed. For example, during the 2014 calendar year, project staff redeveloped the Grade 1 materials, developed and revised Grade 2 materials, and developed Grade 3 materials—the team was essentially preparing materials faster than the MENFP could review them due to the Ministry staff's time constraints.

3.1.2 Collaboration with Other Stakeholders

In addition to collaboration with MENFP, ToTAL management invested substantial time and effort engaging USAID implementing partners and other interested stakeholders. On August 9, 2012, the ToTAL team met with partners working with the MENFP on improving reading competencies in Haiti. During this meeting, ToTAL gave a presentation on the overall ToTAL project. It was agreed that the partners should unite their efforts, with the aim of improving reading instruction in French and Creole. Several follow-up meetings subsequently were held with the same partners so that ToTAL could work with MENFP in developing reading competencies.

Of course, throughout the course of the project, RTI worked closely with FONHEP for program implementation and school monitoring and with IFOS for EGRA assessment fieldwork and workshop logistics; further discussion about the nature and effectiveness of these relationships is provided later in this report. In addition to these central stakeholder relationships, during the summer of 2013 the ToTAL management team broadened and deepened the impact of this program by developing partnerships with leading international and Haitian organizations. ToTAL entered into an agreement with Save the Children to review and incorporate elements of Save the

Children curricular materials into the ToTAL program; when they were relevant, pedagogical approaches and activities were integrated into all ToTAL materials, although most particularly into Grade 1 materials. ToTAL signed a partnership with UNICEF—with Care serving as the implementing partner—for both the provision of the ToTAL curriculum and a separate Care–Caritas Czech Republic EGRA study of program effectiveness through the use of EGRA, and the project established a memorandum of understanding (MOU) with Concern Worldwide for training and provision of materials in up to 30 Concern Worldwide–supported schools in the Saut d'Eau region. During September 2014, ToTAL also began talks with J/P Haitian Relief Organization (J/P HRO) about provision of ToTAL materials and training to J/P HRO schools in Delmas, including 34 private schools and one school managed directly by J/P HRO.

ToTAL also secured MOUs with YMCA d'Haïti and Lions Club International in Haiti (LCIH), two leading civil society organizations in Haiti. YMCA d'Haïti served as an essential partner for ToTAL in the Summer Reading Championship. The MOU with LCIH represented not only an exciting opportunity to address vision difficulties as a barrier to reading in ToTAL schools, but also, more broadly, served as an example of partnering with an organization with sector expertise to address a specific barrier to reading. Under the MOU with LCIH, LCIH staff and ophthalmological experts trained RTI, FONHEP, and MENFP staff in school-based vision screening and referral. LCIH also provided wall charts in ToTAL schools and volunteers who directly conducted vision screening, referral, and clinics at ToTAL schools. ToTAL staff supported a joint event with LCIH—a training for Port-au-Prince-based MENFP inspectors, supervisors, and mentors that took place on September 27, 2013. Working within an approach of sharing experiences and competencies and of creating synergies, ToTAL worked closely with its partners during both implementation years.

Such partners were invited to ToTAL trainings on materials and EGRA assessment. The following list indicates partner participation in trainings:

- Teacher Training in Grade 1 Material, January 20–24, 2014 – J/P HRO
- Policy Dialogue on EGRA Results, August 27–28, 2013 – (UNICEF), Concern, Save the Children, Care, and other Haitian and international partners
- Year 2 Baseline, October 13–20, 2013 – Care, J/P HRO, Ananda Marga Universal Relief Team (AMURT)
- Year 2 Endline, April 27–May 3, 2014 – Care, International Rescue Committee (IRC)
- Grade 2 Curriculum Materials Training of Trainers (TOT), August 24–30, 2014 – Concern, IRC, and Caritas Czech Republic

In addition, ToTAL provided electronic copies of curricular materials to the following implementers for use during the 2013–2014 school year: Concern, UNICEF, Care, Caritas Austria, Caritas Czech Republic, J/P HRO, AMURT Haiti, Save the Children, IRC, and World Bank. Concern, Care, Caritas Austria, Caritas Czech Republic, and World Bank actively implemented the ToTAL program during the 2014–2015 school year as well.

These investments proved useful in both reinforcing the sustainability of the ToTAL program materials but also in providing useful input from the field about the utility of the materials and training opportunities. While each implementing partner conducted its own evaluation of the efficacy and usability of the materials—results that are not available to include in this report—qualitative feedback was used to refine both curricular and training materials, and the input from these partners facilitated policy dialogues with MENFP staff.

3.2 Result 2: Capacity to Implement Applied Research Activity, ToTAL Reading Program, and Future Reading Programs in USAID Development Corridors Assessed and Local Partners Invited to Participate in Project Design, Implementation, and/or Performance Monitoring

As part of this project, ToTAL staff developed a *Capacity Mapping Report* and corresponding database, which together documented the capacity of current organizations operating in Haiti in an effort to better understand the current education system in Haiti as well as the support that might be engaged during future education-focused initiatives in the country. Two hundred and fifty-three organizations were identified as part of the capacity mapping exercise, a majority of which were located in the Artibonite (90 organizations, or 36%) and Ouest (94 organizations, or 38%) departments. The findings from the *Capacity Mapping Report* demonstrated that many local organizations focused on education in Haiti are of limited capacity and highly decentralized in their efforts. However, the *Capacity Mapping Report* also emphasized that there is a great deal of untapped potential for local organizations and for the MENFP to make greater contributions to education in Haiti by coordinating more closely and by creating partnerships.

Key trends from the *Capacity Mapping Report* included the following: (1) increased adoption of new technologies in Haiti such as tablet computers and the Tangerine® electronic data collection software system, (2) availability of research-informed curriculum and pedagogy that have the potential to yield greater student outcome improvements than previously realized, and (3) managerial capacity in some local organizations to support ongoing MENFP initiatives. Impressively, future programs need not rely solely on imported technology because, for example, Surtab now produces tablet computers in Haiti. Haitian business partners such as Surtab would maximize the economic development benefit of any large-scale early grade reading program. Along these same lines, Haitian diaspora organizations such as Educa Vision Inc., a Florida-based publisher of Creole children's books, bring new and high-quality resources to early grade education. However, due to the weak capacity of many local organizations, a great deal of effort, continued commitment from international partners, and increased adaptability from established Haitian organizations is required to achieve the promise of the current moment.

The *Capacity Mapping Report* encouraged synergistic partnerships among local organizations with expertise in specific techniques or best practices such as IFOS and organizations such as FONHEP and CEEC that have wide networks that can be leveraged with the use of new technology. These partnerships can be fundamentally transformative because FONHEP, through its partner CEEC, has a large network of schools but requires a great deal of strengthening of technology and management systems. Skills sharing and skill building partnerships are essential

for the continued development of these organizations as well as for their ability to provide quality services to their beneficiaries.

The *Capacity Mapping Report* also recommended that future programs continue to strengthen the links among Haitian organizations in sectors with strong potential synergies to education, including in the health sector—for example, those involved with activities such as school-based health screenings; health interventions; vitamins; deworming; vaccination; health interventions; food security; and particularly school feedings, water, and sanitation—to ensure a hygienic school environment and to address barriers to education for girls, gender equity, human rights, protection, and livelihoods. ToTAL's work with LCIH for teacher sensitization and school-based vision screening is an example of the power of these cross-sectoral partnerships to improve both educational outcomes and children's lives more broadly by using school infrastructure to reach children for health interventions.

It is important to note that 71% of all surveyed organizations indicated that they were interested in participating in a large-scale early grade reading project.

3.3 Result 3: Student Reading Performance Assessed

Assessing student reading performance across a representative sample of public and private schools within the three target USAID development corridors was a fundamental component of the ToTAL applied research activity. The ToTAL team used results from EGRA administrations to inform the development of curricular materials, teacher training, coaching, and professional development as well as to engage with MENFP in policy-related dialogues regarding opportunities for ongoing educational reform within Haiti.

3.3.1 EGRA and SSME Adaptation

Several workshops and meetings were held with MENFP representatives from August 20 to 31, 2012, to inform and define the assessments and technologies to be used. ToTAL held a workshop with the DEF and DFP and international experts to adapt the EGRA and SSME instruments to the Haitian languages and context. Participants included Haitian Creole and French language experts, Haitian education experts, teachers, and assessment personnel. During this workshop, subtasks were reviewed and selected, and all were adapted to the local languages and context. Follow-up working meetings were held on October 16, 2012, for 20 executives and technicians of the *Direction de la Planification de la Coopération Externe* [Directorate for Planning and External Cooperation; DPCE]) and on November 6, 2012, for 30 executives and technicians of the Directorate-General, DEF, DFP, and *Direction de l'Accréditation des Écoles Privées et du Partenariat* (Directorate for Private School Accreditation and for Partnership [DAEPP]) to introduce them to the use of tablets and Tangerine software and to determine to what extent Tangerine could be used as a data collection tool. Additional assessment- and research-design-based working meetings were held with the DEF director on November 12, 2012 and with the MENFP directors on December 11, 2012, with a final validation workshop following immediately on December 12, 2012.

The following EGRA subtasks were administered at both baseline and endline phases of Year 1:

- *Listening Comprehension*, which measures a student's ability to comprehend a story presented orally.
- *Initial Sound Identification*, which assessed students' phonemic awareness (the ability to explicitly identify and manipulate the sounds of language).
- *Letter Name Knowledge* assessed students' automaticity in letter recognition.
- *Letter Sound Knowledge*, which assessed students' automaticity in their knowledge of the sounds associated with each letter.
- *Familiar Word Reading*, which assessed students' skill at reading high-frequency words.
- *Invented Word Decoding*, which assessed students' skill at applying letter-sound correspondence rules to decode (i.e., sound out) unfamiliar words.
- *Oral Reading Fluency*, which assessed students' fluency in reading a passage of grade-level text aloud.
- *Reading Comprehension*, which assessed a student's comprehension of text read in the Oral Reading Fluency subtask.

All students were administered all subtasks in Haitian Creole; only Grade 2 students were administered the subtasks in French. Administering the full EGRA instrument required approximately 20 minutes per student. The reading assessment was supplemented by a student questionnaire to clarify the demographic and social context in which students were learning to read. EGRA was administered in French and in Haitian Creole, the official languages of Haiti. Although both languages are used for instruction through the primary grades, students receive most of their instruction in Haitian Creole. Consequently, to ensure students understood each subtask's requirements, examiners explained each task and provided directions in Haitian Creole when EGRA was administered (for subtasks in both Haitian Creole and French).

In addition to the EGRA assessment administered to students, at each sampled school the SSME was administered that included head teacher and teacher questionnaires, a school inventory and a classroom inventory, and a classroom observation instrument.

3.3.2 Year 1 (2012–2013) EGRA and SSME Results

Due to delays in project initiation and, thus, program development, the majority of teachers were able to complete approximately one-quarter of what would be considered a full year's curriculum by the time of endline testing. Nonetheless, interesting trends in the data were observed.

- Initial Sound Identification tests a necessary pre-reading ability, and students in this study showed dramatic gains in this skill over the course of the program implementation.
- Students in the two treatment groups showed substantial gains over the course of the implementation in identifying letter sounds.
- Promising trends emerged on the Listening Comprehension subtask that warranted attention during the second year of this study.

Although notable gains were found for the three aforementioned subtasks, across all skills measured students failed to reach desired levels of proficiency for a number of reasons.

- These results reflect a limited period of implementation and varying degrees of fidelity of implementation. At most, teachers used the program for four months at the end of the school year, with some teachers using it even less.
- Treatment teachers—at least when observed by project coaches and supervisors—demonstrated limited adherence to implementation guidelines.

Table 2 summarizes EGRA average scores by grade and language for the 2012–2013 school year. Full EGRA and SSME results and recommendations can be found in the *ToTAL Year 1 EGRA and SSME Baseline Report* and the *ToTAL Year 1 EGRA Endline Report*.

Table 2. Summary of EGRA 2012–2013 Scores by Grade and Language

Listening Comprehension	Haitian Creole Grade 1			Haitian Creole Grade 2			French Grade 2		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	3.42	3.27	-0.07	4.09	3.89	-0.15	0.73	1.21	0.27
Treatment A Means	3.34	3.04	-0.21	3.89	3.91	0.02	0.86	1.50	0.49
Treatment B Means	3.18	3.49	0.25	3.93	3.90	-0.03	0.45	1.48	1.08
Initial Sound Identification	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	2.08	2.71	0.13	2.98	4.05	0.19	3.36	3.95	0.10
Treatment A Means	1.14	5.18	1.39	2.38	8.12	1.66	3.11	7.87	1.25
Treatment B Means	0.61	5.58	2.17	1.74	7.03	1.73	1.97	7.04	1.61
Letter Name Identification	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	10.91	16.63	0.29	24.30	34.68	0.32	32.91	38.29	0.18
Treatment A Means	8.57	12.42	0.36	23.91	31.02	0.42	32.50	36.72	0.21
Treatment B Means	6.94	13.02	0.64	21.25	27.36	0.41	28.63	33.77	0.31
Letter Sound Identification	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	9.12	8.62	-0.03	13.98	15.46	0.06	17.12	15.87	-0.07
Treatment A Means	6.34	11.01	0.46	13.39	28.14	1.15	15.89	25.23	0.72
Treatment B Means	5.38	11.06	0.76	11.78	25.40	1.12	13.43	21.79	0.75
Familiar Word Reading	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	6.02	8.88	0.21	12.79	16.43	0.17	12.64	15.76	0.14
Treatment A Means	4.04	6.20	0.32	13.83	17.24	0.22	13.40	12.55	-0.05
Treatment B Means	2.42	5.52	0.60	10.08	14.05	0.33	8.84	8.64	-0.02

Invented Word Decoding	Haitian Creole Grade 1			Haitian Creole Grade 2			French Grade 2		
	Baseline	Endline	ES	Baseline	Endline	ES	Baseline	Endline	ES
Control Means	3.57	7.27	0.30	9.25	13.01	0.21	7.92	11.46	0.21
Treatment A Means	2.13	4.31	0.39	10.06	12.88	0.22	8.83	9.79	0.08
Treatment B Means	1.32	3.67	0.56	7.09	9.66	0.27	5.31	7.38	0.26
Oral Reading Fluency	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	**Endline**	**ES**	**Baseline**	**Endline**	**ES**	**Baseline**	**Endline**	**ES**
Control Means	4.24	13.08	0.45	13.85	24.56	0.32	12.32	22.71	0.34
Treatment A Means	1.84	7.80	0.68	16.63	26.47	0.39	14.86	16.51	0.08
Treatment B Means	1.02	7.11	0.84	9.79	21.22	0.66	8.30	11.85	0.26
Reading Comprehension	**Haitian Creole Grade 1**			**Haitian Creole Grade 2**			**French Grade 2**		
	Baseline	**Endline**	**ES**	**Baseline**	**Endline**	**ES**	**Baseline**	**Endline**	**ES**
Control Means	0.22	0.36	0.15	0.70	0.92	0.12	0.51	0.66	0.10
Treatment A Means	0.04	0.26	0.49	0.83	1.18	0.26	0.54	0.34	-0.20
Treatment B Means	0.04	0.24	0.50	0.46	0.94	0.46	0.36	0.30	-0.07

It is important to note that student scores at baseline were low, indicating that even in the spring of the academic year students lacked critical prerequisite skills; this deficiency made meaningful gains even more important yet more difficult to attain. No systematic differences between girls and boys were observed.

SSME data revealed that many schools in Haiti lacked much of the basic infrastructure conducive to learning and that many teachers and students lacked access to basic classroom materials, such as textbooks, reading and exercise books, and chalk/writing materials. As a poignant example, fewer than 5% of classrooms observed had non-textbook reading materials available for students, and in these classrooms the average number of books available was five (insufficient given average class sizes of approximately 40 students). Many teachers used various types of classroom management practices, such as having students work in small groups, but many teachers failed to provide effective support to students. Teachers, however, were not given support: few teachers reporting receiving regular inspector visits and many teachers reporting low levels of teacher preparation training and/or reading instruction-specific training.

3.3.3 Year 2 (2013–2014) and Year 1–Year 2 (2012–2014) EGRA and SSME Results

It is important to note that the EGRA subtasks administered during the 2013–2014 school year varied somewhat from the subtasks administered in 2012–2013 in order to more closely align with the direction taken for the curricular materials. In order to align with MENFP policy of focusing Grade 1 instruction in French solely on oral language development, during Year 2 (during which Grade 1 materials were used again in Grade 1 and Grade 2 classrooms), all students were tested in both Haitian Creole and French, and a French oral language subtask and a Creole

letter/word dictation subtask were added. French subtasks of familiar and invented word reading, reading fluency, and reading comprehension were dropped completely.

The ToTAL project faced several types of challenges in implementation across its two years.

- ***Program Implementation by Teachers:*** Despite systematic in-service teacher trainings on Grade 1 materials (i.e., a comprehensive 10-day training prior to the beginning of each school year and three follow-up trainings during the 2013–2014 school year, in January, March, and June), many teachers struggled with implementing the ToTAL curricular approach, while others appeared unwilling to adopt a new approach completely. This is despite the frequent presence of trained project coaches and MENFP inspectors in the classrooms, both observing and providing real-time feedback on teaching and classroom management practices. As this report indicates, many of the teachers within schools selected for the ToTAL program lack sufficient pre-service training and teaching qualifications, which inhibit their ability to implement an explicit literacy instruction program.
- ***ToTAL Curriculum Implementation:*** Implementation of the ToTAL curriculum was limited in the first year of the study (2012–2013 school year, during which Grade 1 materials were, by design, implemented in Grades 1 and 2 classrooms). During the 2013–2014 school year, Grade 1 materials were used for the entire school year, again in Grades 1 and 2 classrooms; Grade 2 materials were piloted in 44 non-project schools during this school year.
- ***Coaching Implementation:*** Coaches received repeated trainings in how to observe classrooms and provide useful, real-time, content-specific feedback to teachers. Because implementation was limited during the 2012–2013 school year, coaching visits were correspondingly limited. However, during the 2013–2014 school year, coaching visits were intended for the entire school year. In addition, for the 2013–2014 school year, coaches were equipped with electronic tablets that both facilitated observation data entry and prompted coach responses to teachers based on that observation data. Due to management challenges on the part of the responsible subcontractor, however, over the course of the 2013–2014 school year, only 2,400 support visits were recorded, which is only 40% of the intended number (6,000) of support visits. Coaches were also unable to meet the intended number of 8,400 classroom observation visits, with only 6,400 (76%) visits recorded.
- ***Community Mobilization Implementation:*** The community mobilization component of this project faced severe challenges over the two school years. Although reading clubs were held in some schools, they were not systematically implemented. Across the entire set of 76 Treatment B schools, a total of 780 reading club meetings were reported, which is only 43% of the total number that had been planned. Further, across all Treatment B schools, only 31 parent meetings were held. Although summer activities did not occur over the summer of 2013 as intended, the project did support the MENFP's reading championship, in which all Treatment B schools participated.

Despite these challenges, meaningful and important gains were found in key foundational skills both across the 2013–2014 school year and when analyzing growth across the two school years covered in the project. Student mean scores for each of the EGRA subtasks are provided in ***Annex C*** of this report, and full EGRA and SSME results and recommendations can be found in the *ToTAL Year 2 EGRA and SSME Endline Report*. A summary of findings follows:

- ***Foundation skills improved in ToTAL schools:*** Observed results revealed promising gains in both sets of treatment schools—both during the 2013–2014 school year and from baseline 2012 to endline 2014—in the key pre-reading skills of initial sound identification and letter sound knowledge, both oral-language-focused skills. In each of these skills, students who were exposed to the ToTAL program demonstrated statistically significant gains over their control-group counterparts. Coaching and classroom observation data suggest that substantial parts of the ToTAL lessons taught in Haitian Creole were spent on oral language manipulation—teachers spent 26% of the lesson time on phonemic awareness tasks—which is likely a factor in these findings. (It should be noted that the ToTAL lessons designate 8% of lesson time to phonemic awareness; teachers, therefore, exceeded the recommended guided time for this skill.)
- ***Improvements in foundational skills did not necessarily translate into improved higher-order skills:*** Students' fluency in reading words and connected text by endline of Grade 2 in ToTAL schools began to approach levels that are required for further progression to reading comprehension. These trends, however, were not observed in all skills, and by the end of Grade 2, the majority of students still lacked speed and/or accuracy in letter name knowledge (measured in both Creole and French) and decoding ability (measured in Creole only). They also showed limited proficiency in the pre-reading skills of listening comprehension (administered in both Creole and French) and oral vocabulary (measured in French), which suggests an ongoing need to bolster students' vocabulary skills in both languages. Together, these results suggest that although the program may have helped to develop students' phonemic awareness and phonics skills, this had not yet translated into gains at word-level decoding or beyond. This is not surprising and is a trend that is seen in other countries as well. Until students have mastered these foundational skills, they lack the cognitive focus required to read and comprehend connected text. This is why it is critical for students to receive explicit instruction and any necessary remediation in language and literacy development in the very early grades. Unless students are able to reach higher levels of proficiency in these skills, they will remain unprepared to progress into the more content-heavy grades of mid- and upper-primary school.
- ***Community mobilization activities did not add to the effects of the program, perhaps due to low levels of implementation:*** Overall, the differential gains hypothesized from the addition of community mobilization activities to Treatment B schools did not materialize. Statistically significant differences between Treatment A and Treatment B scores emerged for several skills, but all such differences favored the Treatment A group. This may result from the lack of full Treatment B implementation under the ToTAL project. Although the core element of the 2013–2014 school year community mobilization plan—reading clubs—was implemented in many schools, the clubs were not present in all schools and

did not meet with the frequency intended (a total of 780 reading club meetings took place across the Treatment B schools, rather than the 1,800 planned). The other two elements of the plan were either infrequently implemented (e.g., 31 parent meetings were held) or not implemented at all (e.g., literacy fairs). This was largely due to insufficient activity on the part of community mobilizers—who missed substantial numbers of days in the field due to poor management on the part of the responsible subcontractor—and insufficient numbers of community mobilizers to reach all rural schools—each community mobilizer was responsible for 10 school communities and, therefore, was able to visit each only twice each month on average. It should also be noted, however, that across subtasks, Treatment B means at baseline were substantially lower than means in the other two groups, suggesting that despite random assignment, the Treatment B communities were meaningfully different from the other communities. The study design did not anticipate this and so did not capture data that might explain this finding; this should be a consideration in interpreting results, however. In addition, the lack of strong Treatment B effects is not dissimilar from efforts made in other countries. Mobilizing communities requires establishing relationships and trust within those communities, and laying this groundwork takes time. The limited implementation of planned activities is likely a symptom as well as a cause of underlying reluctance or inability of many community members to invest the required time. Within each target community, however, progress was made and important relationships were established with community members and partners (e.g., YMCA d'Haïti). These relationships should be strengthened to further build momentum in communities.

- ***Gender gaps favored girls:*** On all skills *except* Invented Word Decoding and Word Dictation, statistically significant differences between girls and boys were observed. In all cases, girls significantly outperformed boys. In many of these cases, these groups were comparable at baseline and the gains were seen in control as well as treatment groups, perhaps indicating that this is a reflection of how girls and boys learn at this age. Future research is needed to better understand this difference. On the subtasks of Invented Word Decoding and Word Dictation, no statistically significant differences between girls and boys were observed.
- ***Coaching and classroom observation data did not provide sufficient information to explain differences in learning outcomes:*** Analyses were also run to determine the impact of coaching visits, community mobilization activities, and the fidelity of teacher implementation of the ToTAL curricula on student mean scores. A regression analysis showed that the factor of teacher following all elements of the lesson did predict student performance on the Oral Reading Fluency subtask. The finding that Treatment A students outperformed control students on EGRA subtasks also suggests that teachers receiving the overall program were offering qualitatively better instruction than control teachers; while this could be attributed solely to the materials and training sessions, it is likely that coaching also played an important part. No other fidelity regressions showed a positive contribution, however, and it may be that the instruments used were not sufficiently calibrated to capture the differences in implementation that were related to increased

learning outcomes. No significant findings were observed with regard to coaching or community mobilization. As mentioned elsewhere, both coaches and community mobilizers failed to provide the quantity or quality of support intended, and it is possible that the limited number and range of activities made it more difficult to see meaningful impacts. Given that fidelity of implementation—whether of teachers using materials or communities engaging in literacy-supportive activities—often is shown to play a key role in learning outcomes and that positive, if not consistent, findings emerged from this study, future research on the forces contributing to student outcomes is warranted.

- ***Teachers were underqualified; the less prepared teachers were, the less likely they were to adhere to ToTAL's implementation design:*** It should be noted that many of the teachers implementing the ToTAL program were underqualified. In addition, many teachers failed to implement the ToTAL program as it was designed; teachers did not consistently use intended classroom management, student interaction, and formative evaluation strategies, and many teachers did not keep pace with the program schedule. For example, 41% of teachers were behind in lessons (during 67% of coaching visits, teachers were observed to be more than five lessons behind schedule) and 75% of teachers were not using the elements of the lessons to interact with students. It is likely that such weaknesses in teacher fidelity of implementation negatively impacted student growth.

3.3.4 Dissemination of Findings to Stakeholders

Findings from the baseline EGRA administration were communicated to stakeholders in the Cap-Haitien and Saint-Marc corridors via partner meetings on February 27 and March 21, 2014, respectively. In both presentations, ToTAL staff were impressed by the level of interest in EGRA and SSME information as well the level of commitment to educational change expressed by teachers, school directors, and local MENFP officials. By linking SSME data to EGRA results, for example, by showing how the high number of days of unofficial school closure interferes with learning and reduces reading outcomes, ToTAL staff sought to help local stakeholders to have helpful "take-away" points that can be applied at the classroom, school, and district levels. A policy dialogue workshop intended to further discuss EGRA and SSME results and implications for future policy decisions was scheduled for September 2014 but rescheduled with MENFP for November 2014.

In August 2013, an EGRA results and policy dialogue workshop was held to stimulate conversation within the MENFP about the state of early grade reading in Haiti and the importance of robust and proactive policy in response. During this workshop, implementing partners were invited and presented their EGRA results in addition to ToTAL staff presenting ToTAL EGRA and SSME results, which enriched subsequent discussions. In November 2014, a similar workshop was held to present and discuss Year 2 results and implications and lessons learned for future education initiatives. Representatives from MENFP as well as school directors, coaches, and supervisors from all three project corridors participated. Representatives from many partner organizations also attended, including Save the Children, Catholic Relief Services, Caritas, Concern Worldwide, IRC, Care, J/P HRO, and UNICEF. The workshop provided an important opportunity to review and discuss the EGRA and SSME results as well as to think critically and

strategically about how to improve reading in Haiti. Targeted working sub-group discussions focused on (1) evaluation of reading skills, (2) curricular materials, (3) training and coaching of teachers, and (4) community mobilization, with the following recommendations emerging from each group.

- Evaluation of Reading Skills
  - Shorten the assessments because they are too long.
  - Increase assessor training time.
  - Ensure that assessors establish a good rapport with the students before administering the test.
  - Schedule sufficient time for evaluations.
  - Adjust the assessments to accommodate the reality of the students.
  - Within the school setting, find/establish a suitable and friendly atmosphere for testing to reduce student stress.
  - Consider the SSME report for the selection of schools.
  - Regularly retrain teachers in Measurement and Evaluation.
  - Continue using electronic tablets for testing, but make solar battery chargers available.
- Curricular Materials
  - Strengthen the capacity of teachers in the methodology "*Map li nèt ale*," in particular in reading with prosody (e.g., intonation).
  - Provide an assessment in the materials after each lesson (in addition to current formative assessment opportunities).
  - Provide schools with materials to provide increased support for the pronunciation of letter sounds.
  - Strengthen in-class reading activities (e.g., reading circles [*cercles de lecture*]).
  - Work with teachers to ensure that reading activities are undertaken regularly in class.
  - Continue training teachers to make better use of the proposed activities and to remediate areas of difficulty.
  - An illustrative list of recommendations related to the materials is provided in ***Annex B*** (also included in ***Annex B***, for ease of reference, are proposed edits to curricular materials provided by the Pilot Support Team through the piloting of Grade 2 materials).
- Teacher Training and Coaching
  - Establish performance criteria.
  - Attract the most qualified teachers and coaches to participate.
  - Offer honor and merit incentives to boost performance.
  - Also offer honor and merit certificates to teachers.

  - Offer incentive payments to teachers.
  - Provide benefits to teachers
  - Organize award ceremonies for good teachers.
- Community Mobilization
  - Make contact with management and school committees to build relationships.
  - Promote reading practice at home for children.
  - Work with parents' associations and meet with community organizers and partners.
  - Obtain financial or in-kind participation from the community.
  - Recruit mobilizers for the program from the intervention area.
  - Sensitize parents to encourage reading practice from their children.
  - Hold an open-door activity (code of conduct, protection, library presentation, photo exhibition, presentation of the TOTAL materials).
  - Establish shared responsibility with the community.
  - Revitalize school councils with examples of good practice.
  - Encourage literacy for all.

The workshop provided an important opportunity for stakeholders from the MENFP and from different organizations to examine in depth these key components of an early grade reading program. ToTAL staff found that this workshop provided an important opportunity to help the MENFP and local stakeholders to understand that although the Year 2 endline results showed that student reading skills must continue to improve, the project had made considerable progress and had clearly achieved results improving basic skills.

3.4 Result 4: School Management Effectiveness Assessed

The project research design called for the SSME to be administered at baseline during the 2012–2013 school year and again at endline during the 2013–2014 school year in order to evaluate progress in key teacher and school environment elements over the course of the project. The SSME survey used at baseline of the 2012–2013 school year was revised slightly, however, to reflect the specific implementation of the 2013–2014 school year and was administered during the 2013–2014 endline EGRA administration. The components administered at both points in time included the following: school inventory, head teacher survey, teacher survey, classroom inventory, classroom observation, and student survey. SSME assessors were trained concurrently with EGRA assessors and accompanied EGRA assessors on all school visits.

Findings highlighted substantial weaknesses in teacher training and variation in levels of program implementation. On the issue of training, the ToTAL program included a rigorous and multi-faceted teacher training component, with teachers receiving a 10-day training at the beginning of each year, followed during the 2013–2014 school year with subsequent targeted and regional trainings and coaching. This report shows, however, that teachers still did not implement the program as designed. During future implementations, teachers need to be continuously trained to

teach the five foundational components of reading beginning in Grade 1: phonemic awareness, phonics instruction, reading fluency, vocabulary, and reading comprehension. Despite the extensive training efforts of ToTAL, many teachers struggled to fully implement the lesson plans. A further implementation issue was coaching. Although the ToTAL program included substantial training and retraining of coaches, the coaches did not meet their projected number of school visits. In addition, the fact that teachers were not implementing the program faithfully implies, at least in part, that the coaches were not helping teachers to address these deficiencies in their implementation. Further working with coaches and inspectors to ensure full adherence to schedules and to strengthen their abilities to provide meaningful pedagogical guidance to teachers will be important in future work. The Full SSME results and recommendations can be found in the *ToTAL Year 2 EGRA and SSME Endline Report*.

3.5 Result 5: Reading Curriculum Developed, Implemented, and Evaluated

3.5.1 Materials Development and Implementation

Curriculum development commenced as soon as the project did, with Grade 1 materials in both grades to be completed within three months, followed immediately by development of the two subsequent grades' materials.

The ongoing objective of ToTAL materials development was to develop an innovative approach based on international best practices that also incorporated the best components of existing curricula in use in Haiti. To this end, ToTAL management organized a series of workshops with MENFP staff to determine the feasibility of adapting existing curriculum (such as Save the Children's *Lekti se Lavni*) and to establish the focus and content of the ToTAL materials. While the decision was ultimately made not to explicitly repurpose *Lekti* or other (e.g., *Organisation Internationale de la Francophonie*) materials—due to the underlying structures and curricular focus of those materials, which could not support a direct repurposing—the ToTAL development team integrated useful pedagogical and classroom management elements into ToTAL from those existing programs as much as possible.

Through these workshops, it was determined that the ToTAL program would be explicitly based on the five established components of an effective literacy-development program:

- Phonemic awareness
- Alphabetic knowledge
- Vocabulary
- Comprehension
- Fluency

Each lesson, whether in Haitian Creole or French, would include explicit focus on each of these key elements. It was further decided that, to remain true to the MENFP focus on mother-tongue instruction in early grades, while Grade 1 Haitian Creole materials would focus on oral language development as well as literacy development, Grade 1 French materials would focus solely on oral language development. French literacy instruction would begin with Grade 2.

In addition to the explicit focus on the five literacy components, ToTAL curricular materials include embedded formative assessment opportunities, preview and review of lesson content, and visualization and prediction activities to foster both oral language and reading comprehension skills. By design, teacher guides were heavily scripted in order to (1) provide support for all teachers and (2) ensure that even struggling teachers would be able to implement the lessons as designed.

All materials were based upon an established and approved scope and sequence. All of the materials produced in the framework of this project—*M ap li nèt ale* (for the Creole lessons) and *M ap pale fransè net ale* (for the oral French lessons)—were validated by the DEF and approved by USAID.

3.5.2 Workshop on Creole Codes and Standards

Through the development of the materials, it became apparent that discrepancies in Haitian Creole linguistic and orthographic uses were not consistent across the country, and in May 2013 the ToTAL project participated in a three-day workshop on Creole codes and standards within the schools. Dr. Michel DeGraff was invited to participate in this workshop as an international expert and champion of Creole as the language of instruction and learning in Haiti. This workshop, which was of paramount importance for MENFP, established a guideline for the codes and standards of writing in the development of Creole teaching materials. Dr. DeGraff assisted MENFP through DEF and PDCL in workshop planning and then facilitated workshop discussions; he also facilitated participatory discussions for key decisions, while ensuring the didactic-pedagogical objectives of the workshop. The resolutions from these meetings allowed the project team to correct and adapt the Creole teaching and educational materials for testing in classrooms.

3.5.3 Development of Grade 1 Curricular Materials

The student reading and writing books and teacher's guide in Creole and the teacher's guide and posters in French were developed, approved by USAID, and printed by the middle of January 2013, although development and publication did face some challenges. The Creole student writing book had to be reprinted because errors in the writing examples to be provided to students and printer error resulted in unusable quality. Copies of the first several weeks of lessons in the writing book were distributed to schools so that joint reading-writing work could still be done while the revised, corrected versions of the materials were being produced.

As a result of these delays, the materials were distributed to approximately 150 experimental schools at the end of January so that, starting the week of February 4, 2013, trained teachers had access to the educational materials distributed to the students in their Grade 1 and 2 classes for the implementation of the program. At the end of a second training session in March 2013, the principals and teachers of the other schools within the ToTAL sample received the materials necessary for the implementation of the program, and all Treatment A and Treatment B schools used the materials through the end of the school year.

Following implementation of the Grade 1 Creole and French materials over the 2012–2013 school year, USAID requested a number of substantial content and format revisions. Changes included revision of the lesson flow and teacher scripts; revision of student stories, activities, and mini-games; inclusion of visualization activities; and rethinking of formative evaluations and review lessons. RTI worked closely with USAID and MENFP during the months of July, August, and September to ensure that all Grade 1 materials were validated in time for printing and distribution to ToTAL schools at the beginning of the 2013–2014 school year.

Several challenges posed problems with these ongoing materials revisions, including a lack of continuity of reviews both within MENFP and USAID, with new reviewers at times providing inconsistent and conflicting guidance in the development and review process. ToTAL development and management staff worked closely with both MENFP and USAID to work through these development challenges to ensure that the materials were of high quality, would be accessible to the majority of teachers and students being targeted, and would meet USAID and MENFP expectations. Distribution of materials also posed substantial challenges, given inaccuracies in projected student enrollment and unanticipated student enrollment fluctuations. ToTAL management worked closely with schools to predict student enrollment in order to distribute materials prior to the start of each school year; to address fluctuations in student enrollment, ToTAL then engaged in multiple rounds of distribution (for example, in late October, early November, and again in early December of 2013 for the 2013–2014 school year).

Despite these challenges, the materials were widely accepted with enthusiasm by teachers, students, school directors, and other implementing partners. During the 2013–2014 school year, implementing partners Care, Caritas, J/P HRO, AMURT Haiti, and Concern implemented the ToTAL program in additional schools. J/P HRO implemented in partnership with AMURT Haiti in 20 schools (with a total of 30 teachers) in Delmas 32, as part of a community-based redevelopment program. Concern reported that the materials were a vast improvement over what was previously in use in schools in their target area of rural Saut d'Eau. In line with ToTAL's experiences in its intervention zones, Concern staff reported that teachers in rural areas found it challenging to complete an entire scripted lesson during a class period. The teachers, who often had limited training and education, were not accustomed to delivering so much content and, as a result, took more time with the material; in addition, students who lacked prerequisite foundational skills took substantial time to master the content, thus also requiring more instructional time. However, Concern leadership found that the scripted nature of the materials and the embedded classroom management strategies that had been provided helped to build teacher capacity. Concern Program Manager Fanela Célestin reported that, before implementing the ToTAL program, the vast majority of the students in the targeted schools could read less than 10 words per minute, but after three to four months of implementation, students were able to read over 20 words per minute on the same assessment.

3.5.4 Development of Grade 2 Curricular Materials

Delays in developing Grade 1 materials and then subsequent, unanticipated major rounds of revisions to those materials resulted in Grade 2 development delays. Grade 2 ToTAL materials in both languages were available to implement in classrooms mid-year of the 2013–2014 school

year, but it was decided with USAID that RTI would pilot test them in non-project schools rather than to cause a disruption in ToTAL schools mid-year. ToTAL pilot tested 24 French lessons and 25 Haitian Creole lessons in 44 non-ToTAL schools in the Cap-Haitien corridor from March to May 2014. To support pilot teachers, in April 2014 ToTAL hired and trained two coaches who visited schools on a regular basis and provided implementation support to teachers as well as feedback on implementation challenges and successes to ToTAL.

In addition, in response to technical guidance on the pilot issued by USAID on April 11, 2014, ToTAL established a Pilot Support Team to review and provide input on both Haitian Creole and French Grade 2 materials. From May 20 to May 21, 2014, ToTAL team members accompanied the Pilot Support Team in visiting the Cap-Haitien corridor to conduct classroom observations in pilot schools and observe Creole and French teacher focus groups. A Pilot Support Team Grade 2 Revision Workshop was held May 26–27, 2014 to consolidate and finalize revisions in a participatory and coordinated manner. Dr. Pierre-Michel Laguerre, former Director General of the MENFP who provided technical support to the materials development process, was present. The workshop represented the final step in the Grade 2 curricula pilot and Pilot Support Team process, and was intended to conclude the process whereby USAID, MENFP, and other stakeholders provided input into the revision process. However, subsequent to the workshop, MENFP requested that additional edits be made to the Grade 2 Haitian Creole materials as well as to the Grade 1 materials, which USAID asked RTI to accommodate.

In addition to support for the Pilot Support Team, USAID's technical guidance called for the training of inspectors in classroom observations in pilot schools, the development of an inspector monitoring instrument, inspector focus groups, student focus groups, and teacher focus groups, as well as student and teacher surveys. The purpose of these visits was to ensure that materials were adapted to students and teachers' needs, as well as Haitian classroom reality. Therefore, in April 2014, the ToTAL team trained 26 inspectors on the ToTAL Grade 2 French and Creole materials as well as on the classroom observation instrument. Inspector training and involvement in classroom observation were particularly important aspects of the Grade 2 Pilot Program because these activities engaged GOH staff, not just local or international NGOs, directly in classroom support. MENFP inspectors highly appreciated the training and the school visits and reported that the Pilot Grade 2 materials were used enthusiastically by students, teachers, and school directors. In focus group discussions, school inspectors emphasized that the materials were of much higher quality than what was currently available and were also very context appropriate. One inspector went as far as saying that ToTAL was the most impressive educational development intervention that he had seen is his decades-long career in education in rural Haiti. Direct involvement of GOH staff and stakeholders will be crucial for the long-term sustainability of future large-scale educational improvement programs. Indeed, involving inspectors in classroom observation for the Pilot Program demonstrated their ability to contribute to classroom observation of reading programs, and an important lesson of the process was that a transfer of responsibility for classroom observation to inspectors, while ensuring quality, would be an important component of future reading programs.

Pilot Support Team: The team is finalizing the revision to Grade 2 materials, May 2014.

During the last quarter of 2014, ToTAL French and Creole curriculum development teams completed the revision process of the Grade 2 materials. The revised version of all materials was submitted on July 31, 2014 and approved by USAID. The ToTAL team distributed the materials to development partners in Haiti—such as Concern, Care, Caritas Austria, Caritas Czech Republic, and World Bank—to implement in their schools during the 2014–2015 school year.

3.5.5 Development of Grade 3 Curricular Materials

Development of Grade 3 scope-and-sequence documents and lesson templates began in July 2014 while the teams were completing the revision of Grade 2 materials. The scope-and-sequence documents, lesson templates, and sample lessons were shared with USAID during August for their comments and suggestions. Upon receipt of USAID comments, the ToTAL team organized a series of review meetings with both USAID and MENFP representatives, and in August 2014 an agreement was reached regarding the content of the scope and sequence, themes of stories, lessons templates, and types of activities to be considered throughout the development process of Grade 3 materials. In December 2014, ToTAL submitted the Grade 3 materials in both Haitian Creole and French to USAID and to the MENFP, according to the terms of the ToTAL contract.

3.6 Result 6: Community Literacy Strategies that Improve Early Grade Reading Developed

As part of the ToTAL project, RTI designed and tested community-focused activities intended to support and improve children's literacy development, working closely with FONHEP to implement community literacy strategies that took into account both boys' and girls' reading skill improvement. This community-support component of ToTAL worked with a subset of schools: 50 in the Cap-Haitien and 25 in the Saint-Marc corridors.

3.6.1 Community Mobilization Activities

The community mobilization plan developed for this project was based in research that shows that initiatives that make use of students' family and community relationships and that capitalize on time and resources outside of the classroom directly benefit students' literacy development in several ways: (1) by offering more intensive, one-to-one learning opportunities, (2) by facilitating changes in the family environment that foster more literacy-rich activities and experiences, and (3) by acknowledging and incorporating the family's culture and language (recognizing that the culture and language of the family is absolutely important), thereby making literacy-focused

activities more personally engaging and meaningful. ToTAL grounded its community literacy plan in this existing body of community-involvement research, modeling its activities on strategies shown to be effective in international contexts, and ensuring that each activity promotes at least one of the following objectives:

1. Direct Learning Support: providing direct support to the teaching of reading to children;
2. Indirect Learning Support: providing indirect support for learning to read by making opportunities available for children to engage in learning activities but not explicitly targeting the specific skills required for learning to read;
3. Direct Parental Instruction: providing instructions to parents on how to support their children as they learn to read; and
4. Parental Information: providing information to parents, informing them in general about the importance of the early development (or rapid learning) of reading and more specifically about the progress made by their children.

For the 2012–2013 school year, ToTAL developed an implementation plan that included student-focused, parent-focused, and community-engagement activities, with community mobilizers instructed to engage with communities to determine the appropriate mix of activities for each community, based upon that community's objectives and resources, although all communities were to, at a minimum, ensure that student-focused activities (such as reading clubs) took place.

Beginning in April 2013, community mobilizers began engaging community support for student literacy development. For the remainder of the school year, they did this primarily through general outreach and in-school reading clubs. When implemented as planned, reading clubs occurred every week for approximately 45 minutes and were, for the most part, led by teachers. These clubs provided important opportunities for students to be exposed to oral language, reading behavior, and comprehension strategies. Few schools planned literacy fairs over the course of the summer, however, and so ToTAL engaged with MENFP in support of its Summer Reading Championship to raise the profile of reading, both at targeted ToTAL and MENFP schools as well as on a national basis. This large-scale community mobilization effort provided critical summer reading practice, community outreach, and awareness-raising for the importance of reading.

The ToTAL team experienced considerable challenges implementing the Summer Reading Championship as a result of under-provision of promised supplies by the MENFP. However, the ToTAL team was ultimately successful in implementing the Summer Reading Championship in targeted schools in close coordination with its implementing partners YMCA d'Haïti and FONHEP. On balance, the Summer Reading Championship was an important community mobilization activity that helped build excitement about reading in ToTAL schools. Participation of acclaimed writer and artist Frankétienne helped to both enliven events and instill a greater sense of possibility and purpose to learning to read and the life of the written word for children, parents, and community members. Through the Summer Reading Championship, ToTAL provided five weeks of summer reading and enrichment activities in all Treatment B schools. In addition to his work at target schools, Frankétienne met with ToTAL staff and senior stakeholders in an important teambuilding event. On September 6, 2013, ToTAL hosted a discussion—with

Frankétienne, ToTAL staff, MENFP officials, and other key stakeholders—about the importance of reading for children and the barriers to education in Haiti. This meaningful event strengthened the sense of shared purpose and shared values among ToTAL staff and partners, who came away from the event energized and inspired.

Based upon lessons learned during the 2012–2013 school year, for the 2013–2014 school year ToTAL encouraged community mobilizers to focus on three primary activities: reading clubs, parent meetings, and literacy fairs. Throughout the 2013–2014 school year, student reading clubs were active in most communities, and some communities began to engage in parent reading fêtes (informative and enjoyable parent-focused meetings) and literacy fairs (community-based fairs in which student work could be showcased). Reading clubs and parent fêtes were often held on Friday in support of MENFP's "reading Friday" initiative, intended to help children engage in reading and promoting additional reading time during the school week. Activities were not implemented to the degree expected, however, largely due to mismanagement by FONHEP, the subcontractor responsible for community mobilization implementation and management. FONHEP repeatedly failed to provide funds to its partner CEEC (who employed community mobilizers), which in turn did not pay mobilizers' salaries, causing mobilizers to stop work. As a result, although FONHEP was under contract to ensure that 1,800 reading clubs and 300 parent fêtes took place, only 556 reading clubs and 31 parent fêtes were held. RTI repeatedly shared its concerns with USAID and issued warning letters to FONHEP; it also supported FONHEP through various types of capacity building (e.g., supported developing processes and tools for tracking field visits). Ultimately, FONHEP required much more capacity building and support to implement its portion of the program than was originally requested, planned for, or budgeted. Although the CEEC coaches did contribute a great deal to the classroom observation portion of the program, community mobilization was an area where it would have been more productive to work with a local partner organization that had substantial experience and proven results implementing community mobilization programs at this scale.

Despite the smaller than anticipated number of events carried out, however, community mobilization activities were positively received by children, teachers, and parents at the treatment schools where they occurred. Children engaged enthusiastically with these important enrichment activities. Parents supported the activities as well and sacrificed work time to attend parent fêtes. Program staff reported children waiting with anticipation for their favorite community mobilizer to return and facilitate a reading club or a parent fête.

Students attending reading caravan in Fort-Liberté, November 2013

In addition to the community mobilization activities mentioned above, ToTAL supported two large-scale MENFP "*caravans de lecture*" (reading caravans)—in Fort-Liberté on November 22 and in Pétionville on December 20, 2013. The objective of the reading caravans was to raise awareness about the importance of reading while also making reading fun. The events included speeches, dances, reading contests, and entertainment. The result of both events was to raise the profile of reading in general and, specifically, to raise awareness of the MENFP's and USAID's efforts to improve early grade reading through ToTAL. At the Fort-Liberté reading caravan, the Minister of Education, Vanneur Pierre, was the guest of honor. Celebrity TiRa served as master of ceremonies to animate the crowd, and students from 20 schools participated in this joyous celebration to promote reading.

Students watching performers at the caravan in Pétionville, December 2013

The December 20, 2013, reading caravan was held in the prominent location of Place Boyer in Pétionville. Holding this festive, upbeat event in a high-visibility urban location helped to further raise the profile of ToTAL, while also, and more importantly, providing needed recreation for children and raising awareness about the importance of early grade reading. The reading caravan was promoted extensively in advance through radio commercials, in line with the ToTAL communication plan.

As noted above, community mobilization activities were not implemented as planned by FONHEP. Due to the variability in the degree of implementation of community literacy strategies across Treatment B schools, the ability to test causal relationships through the original randomized control trial design was compromised. In response to this, on July 14, 2014, RTI submitted a Community Mobilization Mitigation Plan that proposed a modified analysis plan employing regression techniques to determine whether the degree of community mobilization is associated with improved reading skills. In response to the research question "What are the effects on learning outcomes for students (disaggregated by sex) receiving only Treatment A interventions (i.e., early grade reading instruction with full teacher professional development package) as compared with those receiving Treatment B interventions (i.e., early grade reading instruction, teacher professional development package, and community literacy strategies focused on improved reading)?", RTI included level of implementation as a predictor in a series of multiple regressions that explored whether a higher degree of community mobilization implementation was associated with larger positive change in student performance, after student characteristics such as grade, gender, and socioeconomic status categorization were taken into account. Using the data collected on school communities' actual engagement in reading clubs, parent reading events, and literacy fairs, RTI established a measure of each school's degree of implementation of these community literacy strategies. Treatment-based effect sizes were estimated and reported in the *Year 2 Endline EGRA and SSME Report*.

3.6.2 Student Reading Report Cards

Measuring and communicating individual student progress is an important part of a literacy program, and ToTAL developed a student report card for progress-evaluation purposes. The criteria used allow each student to see and track his/her level of performance for each basic skill, such as reading, writing, and oral communication. The report card also gives a general overview of each student's learning process and the progress made during a given period. With the help of the teacher, a student checks the box that corresponds to his/her level of acquisition at the time of the evaluation. The card contains a column/section for general "comments" to allow the teacher to provide qualitative elements to better understand the student's level of acquisition of reading competences. This report card was not piloted or implemented during the ToTAL project; it is hoped that the MENFP will take this task on and in the future use report cards as a mechanism for monitoring student performance in the classroom and communicating progress to families.

3.7 Result 7: Reading Instruction Improved

3.7.1 Year 1 (2012-2013) Training of Trainers (TOT) and Training of Teachers

For the 2012–2013 school year, a TOT covering Grade 1 materials was conducted January 7–18, 2013, with the first TOT session held at the Fort-Liberté EFACAP. Twenty-four trainer trainees were selected and were trained during this session. At the end of this TOT, 20 of the trainers (7 women and 13 men) were selected to take charge of the 17 training sessions for principals and 270 teachers, which ran from January 21 to February 2, 2013 at seven different sites (Cabaret, Arcahaie, Saint-Marc, Limonade, Trou-du-Nord, Fort-Liberté, and Ouanaminthe).

For various reasons related to the non-participation of over 40 schools in the first training sessions, five additional training sessions were organized from March 4 to 16, 2013 in Arcahaie, Saint-Marc, Limonade, and Ouanaminthe for another 167 principals and teachers. FONHEP staff took part in the TOT session, along with executive managers and technicians from the DEF, DFP, SAP, and BDS and inspectors and education advisors. The TOT sessions resulted in informed and aware staff members who could ensure training replication and the implementation of the program in ToTAL schools. From April 1 to 4, 2013, inspectors in the Saint-Marc corridor received this training so that all Ministry staff were properly trained in the teaching/learning methods of the ToTAL project in the 200 experimental schools.

From April 1 to 3, 2013, the seven community mobilizers hired by the FONHEP were trained and informed of their community motivation responsibilities to strengthen reading skills in approximately 75 Treatment B schools within the ToTAL sample.

3.7.2 Year 2 (2013-2014) TOT and Training of Teachers

The 2013–2014 TOT was of high quality and was an important demonstration of the effectiveness of the current ToTAL team. All of the teacher trainers (16), supervisors (4), and professional development trainers (20 plus 10 new ones for Port-au-Prince) were trained in the last week of July (July 24–August 2, 2013). During August 2013, these trainers then provided subsequent training for the principals and teachers of the 200 initial test schools (August 5–14) and for those of the 100 new schools in the Cul-de-Sac corridor (August 19–28).

The stated goals for the training were as follows:

- Obtain feedback on pedagogy and the previous year's curriculum from first-line staff.
- Communicate changes to the program for the coming school year.
- Practice using the new lessons and monitoring instruments (for both Creole and French).
- Empower trainers, supervisors, and leaders in the effective presentation of lessons.
- Plan training of principals and teachers for implementation at the school level for the 2012–2013 school year.

ToTAL staff focused on training participants in the Creole curriculum from July 24 to 27 and in the French curriculum from July 29 to August 2. To ensure that participants were effectively

learning, pre- and post-tests were administered before and after the sessions in Creole and in French.

The ToTAL team used a working session to familiarize participants with all curriculum materials, including the teacher's guide, the student book, and the writing book. Following the detailed introduction to the materials, the ToTAL team presented training participants with the five pillars of the method: (1) phonemic awareness, (2) letter recognition, (3) fluency, (4) vocabulary, and (5) comprehension. ToTAL staff also emphasized the pedagogic approach for the lessons of (1) modeling the ideal way to conduct the lesson; (2) providing immediate feedback and technical assistance, such as prompt correction of errors; (3) using intonation, rhythm, and a song beneath the words to make lessons more animated; (4) using participatory classroom management; (5) demonstrating fairness, justice, and inclusivity in participation in lessons; and (6) having students work in pairs. To help teachers master the process of learning to read and the proper identification of sounds, ToTAL staff emphasized the importance of always learning sounds. As a result of intensive drilling on the approach and guided practice on individual lessons, all participants in the training were able to effectively present Creole lessons by the conclusion of the Creole portion of the training.

Presentation of and training on the French lessons followed a similar structure and approach. At the introduction of the French lessons, ToTAL staff compared the ToTAL French curriculum to the MENFP French curriculum. This head-to-head comparison was extremely important, because many teachers believe that ToTAL has increased their workload with its new way of teaching reading. It is necessary to help them understand that ToTAL is helping them do their job better, even if the adjustment can be time-consuming. In providing feedback on the previous year, an additional concern surfaced that students were not receiving sufficient time on task because schools do not respect the national school calendar. Some schools, for example, were reported to shut down during market day, others at harvest times. ToTAL staff emphasized the importance of carefully observing the official MENFP school calendar to ensure that teachers and students have enough time to work through the lessons properly with students. ToTAL staff demonstrated to participants that the lessons could be completed as required and coached trainers on how to effectively manage class time to complete lessons efficiently.

Of particular importance during the French lessons were exercises focused on diction and phonics, including demonstrations and simulations. These exercises were very important to the study of French because pronunciation is a very serious challenge to teaching French in Haiti; many teachers find it difficult to pronounce the required words. Workshop participants found the pronunciation exercises quite difficult, and after the exercises were complete, the ToTAL team organized more upbeat learning games to rebuild morale and confidence within the group. As with Creole, the final stages of the French training focused on improving participants' abilities to present lessons. By the end of the training, each participant had demonstrated the capacity to present a lesson and thus was ready to effectively train principals and teachers. ToTAL staff, trainers, and supervisors left the training well prepared and motivated for the teacher trainings and well prepared to support teachers in the classroom during the coming school year.

Following the TOT, ToTAL carried out teacher trainings in the three program areas of Cap-Haitien, Saint-Marc, and Port-au-Prince. ToTAL curriculum team members staffed the trainings while also fulfilling other responsibilities to the project. Three eight-day sessions took place as follows:

- Cap-Haitien corridor and North-East, August 5–14
- Saint-Marc, August 5–14
- Port-au-Prince and Cul-de-Sac, August 19–28

The focus of the sessions was as follows:

1. Introduce participants to the various changes to the lessons.
2. Deepen participants' understanding of the various lessons.
3. Ensure that participants understand the structure of lessons.
4. Help participants to master the pedagogy of lessons in French and Creole.
5. Show participants how to present the lessons.
6. Coach teachers as they present at least one lesson.

The training sessions were well received by participants. The inspectors present reported that they were impressed by the high levels of enthusiasm from the participants, who reacted positively and adapted quickly to the changes in the lessons. ToTAL staff also included games and energizers to revitalize the group and lighten the mood, and trainers reported that participants were highly motivated and punctual. At the beginning and the end of the session, ToTAL trainers administered a test to assess knowledge retention during the training. Comparison of pre-test and post-test results revealed 60% to 75% retention of material between sessions. Trainers reported that the training sessions included high levels of supervisor support, participation of directors in the session, clear application of the proposed strategy, high levels of participant motivation, participation by MENFP inspectors in the training centers, participants gaining comfort with the instructed practices and the methods, sufficient available materials, and well-prepared trainers and supervisors. In recommending improvements, participants emphasized that holding the training in school facilities is difficult because of the condition of the toilets and the child-sized furniture. Participants also reported delays in food service and requested an additional two days of training (i.e., extending training from 8 to 10 days) due to the amount of material.

Overall, although teachers demonstrated strong improvements in knowledge and understanding of the materials, some teachers struggled and will require additional support to achieve competence. For this reason, the ToTAL project implemented remedial in-service trainings to reinforce skills as required.

3.7.3 Refresher Teacher Trainings on Grade 1 Materials

The ToTAL project conducted refresher training for project teachers and school directors at 10 training centers January 7–10, 2014. These training sessions, which included 665 teachers and 255 school directors, were used to address pedagogical and classroom management issues that

had been observed by coaches and ToTAL staff during visits to schools, including too much time spent on basic skills such as letter identification, not enough on reading comprehension, and insufficient time with the school libraries, as well as to provide additional guidance and practice on the ToTAL lessons that teachers found challenging. The training included specific recommendations for remediation and corrective actions. For example, a key issue for teachers was learning to follow the time allotted for activities within the lessons. Some teachers had a tendency to go too slowly through shorter, less detailed activities and not leave sufficient time to go in depth into the more intensive parts of the lessons. Through coaching teachers as they presented lessons, the trainers helped the teachers learn to use the time allotted better. The training also focused on addressing fundamental problems such as teachers not teaching a ToTAL lesson every school day and teachers not preparing for their lessons before the start of the school day. A more complex issue that the training addressed was that some teachers were not paying attention to whether or not the students understand the lessons.

In response to these issues, the ToTAL team ensured that the training included many opportunities for teachers to practice giving lessons using more participatory pedagogy. To improve the practices of school directors and encourage them to better support teachers, Marie Laurette Cupidon, who oversaw training at ToTAL, visited all 10 training sites to hold meetings with directors that emphasized the importance of observing the teachers' work and of helping teachers to perform better through feedback and guidance. Although some progress was made during the school year, important lessons of ToTAL were that changing the behavior of teachers is very difficult and that continued intensive training and coaching is essential to ensure continued improvement in classroom results.

To improve the performance of teachers and directors, the ToTAL project held additional in-service teacher training sessions March 17–18 in the Cap-Haitien corridor and March 20–21 for the Saint-Marc and Port-au-Prince corridors. Particular areas of emphasis for these training sessions included making greater use of the libraries to supplement curriculum and, again, improving pedagogy and classroom management in response to information gathered during school coaching visits. The classroom management portion of the training focused on providing techniques and approaches to help teachers improve their interaction with students and establish more positive and supportive relations with the children. Starting with the foundations of emphasizing good relations between students and teachers, ToTAL staff then extended the training to emphasize the importance of encouraging students' active participation in the lessons. A key point was the importance of setting a specific objective for each lesson and orienting the lesson around that specific objective through planning ahead of time and focusing on it during the lesson. The trainers also explained that the classroom must be an attractive place that encourages learning. ToTAL staff devoted time to the issue of school discipline and the importance of not using corporal punishment or harsh language in the classroom. Finally, the training strongly emphasized the importance of using school libraries to supplement and extend the ToTAL curriculum. RTI's objective in holding smaller, more local and focused trainings in Year 2 of the project was to target specific areas of remediation and to encourage wider participation among teachers and MENFP partners. Both the refresher training and the in-service training used

modeling of target behaviors and provided practice opportunities for teachers. ToTAL staff, teachers, and MENFP partners actively participated in both trainings, and feedback from subsequent coaching visits showed that the trainings impacted teacher behavior.

3.7.4 Training of Coaches on Grade 1 Reading Materials

MENFP technician Madame Antonia leads a simulation exercise on the first day of teacher training in Delmas.

One of the key components of this project was to provide training to all stakeholders involved in project implementation. In October 2013, RTI hosted a successful training for MENFP inspectors from the Saint-Marc corridor. As part of the training, ToTAL staff presented in detail the project strategy and approach as well as the Creole and French learning materials (including hands-on, interactive practice with the content of the materials, such as leading students in story gestures). In total, 42 inspectors were trained.

In partnership with RTI staff, FONHEP also conducted its required training of coaches and supervisors, including hands-on training on the monitoring forms and on the proper approach to coaching. As part of ToTAL's strategic shift toward improving the quality of instruction in ToTAL schools and increasing adherence to the ToTAL program at the classroom level, ToTAL held a special series of trainings during the weeks of December 2–16, 2013, to introduce FONHEP coaches to tablet computers and transition FONHEP coaches to tablet-based input of coaching data. The training was held in all three regions to minimize coaches' time away from schools and to ensure that all coaches received intensive instruction in the use of tablets. Indeed, the introduction of tablet-based coaching forms proved to be a very important adaptation of the project. As mentioned earlier, when paper forms are used, there is often a significant delay between when the form is completed in the classroom, when its data are captured in a database, and when a report is shared that includes the coaching data. Under a system of using paper forms, the project management team often was forced to make decisions with outdated data. Because the Tangerine software allowed data from coaching forms to be uploaded immediately to an online database, tablets enabled with the Tangerine system provided much more relevant, real-time data. As a result, both project management and monitoring and evaluation (M&E) systems greatly improved through the use of the Tangerine online data capture system.

In keeping with the strategy—outlined in ToTAL's *Capacity Mapping Report*—of seeking synergistic partnerships between organizations with different and complementary capacity, an IFOS representative provided technical support to the training of FONHEP coaches, including full use of the Tangerine-based coaching school visit form. The use of Tangerine was particularly

important because FONHEP, due to its internal managerial challenges, did not enter or report its coaching visit data in a timely fashion.

After the December training, coaches were then required to upload classroom observation school-visit data using tablets and the Tangerine system for the rest of the school year. To ensure the success of this initiative, RTI held a series of follow-up trainings for coaches as well as provided individual feedback. Some coaches still required ongoing support, and RTI followed up with coaches and supported them to build their capacity in web-based monitoring systems, a skill that will serve them well in future development projects.

To ensure closer adherence to the ToTAL pedagogy and better performance in the classroom, ToTAL held an intensive refresher TOT for coaches and supervisors December 26–27, 2013. The sessions provided an important opportunity to practice and correct pedagogical techniques, as well as to show a video that demonstrated examples of both good and bad pedagogy. Because of the effectiveness of videos of classroom performance in teacher training in other RTI EdData II country programs, RTI sought to use more video of classroom performance in ToTAL schools. RTI invested in a high-quality video camera and tripod for the purpose of filming lessons. Having coaches and supervisors trained in one place also provided an opportunity to receive updates from the field, to work with coaches to upload data from tablets, and to answer questions about the Tangerine system.

A small group prepares a presentation at the 2014–2015 TOT.

3.7.5 School Visits and Classroom Observations

Intensive support to teachers through classroom observation and coaching can be crucial to the implementation of new curriculum and to the success of an early grade reading program like ToTAL. These visits become, in turn, an essential link between activities in the classroom and project management and support at the field office, capitol city, and headquarters level, with coaches disseminating information to teachers and school directors while also gathering school-level data. Within ToTAL, coaches and supervisors worked together to provide additional support to new, under-credentialed, or otherwise struggling teachers and were able to achieve transformational results in some cases. Coaches monitored and provided pedagogical support in a variety of areas, which were presented in greater detail in EGRA and SSME project reports. As an example of coaching data presented, a central component of the ToTAL curriculum is equal engagement of girls and boys, and during 76% of classroom observations, teachers engaged both

sexes. During a few of the classroom observations (17%), teachers were seen using too much repetition or students were observed to have had difficulty understanding instructions (33%). Unfortunately, however, in only 25% of observations were teachers seen to use elements of the lessons to interact with students, and in only 59% of classroom visits were teachers observed to keep to the timing of the lesson plan. The inability to adhere to the lesson plan resulted in teachers spending greater amounts of time on early components—such as phonemic awareness—at the cost of other skills and likely impacted student learning. Moreover, as indicated earlier, during 67% of visits, teachers were observed to be more than five lessons behind schedule, which no doubt impacted students' exposure to and thus ability to learn critical knowledge and skills, and which suggests that limiting the curriculum to fewer lessons overall might be considered in future revisions. Regression analyses were used to determine to what extent key teacher implementation characteristics as well as an index of characteristics contributed to student learning in key literacy skills.

During the first year of the project, school-level data were slow to reach ToTAL management because of the delays experienced gathering, entering, and reporting on data from paper-based coaching forms. During the second year of the project, the ToTAL team introduced Tangerine-based coaching forms whose electronic data could be uploaded immediately after the visit, allowing for real-time access to information in Port-au-Prince and RTI headquarters. The electronic coaching data helped to identify trends and to highlight what schools needed additional support by seeing, for example, if they had fallen behind on lessons or if they needed additional materials.

During the Grade 2 Pilot Program, regular classroom observation was provided by two pilot coaches hired by ToTAL. MENFP inspectors, chief inspectors, *conseillers pédagogiques*, and SAP members trained by the ToTAL team conducted two classroom observation visits per week and also participated in three focus groups organized by ToTAL to provide feedback on how the materials worked in classrooms and identify what revisions are necessary. The training was well received by the vast majority of participants. The MENFP officials appreciated the detailed introduction to the Grade 2 materials as well as the opportunity to participate in the materials development process by reporting during focus groups on the classroom observations at pilot schools. In their feedback, the MENFP observers emphasized that the materials were high quality, well received by students and teachers, and context appropriate.

To assist schools further, in March 2014 ToTAL directly hired three coaches who were tasked with adding a layer of pedagogical support to FONHEP coaches and teachers. This additional aid was helpful for several reasons. First, these additional experienced human resources could monitor activities at the school level, provide support, and address issues. Second, these three additional experienced educators strengthened the link between project managers and program implementers. Third, it was helpful to have RTI staff members on hand to independently confirm reports by FONHEP and CEEC. Finally, beyond simply coaching, these three staff members gave essential help to the Pilot Program, teacher trainings, and other additional activities related to this project.

While ToTAL coaches conducted the classroom observation visits that were used to monitor program quality and provide support to teachers, MENFP inspectors made some classroom observation visits to schools where the Grade 1 reading program was implemented, and they participated in a formal coaching program as part of the Grade 2 Pilot. Any future early grade reading program should intensively engage with the inspectors with the goal of empowering them to take full responsibility for providing coaching and classroom observation at the classroom level. Although all coaches were assigned 10 schools to support, travel times between schools varied a great deal. Future programs should carefully consider travel times and other potential logistical challenges when assigning schools to coaches and should take additional steps and have sufficient logistical resources to ensure that the hardest-to-reach schools receive sufficient support.

3.7.6 Pilot Teacher Training on Grade 2 Materials

Training for the Grade 2 Haitian Creole Pilot Program took place March 17–20, 2014 in Limonade. The teachers and directors from all 22 Creole Pilot schools were trained on the Grade 2 Creole materials so that the Year 2 Pilot could begin on March 24. The Creole team used this training to present the lessons to the teachers and to help the teachers to understand the underlying pedagogical concepts and approach of the lessons. In doing so, the team started with what the teachers already knew and built upon that knowledge. After the team ensured that teachers understood the teacher's manual and the structure of the lessons, the teachers were expected to demonstrate their skills effectively presenting ToTAL lessons. The ToTAL team made sure that the teachers understood the role of the reading comprehension strategies of the method, the importance of the phonemic awareness activities, and the use of rhymes and other examples of texts and passages within the lessons. The mood of the training was upbeat, and the teachers and directors who participated remained highly motivated for all four days. Participants expressed a great deal of enthusiasm for the method and expressed their commitment to put into practice the knowledge acquired.

During the month of April, ToTAL staff trained French Pilot teachers in the 22 targeted schools on the Grade 2 French curriculum. After this initial training, the French Pilot teachers then began implementing the French Pilot Program. Although teachers were new to the ToTAL program, most very quickly adapted the pedagogical principles and begin progressing effectively through the lessons. The classroom lessons provided useful opportunities for developers and other stakeholders to see challenges in the lessons. For example, some of the small activities were determined to be too complex for students; these were changed. Some visualization activities were also reported to be too difficult for teachers and these were revised. The timing of certain parts of lessons did not appear to be appropriate and was revised. Teacher instructions that were determined to be unclear when piloted were revised as well. Finally, during the piloting process, it was determined to more fully integrate oral communication into selected French lessons and to develop six new oral communication lessons.

3.7.7 2014–2015 School Year: Refresher Training of Trainers and Coaches in Grade 1 Materials and Training in Grade 2 Materials

From August 24 to August 30, 2014, ToTAL held a TOT on Grade 1 and Grade 2 materials. Participants included 4 CEEC supervisors; 31 CEEC coaches; and 8 government officials from the DEF, DCQ, and PDCL (DFP and DPCE). The MENFP staff expressed their appreciation for the sessions and for the ToTAL materials. Representatives from partner organizations, including six from Concern, two from Caritas, and two from IRC, participated actively throughout the entire training. To make best use of the time available, these trainings were intensive and very hands-on. The four key objectives of the trainings were (1) identification of the different types of lessons and their importance to learning to read, (2) learning the structure of the lessons, (3) simulating the lessons, and (4) mastering the technique of presenting the lessons.

On June 26–27, 2014, ToTAL organized a TOT, inviting all trainers and coaches from the three corridors, with the aim to exploit the results of the evaluation EGRA for better teaching and learning of reading. The coaches and trainers then used the information received to conduct a training for ToTAL teachers and directors on summative assessments July 17–18. The training included a detailed discussion of what the EGRA is and why it is important to measure reading skills, an introduction to how EGRA is administered, and the contents of EGRA for ToTAL. The training was of sufficient technical depth to give trainers and coaches a thorough understanding of EGRA and to prepare them for involvement in future programs that incorporate EGRA. At this TOT, 43 people were trained, including 18 women and 25 men. Eleven trainers were present, including four women and seven men. Thirty-two coaches and supervisors participated, including 14 women and 18 men. In July 2014, the ToTAL team trained 952 teachers and directors in summative assessments. For the preparation of the training programs, ToTAL used information gathered during classroom observations and interactions with teachers, directors, and coaches to develop a training program that addresses key classroom management challenges and helps teachers to teach reading more effectively.

3.7.8 2014–2015 School Year: Refresher Training of Teachers in Grade 1 Materials and Training in Grade 2 Materials

From August 31 to September 6, 2014, ToTAL coaches, trainers, and supervisory staff trained 627 teachers, school directors, and inspectors in Grade 1 materials and 696 teachers, school directors, and inspectors in Grade 2 materials before the official start of the 2014–2015 school year on September 8, 2014. These training sessions happened simultaneously across all three project corridors. Teachers from all 300 ToTAL treatment schools and 44 pilot schools were present. On August 31, the first day of the training, the school directors and Grade 1 teachers received refresher training on revised Grade 1 materials. From September 1 onward, training focused on Grade 2 materials to ensure that teachers were familiar with the new content. Training covered all aspects of Grade 2 materials, such as lesson structures and content, and classroom management activities. Teachers responded positively to the trainings and indicated that they felt the content and structure/timing of the trainings were useful, although they wished they had more time to fully internalize the nuances of the program.

An MENFP inspector was present at all sessions, and more senior-level MENFP staff were often on hand at all training sites to observe and supervise. In their discussions with ToTAL staff, the MENFP officials spoke very positively overall about the training, in particular the thorough coverage of new content and the hands-on opportunities for teachers to practice various types of activities. Chief of Party (COP) Kadidia Dienta reported seeing MENFP inspectors give helpful advice to the teachers during the practical exercises, showing how seriously they considered the training—and their growing sense of ownership of the project. MENFP staff participated actively in all training activities, with some staff taking increased responsibility for implementation, including this final training of teachers and the TOT held the previous week. As with all ToTAL trainings, this training included a great deal of simulation of lessons to help the teachers to be prepared to effectively teach the different types of lessons once they returned to their classrooms.

3.7.9 Intervention Implementation

As reported earlier in this report, Treatment A and B interventions were implemented in ToTAL schools during the 2013–2014 school year. These interventions included use of Grade 1 materials in Haitian Creole and French. Grade 2 materials in Creole and French were pilot tested in 44 non-ToTAL schools from March to May, 2014.

A large component of implementation was the use of coaches to observe and provide pedagogical support to teachers on a regular basis. As indicated elsewhere in this report, coaches received training in both aspects of this role. However, as indicated earlier in this report, coaching visits often did not occur as scheduled. Corrective actions taken by RTI included requiring that FONHEP coaches switch from paper to electronic data collection; issuing warning letters to FONHEP on October 7, 2014 and January 13, 2014; and negotiating a new schedule of milestones for FONHEP as part of a second contract modification in October2013. Additionally, as noted above, in order to supplement the FONHEP staff involved in coaching and its management, RTI hired three pedagogical advisors and developed a calendar of staff visits to schools.

3.7.10 Report on Recommendations for Nationwide Implementation

To inform future MENFP education initiatives, ToTAL management developed a *Report on Recommendations for a Nationwide Implementation of the ToTAL Program*. Recommendations provided in this report were informed by implementation of the project for more than two years and, as part of that, the preparation of a detailed *Capacity Mapping Report*. The key recommendations of the recommendations report are as follows:

1. ***Partner with and build the capacity of the MENFP:*** Support the Ministry to independently manage a nationwide rollout.
2. ***Expand gradually:*** A careful, phased geographical rollout will be more successful than a more aggressive nationwide rollout.
3. ***Support and establish accountability for local organizations:*** Engage local organizations based on a realistic assessment of their capabilities, provide carefully designed capacity building, and hold them accountable for results. Working with a variety of diverse

implementing partners, including local and international organizations, will enrich programming but also complicate implementation.

4. ***Continue curriculum development:*** Materials development and revision should be an ongoing process and should progress into the higher primary grades.
5. ***Prioritize Haitian Creole but strengthen French:*** The curriculum must reflect a bilingual method and approach that prioritizes Creole while ensuring competency in French.
6. ***Expand EGRA:*** Continue and extend the use of EGRA to monitor student learning gains over time.
7. ***Continue to apply Tangerine technology:*** Build upon the ToTAL project's use of electronic (e.g., Tangerine-based) data gathering technology for M&E and project management purposes.
8. ***Provide extensive, multi-faceted support to teachers:*** Improve teacher quality by connecting, supporting, and training current teachers while attracting qualified professionals to teaching.

3.8 Result 8: Capacity to Conduct Applied Research and to Design and Implement Future Early Grade Reading Programs Strengthened

The ToTAL Senior Technical Advisor, Mr. Joe DeStefano, met with more than 20 staff and technicians from MENFP during the week of September 10–14, 2012, to draw up, within the framework of ToTAL, a plan for MENFP's directorates to collaborate with the project and, at the same time, to reinforce them. He interviewed directors and certain cadres and technicians of the DEF, DFP, DCQ, DAEPP, DPCE, Training Center for Basic Education, and Center for Training of Education Cadres with a view to deciding, with their input, the mechanisms of their involvement in the proper execution of ToTAL activities. As a product of the RTI/USAID contract, a report was drafted to emphasize to ToTAL and MENFP officials the methods of achieving ToTAL objectives as well as building the capacity of the MENFP.

In follow-up to the September 2012 meeting and subsequent planning discussions, ToTAL, in partnership with the MENFP, carried out a variety of activities, beginning October 2012, to enable the executives and technicians of the various Directorates General, including DPCE, DEF, DFP, DCQ, and DAEPP to master all the techniques for the EGRA data collection, treatment, and analysis. A three-day workshop (April 16–18, 2013) on the analysis of the data collected in November 2012 was organized for these same executives, to follow up on the sessions held in October and November on the tools (EGRA), software (Tangerine), and medium (Nexus 7 Tablets). These various executives were invited to the training sessions (May 13–17, 2013) for the enumerators and supervisors of the EGRA survey to prepare the executives to oversee EGRA using the tablet. During the week of May 27–31, 2013, they were onsite within the schools to supervise the administration of EGRA to first- and second-grade students. During August 2013, this same MENFP executive panel participated in the analysis of the baseline and endline EGRA data.

As stated earlier in this report, the inspector training and classroom observation was a particularly important part of the Pilot Program. The ToTAL team trained 26 inspectors, chief inspectors, *conseillers pédagogiques*, and SAP staff April 24–25, 2014, on the ToTAL Grade 2 French and Creole materials as well as on the classroom observation instruments. FONHEP/CEEC supervisors were also invited. RTI hosted a successful training for MENFP inspectors from the Saint-Marc corridor October 21–25, 2013. As part of the training, ToTAL staff presented in detail the project strategy and approach as well as the Creole and French learning material. In total, 42 inspectors were trained. Finally, to reinforce MENFP's capacity to use EGRA as a tool in future education evaluations, ToTAL held a training for MENFP officials on EGRA statistical data analysis. On August 12, 2014, ToTAL staff hosted three MENFP-DEF staff members for a screen-sharing conference call virtual presentation with RTI statistician Simon King. The meeting provided an opportunity to discuss the EGRA methodology and the preliminary data analysis for the upcoming EGRA report. The MENFP staff present had participated in the 2013-2014 baseline and endline training for EGRA. The discussion was productive and thought provoking, with MENFP staff examining the steps that RTI took to implement a randomized control trial in education from both a project planning and a data analysis perspective and using the opportunity to consider how MENFP could use similar processes in future EGRA implementations. MENFP staff reported feeling comfortable with the content of the training and their abilities to implement the assessment.

MENFP embraced the use of the tablet-based Tangerine-system in gathering coaching data and assessment data within future education initiatives, and ToTAL staff/consultants provided training on the software to MENFP staff as part of EGRA enumerator trainings as well as to all coaches from FONHEP and CEEC in Port-au-Prince, Saint-Marc, and Cap-Haitien corridors in December 2014.

3.8.1 Implementation of Communication Tools

A communication tool—designed to communicate project findings to key stakeholders—was required as part of the ToTAL contract. In September 2013, USAID convened a meeting of MENFP and ToTAL representatives to discuss communication plans across the organizations. RTI submitted this communication plan to USAID in the final quarter of 2013. The ToTAL Communication Plan was approved in December 2013.

In March 2014, as part of ToTAL's communications plan, the leadership of the project initiated and conducted a trip inviting MENFP and Radio Educative (the Ministry radio station) to visit 15 schools targeted by the project in Saint-Marc and Cap-Haitien corridors. The purpose of this initiative was to film real classroom situations and conduct interviews with teachers, directors, and other stakeholders to learn about the effects of the project on children's reading and writing competences.

At USAID's request, the team worked with Radio Educative to develop a short video on ToTAL as part of its communications plan. When the video was deemed unacceptable to USAID, the team worked with the MENFP staff and Radio Educative to improve the video, but for a second time the final product did not meet the expected quality. RTI worked closely with Radio

Educative but found that Radio Educative would not fully follow instructions and do what was required to produce a high-quality video. To respond to USAID's concerns, ToTAL hired a new independent filmmaker to develop a new video on project activities and the impact of the materials on improving student reading performance.

ToTAL also developed and aired jingles on Haitian radio. These jingles were adapted from a *Championnat National de Lecture* song written by MENFP's Valerie Dorceus and formatted and recorded by the Muska Group. Jingles featured local artists Kako and TiRa. The jingles aired on Radio Superstar and Radio Metropole radio stations from May 6 to June 6, 2014.

Lions Club vision screening event, November 2013

On November 6, 2013, USAID Senior Advisor on International Education Christie Vilsack visited ToTAL-supported school École Nationale Lully to observe teachers and students using ToTAL materials and to observe a school-based vision screening by ToTAL partner LCIH. Senior Advisor to the Secretary of Education and Director of International Affairs Maureen McLaughlin also participated in the visit. Senior Advisor Vilsack and Director McLaughlin carefully observed the use of ToTAL materials by students, teachers, and administrators and, in the process, obtained a very detailed, hands-on understanding of how the program is implemented at schools in Haiti. The Senior Advisor was also impressed by the partnership with LCIH, asked many questions about the vision screening, and encouraged the growth of the partnership as well as other school-based health interventions. As a direct result of this visit, 28 of the children screened received more thorough eye exams from LCIH, and glasses were provided to students in need.

On November 5, 2013, the ToTAL team actively participated to the preparation and event management of the successful school visit by US Secretary of Education Arne Duncan that was coordinated by USAID. Secretary Duncan was accompanied by Haitian Minister of Education Vanneur Pierre, US Ambassador to Haiti Pamela White, USAID Senior Advisor for International Education Christie Vilsack, and USAID/Haiti Senior Education staff Fabiola Lopez-Minatchy and Loretta Garden. This visit was covered in Haitian newspapers. After classroom observations, Minister Pierre and Secretary Duncan complimented USAID and ToTAL staff on the ToTAL curriculum materials.

Finally, the ToTAL team also developed newsletters and distributed them to schools during the 2013–2014 school year. These monthly newsletters were produced in French and included updates on relevant events, key EGRA and coaching results, photos, implementation tips, and project success stories.

A visit by the Haitian Minister of Education Vanneur Pierre and the US Secretary of Education Arne Duncan to the ToTAL-supported school École Nationale de Tabarre

3.8.2 Partner Meetings

To promote understanding of the action research component of the project among MENFP and school-level stakeholders, RTI and the IFOS held two partner workshops to present and discuss the Year 1 EGRA findings in the context of the ToTAL program. One of these workshops was held in Trou-du-Nord on February 27, 2014, and the other was held in in the BDS Saint-Marc on March 21, 2014. The intention of these partner workshops was to communicate the goals and structure of the ToTAL program, share results of the Year 1 EGRA, and, more importantly, dialogue with key partners in each of these corridors regarding how they can enhance their support of student reading progress. These workshops were organized with significant contributions from local DDE officials through the BDS and were coordinated by IFOS.

In Trou-du-Nord, 51 partners and community members attended the partner workshop, including MENFP officials, Adjunct National Director for the DDE Blaise Rossini, school directors, teachers, and journalists. In addition to RTI and IFOS staff, 49 education professionals were present at the meeting in Saint-Marc, including inspectors, school principals, teachers, representatives of other educational organizations, and journalists. Mr. Volvick Germain Charles, Director of the MENFP DEF, was the guest of honor and took the opportunity to present some suggestions on helping children with visual disorders that may go undetected due to lack of awareness as well as on the importance of reading in the development of a country. MENFP Chief Inspector of Saint-Marc, Mr. Thony Jacques, took the floor at the end of the meeting to congratulate the project on the quality of materials being piloted in schools and to express hope that these materials can be distributed in all schools in Haiti. One immediate outcome of these partner workshops was raising overall awareness of project goals—the majority of the participants were not aware of the importance of the work carried out by ToTAL. The workshops also provided an opportunity to discuss the importance of early literacy instruction in the mother tongue.

4 Response to Research Questions

Performance on these indicators, combined with EGRA and SSME results over the two years of the project, was used to answer the research questions for this task order.

1. **What are the effects of the early grade reading program on the reading performance of students who have completed one and two years of instruction? What are the differences for boys and girls?**

Overall, it appears from the results of the evaluations conducted that the ToTAL program impacted reading performance for students who completed both a first partial year and two full years of instruction on those subtasks that were emphasized by teachers during classroom instruction: Phonemic Awareness Ability and Letter Sound Knowledge. Observed results revealed large and substantial gains in both sets of treatment schools—both during the 2013–2014 school year and from baseline 2012 to endline 2014—in these key pre-reading skills. In each of these skills, students who were exposed to the ToTAL program demonstrated statistically significant gains over their control-group counterparts. Coaching and classroom observation data suggest that substantial parts of the ToTAL lessons taught in Haitian Creole were spent on oral language manipulation—teachers spent 26% of the lesson time on phonemic awareness tasks—which is likely a factor in these findings. (It should be noted that the ToTAL lessons designate 8% of lesson time to phonemic awareness; teachers therefore exceeded the recommended guided time for this skill.)

In ToTAL schools, students' fluency in reading words and connected text by endline of Grade 2 began to approach levels that are required for further progression to reading comprehension. These trends, however, were not observed in all skills, and by the end of Grade 2, the majority of students still lacked speed and/or accuracy in letter name knowledge (measured in both Creole and French) and decoding ability (measured in Creole only). They also showed limited proficiency in the pre-reading skills of listening comprehension (administered in both Creole and French) and oral vocabulary (measured in French), which suggests an ongoing need to bolster students' vocabulary skills in both languages. Together, these results suggest that although the program may have helped to develop students' phonemic awareness and phonics skills, this had not yet translated into gains at word-level decoding or beyond. This is not surprising and is a trend that is seen in other countries as well: for example, ToTAL student performance on subtasks where improvement was seen exceeds that of students in RTI projects in Kenya, both in terms of percentage growth over time and effect size. Until students have mastered these foundational skills, they lack the background knowledge and the cognitive focus required to read and comprehend connected text. This is why it is critical for students to receive explicit instruction and any necessary remediation in language and literacy development in the very early grades. Unless students are able to reach higher levels of proficiency in these skills, they will remain unprepared to progress into the more content-heavy grades of mid- and upper-primary school.

On all skills *except* Invented Word Decoding and Word Dictation, statistically significant differences between girls and boys were observed. In all cases, girls significantly outperformed

boys. In many of these cases, these groups were comparable at baseline and the gains were seen in control as well as treatment groups, perhaps reflecting how girls and boys learn at this age. Future research is needed to better understand this difference. On the subtasks of Invented Word Decoding and Word Dictation, *no* statistically significant differences between girls and boys were observed.

2. **What are the effects on learning outcomes for students (disaggregated by sex) receiving only the early grade reading instruction and full teacher professional development package as compared to those receiving the early grade reading instruction, teacher professional development package, and community literacy strategies focused on improved reading?**

Overall, the differential gains hypothesized from the addition of community mobilization activities to Treatment B schools did not materialize. Statistically significant differences between Treatment A and Treatment B scores emerged for several skills, but all such differences favored the Treatment A group, which had no formal community input. This may result from the lack of full Treatment B implementation under the ToTAL project. Although the core element of the 2013–2014 school year's community mobilization plan—reading clubs—was implemented in many schools, the clubs were not present in all schools and did not meet with the frequency intended (a total 780 reading club meetings took place across the Treatment B schools, rather than the 1,800 planned). The other two elements of the plan were either infrequently implemented (only 31 parent meetings took place) or not implemented at all (literacy fairs).

It should also be noted, however, that across subtasks, Treatment B means at baseline were substantially lower than means in the other two groups, suggesting that despite random assignment, the Treatment B communities were meaningfully different from the other communities. The study design did not anticipate this and so did not capture data that might explain this finding; it should be considered for interpretation of results, however.

In addition, the lack of strong Treatment B effects is not dissimilar from efforts in other countries. Mobilizing communities requires establishing relationships and trust within those communities, and laying this groundwork takes time. The limited implementation of planned activities is likely a symptom as well as a cause of underlying reluctance or inability of many community members to invest the required time. It is also likely that the limited resources available to support community mobilization within this project—each community mobilizer was responsible for 10 school communities and, therefore, was able to visit each only twice each month on average—further hindered full and sustained engagement. Within each target community however, progress was made and important relationships were established with community members and partners (e.g., YMCA d'Haïti). These relationships should be strengthened to further build momentum in communities.

3. **How do different degrees of teacher mastery correlate with learning outcomes for boys and girls?**

A regression analysis showed that teachers following all elements of the lesson did predict student performance on the Oral Reading Fluency subtask. The finding that Treatment A students

outperformed control students on EGRA subtasks also suggests that teachers receiving the overall program were offering qualitatively better instruction than control teachers; although this could be attributed solely to the materials and training sessions, it is likely that coaching also played an important part. No other fidelity regressions showed a positive contribution, however, and it may be that the instruments used were not sufficiently calibrated to capture the differences in implementation quality that were related to increased learning outcomes.

It should be noted that many of the teachers implementing the ToTAL program were underqualified. In addition, many teachers failed to implement the ToTAL program as it was designed; teachers did not consistently use intended classroom management, student interaction, and formative evaluation strategies, and many teachers did not keep pace with the program schedule. For example, 41% of teachers were behind in lessons (during 67% of coaching visits, teachers were observed to be more than five lessons behind schedule) and 75% of teachers were not using the elements of the lessons to interact with students. It is likely that such weaknesses in teacher fidelity of implementation negatively impacted student growth.

4. What are the effects of the ToTAL intervention on key school management effectiveness factors?

These results show promising trends in both classroom access to books and literacy-supportive home environments as well as changes in parents' behaviors. Some of these characteristics—such as teachers' access to a Haitian Creole teacher guide—can be directly attributed to the ToTAL program, while others—such as students having access to books in the home—are less directly attributable and should be monitored further. Other specific classroom management strategies promoted within ToTAL—such as reviewing students' exercise books, providing constructive feedback to students, and working with students to find the correct responses to questions—showed little to no increase, or even a slight decrease, over time. Additional teacher training and monitoring will hopefully continue to reinforce these behaviors. However, it should be noted that these SSME data were gathered during one classroom visit each at the two SSME implementations and very well may not reflect the entire range of teaching behaviors present in each classroom. Further research would be required to determine whether these findings remain stable over time and whether exposure to this curriculum intervention causes shifts in student characteristics.

5. What are the costs/benefits of the treatments/intervention models evaluated? Which appear to be most cost-effective?

In order to explore the cost effectiveness of the Treatment B intervention, the following costs for community mobilization activities were captured, by category:

- community mobilizers' salaries
- community mobilization training and workshop data (labor and logistics costs)
- community mobilizer materials
- community mobilization activities, such as the MENFP reading championship

The costs of these Treatment B-specific activities were then compared with Treatment A costs, or those costs associated with the development and implementation of all ToTAL program materials and activities that occurred in both Treatment A and Treatment B schools, excepting Treatment B-specific activities.

Treatment B-specific costs equaled 12.65% of the Treatment A costs. As seen in the earlier analyses in this report, where statistically significant differences in student means emerged between Treatment A and Treatment B groups, these differences favored Treatment A. Given these findings, it appears that the cost of implementing the Treatment B activities did not result in corresponding benefits to student learning as measured by EGRA.

That said, there are many possible reasons for this finding. As indicated earlier, the Treatment B activities were not implemented fully, with reading clubs being the only type of activity implemented broadly, and even these were not run with the frequency intended. Activities that are not implemented fully may actually disrupt the school routine, and thus also interrupt learning more than they enhance it, which makes it even more important for well-intentioned disruptions to be implemented fully and as designed. Even though they were not fully implemented, however, the costs associated with field staff salaries, trainings, and other management costs were still incurred. While, in theory, exposing students to more literacy-building opportunities should lead to improvements in oral reading skills, it is possible that such activities must occur with greater frequency than they did in this project to have this impact. Given the relatively low cost to do so, it would be a worthwhile investment to more faithfully pilot this intervention to more fully evaluate its potential.

For reference, ***Table 3*** presents the approximate costs for the following categories of activities:

Table 3. Approximate Implementation Costs of Various Activities

Activity Category	Cost
Printing of instructional materials per student	G1: $1.75 G2: $6.72
Printing of instructional materials per teacher	G1: $13.04 G2: $13.29
Teacher training per teacher	$40/teacher per day of training if trained locally (this amount includes trainers and RTI costs)
Coach training per coach	$120/coach per day of training (includes trainers and assumes that coaches are trained at FONHEP offices in Port-au-Prince)
Distribution of instructional materials	$10,000 per distribution ($33.30 per school)
Community mobilization per school	$3,400 per school

5 Issues and Challenges

5.1 Contract Mechanism

Many challenges encountered during this project resulted from the reality of working within a fixed-fee contract mechanism in a challenging and unstable context. Too often, contextual constraints made it impossible for RTI to respond to needs in the field as adroitly as needed and desired. One example is teacher training. Built into the project budget and work plan were standard levels of teacher training; however, from working in schools during the 2012–2013 school year, RTI realized that more substantial—and costly—trainings would be required in the subsequent year due to the extraordinary deficiencies seen in many teachers. A more flexible contract mechanism would have more easily accommodated these unanticipated but critical realities.

5.2 Materials Development

Standard development time for an academic year's worth of curriculum is one year. Within this project, however, three years' worth of curricular materials in two languages were developed, implemented, and repeatedly revised in just over two years. In addition, unexpected revisions (i.e., complete redevelopment of initial versions that was not planned or budgeted for) of Grade 1 materials during the first year of the project put intense time pressures on the development team when finalizing Grade 2 and starting Grade 3 materials. These pressures were intensified further when RTI was asked to again revise Grade 1 Creole materials per MENFP input. RTI met the USAID-requested June 30 deadline for Grade 1 materials as well as the July 31 deadline for Grade 2 materials (French and Haitian Creole). Such a schedule is not sufficient: it does not allow sufficient time for pilot testing and effective rounds of revision, and it introduces substantial risk for errors to be made. A more efficient schedule would have allowed six months for consultations with MENFP about educational priorities, and one year for each year's worth of curriculum development, pilot testing, revisions, and finalization.

RTI's successful endeavors to provide USAID-requested but non-contractual reports and activities—many coming out of a U.S. government audit—further impeded our ability to meet scheduled contractual demands (e.g., developing the staffing plan and M&E protocols; holding refresher Grade 1 training for teachers prior to the 2013–2014 school year). RTI is pleased that USAID has expressed satisfaction with these deliverables but does note the impact they had on ToTAL staff because RTI pushed to also meet scheduled deliverables.

5.3 Materials Distribution

As indicated earlier, ToTAL ensured that revised Grade 1 teacher and student materials were in schools prior to the start of the 2013–2014 school year on October 1, 2013. Quantities for this distribution were based on expected student enrollment figures (which, in turn, were based on 2012–2013 enrollment figures). During the first weeks of the school year, RTI worked with coaches and school directors to refine enrollment data and, in late October–early November, redistributed materials accordingly. During the first months of the school year, the MENFP

aggressively campaigned for all students to be enrolled in schools as part of the *Programme de Scolarisation Universelle Gratuite et Obligatoire* (Program for Universal Free and Obligatory Education), causing enrollment numbers to again increase. In response to this, RTI printed and distributed additional materials in December to ensure that each student had required materials. In addition, for the 2013–2014 school year RTI provided classroom supplies (e.g., notebooks, pencils, chalk) and ensured that additional supplies were also distributed. Because of the geographic inaccessibility of many Haitian schools and a lack of data within MENFP about actual enrollment, the process of ensuring adequate quantities given changing student enrollment figures was difficult. RTI went to considerable expense, however, to reprint and redistribute materials as needed through the first months of the school year.

5.4 Implementation

Implementation of the project was made difficult by the same factors that made the distribution challenging:

Geographical distribution. Many schools were in remote or hard-to-reach locations, making it difficult for coaches and ToTAL staff to access them as planned. The geographical division of the treatment schools added another challenge because the majority of schools in the program, 150 treatment schools and 44 pilot schools, were in the Cap-Haitien corridor, furthest away from the Port-au-Prince-based management team. This made school visits more time consuming and expensive and made coordination between project management and treatment schools more difficult. Although ToTAL added a Field Coordinator during the first school year, it would recommend that future programs base even more of the management team in the Cap-Haitien corridor if the majority of treatment schools remains there.

Changes in student enrollment. Fluctuations in student enrollment made it difficult to ensure that each classroom had materials for all students, while also making it impossible to ensure that each child participated in the program for the entire year.

Teacher turnover. Turnover of teachers was also a concern. However, the agreement between schools and ToTAL teachers required the trained teachers to remain in their assigned grade throughout the school year. ToTAL staff were vigilant and, in the few cases where school directors attempted to promote or shift teachers outside of Grade 1 or Grade 2, as soon as ToTAL staff found out, they negotiated with school directors, who then stood by their commitments.

External political factors. Civil unrest in the Cap-Haitien corridor resulted in demonstrations and roadblocks that interrupted program activities and made it difficult to reach schools during the early months of 2014.

Weaknesses in teacher capacity. Some teachers struggled to implement the lessons, particularly those who were younger, less experienced, and less well educated. However, ongoing training and support helped to build the skills of many teachers and, in some cases, led to very impressive improvements in their classroom effectiveness. In the Cap-Haitien corridor, the ToTAL Curriculum Development Manager and the ToTAL Field Coordinator worked closely with supervisors and coaches to provide a network of support to teachers identified as struggling.

Withdrawal of participating schools. Overall, only four treatment schools left the program during the final year of implementation. The schools were École National La Deliverance, Institution Mixte Hans Muselaire, College Ruben Marc, Institut Jolly Garten, and College Univers. This very low rate of schools opting out likely reflects the fact that the students, teachers, and school directors who remained in the program overwhelmingly reported that they found that the materials improved learning and were also user-friendly and fun.

5.5 Subcontractor

As indicated earlier, nonperformance by FONHEP resulted in critically lower numbers of coaching and community mobilizer visits than planned, which negatively impacted ToTAL's ability to implement Treatment A and B interventions as designed. This insufficient delivery of coaching and community mobilization likely had an impact on teacher behaviors and on the overall level of engagement within communities attained by the end of the 2013–2014 school year. RTI took repeated measures to remediate these issues and considered seeking another partner for the 2014–2015 school year. However, due to the desire to retain experienced coaches and community mobilizers for the 2014–2015 school year, as well as having received assurances from FONHEP that it was committed to improving, RTI opted to not cancel the subcontract with FONHEP.

RTI also explored other options for working directly with coaches in order to more closely manage them and ensure their full participation. However, in order to retain the trained and experienced coaches—which RTI determined was essential for the success of the second year of the project—RTI ultimately decided to continue working with FONHEP. To seek to address performance issues, RTI met on a weekly basis with FONHEP management, was in constant contact with FONHEP, and strove to strengthen FONHEP activities and build FONHEP's capacity through database support, data entry support, field management tools and training, and finance reporting support.

In addition, to supplement FONHEP's coaching efforts, in March 2014 RTI directly (rather than through FONHEP/CEEC) hired three coaches who were tasked with providing an additional layer of pedagogical support to FONHEP coaches and teachers. These coaches served as valuable sources of information about implementation challenges and successes and provided critical support to teachers in ToTAL schools.

Another challenge the project faced was the collection of coaching data. The ToTAL team implemented an electronic collection system for coaching data using tablets, and in December 2013, the team trained FONHEP coaches on its use. Many coaches started using the electronic system late, if at all, resulting in approximately 1,109 paper copies of coaching visit information that needed to be manually entered into the ToTAL database. FONHEP informed ToTAL in April 2014 that it would be unable to enter these data, thereby requiring RTI to hire staff to do so. Tablet-based systems that use electronic data capture facilitate much more rapid sharing of classroom-level data and, as a result, better project management. The use of electronic data capture systems for coaching forms should be encouraged in future education projects in Haiti.

5.6 Staffing

As communicated to USAID throughout the life of this project, recruiting for certain technical positions in Haiti is difficult, given the lack of a sizeable talent pool from which to draw.

In April 2014, COP Ronald Jean-Jacques resigned from the project. Project Manager Jennae Bulat assumed the role of Acting COP until a new permanent COP could be hired. In June 2014, RTI hired replacement COP Kadidia Dienta to lead the project. Mrs. Dienta proved herself to be a strong and capable leader with excellent team building and motivational skills. Under Mrs. Dienta's leadership, RTI continued its strong project performance, as reflected in on-time submission of all deliverables that were due from April through September 2014.

In meeting the M&E needs of the project, RTI had to recruit repeatedly for quality, experienced M&E staff. The short duration of the opportunity made the position less favorable to potential candidates. Further, it appeared that highly experienced M&E professionals were more interested in consultancies than a long-term assignment, possibly due to the potential of receiving higher compensation in short-term consultancies. M&E staff hired by ToTAL did not meet the expectations of their role. Ultimately, project management found that the most efficient way to manage M&E was to work directly with a team of data entry consultants instead of through an M&E officer. Had RTI been able to identify a strong, reliable, and experienced M&E officer, this structure of data entry staff reporting to senior project management would not have been necessary. However, given the time constraints and the importance of the M&E function, this proved to be the most practical solution. If the ToTAL team had a longer contract period, it would have been worth considering seeking another M&E officer whose capacity could be built and who could grow into the role.

Recruiting for experienced curriculum developers familiar with developing scripted lesson plans for explicit literacy instruction in Haitian Creole and French also proved difficult, given the lack of strong teacher training and/or curriculum development schools of higher education in Haiti. In both years of the project, RTI repeatedly recruited for developers to supplement its core team of talented and qualified staff, and in August 2014, RTI was pleased to hire Darline Alexis as a reading specialist to support the curriculum team.

5.7 Scheduling

As indicated earlier, unexpected development delays and revisions to curricular materials introduced substantial time pressures. In addition, an audit by the Regional Inspector General resulted in requests for unplanned and unbudgeted activities (i.e., revised staffing plan and M&E protocols, community mobilization mitigation plan, documentation of curriculum development standards, revised Performance Monitoring Plan and Performance Indicator Reference Sheets) further compressed the project schedule, as did useful but unbudgeted activities, such as refresher Grade 1 training for teachers prior to the 2013–2014 school year.

6 Lessons Learned and Recommendations

Project EGRA and SSME results, along with lessons learned from the many working sessions, workshops, materials implementations, trainings, and dialogues with stakeholders indicate a clear need to continue reinforcing reading instruction in the early grades. Such an endeavor will require a focus of energy and attention on the following key actions.

6.1 School- and Teacher-Focused Recommendations

Train and support teachers to teach reading: Reading is a fundamental skill that is critical for learning in other subjects, and it must be learned in the early grades. The ToTAL program included a rigorous and multi-faceted teacher training component, with teachers receiving a 10-day training at the beginning of each year, followed during the 2013–2014 school year with subsequent targeted and regional trainings and coaching. This report shows, however, that teachers still did not implement the program as designed. During future implementations, teachers need to be continuously trained to teach the five foundational components of reading beginning in Grade 1: phonemic awareness, phonics instruction, reading fluency, vocabulary, and reading comprehension. The ToTAL program provides scripted guidance for teachers in how to teach each lesson as well as supplemental activities for those teachers and students who are able to move beyond the lesson fundamentals, as well as ongoing training—especially for new teachers—in the effective use of such tools. This report also shows, however, that many teachers involved in the program lacked basic preparation for teaching in the lower grades and were inconsistent in their implementation of the ToTAL approach. Therefore, the MENFP should continue to support teachers through ongoing training and coaching that provide strategies for teaching phonics, reading fluency, and reading comprehension, in both Haitian Creole and French. Ideally, this would be done through a combination of more explicit and extensive pre-service training as well as regular in-service trainings that reinforce teaching strategies and address demonstrated teacher challenges.

Another important component of effective teaching is ongoing pedagogical coaching. Although the ToTAL program included substantial training and retraining of coaches, the coaches did not meet their projected number of school visits. In addition, the fact that teachers were not implementing the program faithfully implies, at least in part, that the coaches were not helping teachers to address these deficiencies in their implementation. Further working with coaches and inspectors to ensure full adherence to schedules and to strengthen their abilities to provide meaningful pedagogical guidance to teachers will be important in future work. Linking transportation and allowance payments to completion of GPS-enabled monitoring reports has been successful in other countries in ensuring that coaches visit their schools and submit their reports; future programs may want to consider such an approach.

Provide students with books and opportunities to read: Despite improvements in the share of students reporting having access to reading materials in school and at home, results from student questionnaires suggest that many students still lack literacy-building reading experiences outside of the classroom. This reality makes it even more important for teachers to encourage reading within the classroom, using not only ToTAL curricular books but also in-class libraries.

Encouraging parents and communities to provide opportunities to read can further enhance literacy-building opportunities for all children—particularly for students who otherwise lack access to books and literacy-rich experiences outside of the classroom. Results from this study, however, suggest that students are not spending large amounts of time reading in class or at home, nor do many students have family members at home who read to them. Future programs in Haiti must find ways to provide more-proficient readers with ever more opportunities to enrich and extend abilities, to provide less-proficient readers with more opportunities to practice emerging skills, and in general to change the culture by promoting pleasure reading at a young age. In addition, the MENFP should consider ways to increase instructional time and, more specifically, the amount of time students spend reading in class.

Train teachers to promote a classroom environment that is conducive to learning: Constructive, formative feedback given to students in a timely manner can foster learning in the classroom by engaging students in safe, positive interactions and encouraging them to think critically about concepts. Conversely, use of punitive measures can intimidate and frighten students and impede learning. Students reported that teachers used punitive measures when students were unable to answer questions in class (73% of student responses), which highlights the need to reinforce with teachers positive classroom management techniques, and ensuring that all students are equally engaged should remain a primary training and coaching focus in future programs. In addition, teachers must continue to be trained to engage students in small groups, pairs, and one-on-one learning opportunities to ensure that all students are learning the content being taught. Teachers also need additional, explicit training in the use of formative student feedback and effective classroom management strategies to further solidify these behaviors.

Provide explicit instruction in oral language, in both Haitian Creole and French: The relatively low scores on the Oral Vocabulary and Listening Comprehension subtasks point to a lack of grade-level oral language aptitude in both languages. ToTAL materials and training were developed in such a way as to promote oral language development, including vocabulary in both Haitian Creole and French, and teachers should continue to receive direct instruction in developing strategies for teaching oral vocabulary through ongoing targeted training and coaching sessions.

Provide explicit instruction in comprehension strategies: Student scores were low in both listening and reading comprehension, suggesting that students could benefit from ongoing explicit instruction in strategies for increasing comprehension. Teachers in this study did not spend much time during lessons teaching comprehension, as evidenced in classroom observations. Such strategies are built into ToTAL curricular materials and should continue to be reinforced through teacher training and coaching.

Address challenges to intensive implementation: A persistent theme in the above recommendations is the need for more consistent and intense training, supervision, and implementation by teachers, coaches/supervisors/inspectors, and community mobilizers. From a sociological perspective, a lack of full adoption of new methods over a 28-month-long project is not surprising, as in even the most conducive environments it can take three years or more for teachers to fully internalize and master a new curriculum; achieving full buy-in and effectiveness

of coaches and monitors can also take years of ongoing trainings and monitoring. In addition, high rates of teacher absenteeism and tardiness observed in this study reduced available instruction time and likely had a substantially negative impact on student learning. Based on analyses of instructional time in other developing countries,[9] the 43% teacher absenteeism and 38% teacher tardiness reported in ToTAL schools exceeds what is seen elsewhere (e.g., 15.4% of teachers tardy in Morocco and 12% of teachers tardy in Pernambuco) and is a critical threat to learning that must be addressed. The reality that often severe challenges were encountered within the confines of this controlled project suggests that expansion of the project is at risk if implementation issues are not addressed. As RTI recommended in its *Report on Recommendations for MENFP and Education Partner Post-Activity Nationwide Rollout of Early Grade Reading Program*, ongoing MENFP capacity building, partner development, and teacher training/support will increase the likelihood of successful expansion.

In addition, sufficient time during the school day and the school year should be allocated to literacy instruction, and teachers should be held accountable for following the design of the literacy program. As seen in this report, students improved in skills that teachers stressed during classroom instruction (i.e., Initial Sound Identification, Letter Sound Knowledge) and that were within the range of proximal development of the students. For other subtasks, however, one sees great diversity in difference-in-differences effect sizes: some are small and show a flat trend line, while others are larger but in both positive and negative directions. Because control group classrooms were not observed, it is impossible to know with certainty if those teachers' instruction could account for the differential if not consistent gains in the control group means, but the findings do suggest that (1) for skills that students were ready to master and (2) skills that were emphasized during instruction, students showed consistent and quite remarkable growth.

6.2 Government- and System-Focused Recommendations

Build MENFP capacity: The current government focus on education offers unprecedented opportunities to improve early grade reading in Haiti. Important political and social developments such as MENFP support for early grade reading initiatives, strong consensus of the importance of learning to read in the mother tongue of Haitian Creole while also teaching reading in French, the availability of new Creole-language teaching and learning materials, substantial local capacity to conduct EGRA assessments, increased clarity and consensus identifying the interventions required for children to learn to read, and evolved levels of capacity among local Haitian organizations are making productive change possible. Combined, these developments can bring long overdue progress in early grade reading and overall levels of literacy in Haiti.

Fundamentally important to ongoing education reform and student progress is building the capacity of the MENFP to sustainably build upon, manage, and evaluate this type of program on a long-term basis. The MENFP must more fully support education in Haiti by recruiting qualified staff and providing strong pre-service teacher training, regular and targeted in-service teacher training, and a stronger coaching and inspector system, with particular attention to accountability

[9] Abadzi, H. (2007). *Absenteeism and beyond: Instructional time loss and consequences.* Washington, DC: World Bank.

and incentives. For all major components of a large-scale education program where international donors and partners are involved, the program should be implemented in a way that gives increased responsibility for planning, carrying out, and evaluating program activities directly to MENFP, along with increased accountability for program success.

Engage local organizations to extend reach: Local NGOs have played a large role in education in Haiti and have much to contribute to ongoing initiatives. For example, CEEC benefits from rich, longstanding networks of relationships with supported schools, and it along with IFOS and other early adopters of the ToTAL curriculum is now intimately familiar with the ToTAL program. Although many of these organizations lack certain technical and logistical capacities, together they can capitalize on each other's strengths to move education forward in Haiti.

Cross-sectoral partnerships will also strengthen subsequent projects. Opportunities for powerful collaboration exist between Haitian education organizations and Haitian organizations active in the health, protection, and livelihoods sectors. Organizations involved in gender, human rights, child protection, and livelihoods should also be engaged to address barriers to education in these essential areas.

Continue materials, teacher, and community development: The development of curricular materials for Creole and French should continue. Due to the historical relationship between Creole and French, the curriculum must be centered on a bilingual method and an approach that prioritizes Creole, especially for instilling early decoding, fluency, and comprehension skills, while also ensuring competency first in French oral language and then in French literacy. The usability of the materials should also be monitored. As the materials are refined and, importantly, as teachers become more accustomed to the underlying method and pedagogical approach, it is likely that the level of scriptedness can be reduced, which many teachers may find useful. The scope of the materials should also be evaluated, with an eye toward reducing the number of lessons overall (e.g., from 150 to 80–100 per grade for each language). Within the current program, teachers are guided to focus on a core set of lessons if time does not allow for instruction of all 150 in a school year, but an actual limiting of the number of lessons available might be considered.

The challenge of low levels of education and training must also be addressed. It is essential to any ongoing education-focused initiative to improve teacher quality by connecting, supporting, and training current teachers while attracting qualified professionals to the teaching profession. In addition, continued implementation and analysis is necessary to more fully understand the importance of community mobilization and its cost-effectiveness in contributing to improved reading outcomes—e.g., to determine if the lack of impact in this study is a result of poor design or poor implementation.

Continue to monitor progress: Progress in student achievement can best be promoted when it is monitored for areas of weakness and opportunity. EGRA is well established in Haiti and benefits from significant support from the MENFP. As a result, allocating resources to expand and extend the use of EGRA (or a comparable assessment tool) is warranted. The SSME, or comparable evaluation tool, should be used to help the MENFP identify the school improvement initiatives

that address barriers to effective education and that must receive priority focus. Both EGRA and SSME implementations can be supported through use of established electronic data collection applications and systems (including both tablet devices enabled with the Tangerine® technology and smart phones enabled with Pomegranate™) to most cost-effectively gather information during the repeated assessments and routine monitoring and coaching of teachers.

Annex A

The results of Haiti ToTAL monitoring and evaluation efforts during the two school years of program implementation, and reflecting the results of Haiti ToTAL as a whole, are summarized in the performance indicators established for Haiti ToTAL. The values achieved on these indicators are presented in three tables.

Table A1, "Haiti ToTAL Performance Monitoring Summary Table of Indicators, Targets, and Values Achieved through September 2014" provides the targets and values achieved on 14 of the 17 performance indicators established for the Haiti ToTAL project. ***Table A2***, "Proportion of children achieving reading performance indicators 13, 14, and 15" presents a summary of results on the three student learning performance indicators across Year 1 and Year 2 baseline and endline assessments, while ***Table A3***, "Creole Oral Reading Fluency Sample : Number of children assessed (denominator)" presents the number of students in the sample at each assessment.

The data underlying the indicators presented in these tables were collected and analyzed through the methods described in the document *ToTAL Revised Monitoring and Evaluation Methods Narrative, Performance Monitoring Plan, and Performance Indicator Reference Sheets* (RTI International, September 2014).

Details for interpretation of the values presented are provided for each indicator, in the pages following the tables.

Table A1. Haiti ToTAL Performance Monitoring Summary Table of Indicators, Targets, and Values Achieved through September 2014

	PERFORMANCE MONITORING INDICATOR	LEVELS OF DISAGGREGATION		Oct 2012 - Sep 2013		Oct 2013 - Sep 2014					
				Target for the Year	Achieved Year 1	*Target for the Year*	*Achieved in Quarter ending:* Dec 2013	Mar 2014	Jun 2014	Sep 2014	Achieved Year 2
1	**Number of standardized learning assessments supported by the U.S. Government (USG)** ***Indicator Reference:*** SI 3.2.1-34 ***Disaggregation:*** None ***Data source:*** Project records ***Type:*** Output	OVERALL		*2*	**2**	*2*	1	0	1	0	**2**
2	**Number of teachers who successfully completed in-service training or received intensive coaching or mentoring with USG support**	Cap-Haitien	M & F	*331*	**282**	*493*	**327**	**357**	**22**	**349**	**368**
			M	*199*	**111**	*296*	125	140	14	151	151
			F	*132*	**171**	*197*	202	217	8	198	217
		Saint-Marc	M & F	*110*	**84**	*162*	**116**	**110**	**0**	**107**	**124**
			M	*78*	**48**	*115*	68	54	0	56	68
			F	*32*	**36**	*47*	48	56	0	51	56
		Port-Au-Prince	M & F			*230*	**278**	**228**	**0**	**260**	**278**
	Indicator Reference: SI 3.2.1-31		M			*138*	65	46	0	64	65
	Disaggregation: Corridor, Gender		F			*92*	213	182	0	196	213
	Data source: Project records	SUM	M & F	*441*	**366**	*885*	**721**	**695**	**22**	**716**	**770**
	Type: Output		M	*277*	**159**	*549*	258	240	14	271	284
			F	*164*	**207**	*336*	463	455	8	445	486
3	**Total number of person-hours of teachers who successfully completed in-service training or received intensive coaching or mentoring with USG support.**	Cap-Haitien	M & F	*30000*	**27072**	*35300*	**20928**	**16656**	**704**	**12872**	**51160**
			M	*18000*	**10656**	*21200*	8000	6576	448	5856	20880
			F	*12000*	**16416**	*14100*	12928	10080	256	7016	30280
		Saint-Marc	M & F	*10000*	**8064**	*11600*	**7008**	**5536**	**0**	**3872**	**16416**
			M	*7100*	**4608**	*8200*	4128	2848	0	2184	9160
			F	*2900*	**3456**	*3400*	2880	2688	0	1688	7256
		Port-Au-Prince	M & F			*21000*	**16576**	**10064**	**0**	**7856**	**34496**
	Indicator Reference: SI 3.2.1-41		M			*12600*	3936	2160	0	1888	7984
	Disaggregation: Corridor, Gender		F			*8400*	12640	7904	0	5968	26512
	Data source: Project records	SUM	M & F	*40000*	**35136**	*67900*	**44512**	**32256**	**704**	**24600**	**102072**
	Type: Output		M	*25100*	**15264**	*42000*	16064	11584	448	9928	38024
			F	*14900*	**19872**	*25900*	28448	20672	256	14672	64048
4	**Number of textbooks and other teaching and learning materials provided with USG assistance.** Note: Teachers materials include teacher's manuals, school libraries, and posters.	Cap-Haitien	Teacher	*662*	**916**	*986*	1506	17	304	Data previously provided corrected. Materials distributed end Year 1 for 2013-2014 school year moved to "Dec 2013" quarter, to facilitate evaluation against targets	**1827**
			Student	*47000*	**24960**	*36000*	32636	517	0		**33153**
		Saint-Marc	Teacher	*220*	**333**	*324*	474	0	85		**559**
			Student	*13800*	**7040**	*9200*	7928	0	0		**7928**
	Indicator Reference: SI 3.2.1-33	Port-Au-Prince	Teacher			*460*	1226	89	166		**1481**
	Disaggregation: Corridor, Teacher / Student		Student			*27000*	21254	726	56		**22036**
	Data source: Project records	SUM	Teacher	*882*	**1249**	*1770*	3206	106	555		**3867**
	Type: Output		Student	*60800*	**32000**	*72200*	61818	1243	56		**63117**

5	**Number of learners receiving reading interventions at the primary level**	**Cap-Haitien G1 & G2**	**M & F**	*12300*	**12853**	*18000*	**16290**	Dec 2013 numbers are estimated from materials distribution data and from Y2 baseline SSME gender proportions		Revised numbers for the year are based on the June 2014 School Survey (direct reports from schools)	**12423**
			M	*6500*	**6746**	*9447*	8675				6484
			F	*5800*	**6107**	*8553*	7615				5939
		Cap-Haitien G1	**M & F**	*6150*	**6671**	*9342*	**9887**				**6244**
			M	*3250*	3517	*4925*	5265				3294
			F	*2900*	3154	*4417*	4622				2950
		Cap-Haitien G2	**M & F**	*6150*	**6182**	*8658*	**6403**				**6179**
			M	*3250*	3229	*4522*	3410				3190
			F	*2900*	2953	*4136*	2993				2989
		Saint-Marc G1 & G2	**M & F**	*3200*	**4127**	*4600*	**4124**				**3418**
			M	*1600*	2094	*2334*	2209				1770
			F	*1600*	2033	*2266*	1915				1648
		Saint-Marc G1	**M & F**	*1600*	**2134**	*2379*	**2188**				**1674**
	Indicator Reference: SI 3.2.1-35		**M**	*800*	1071	*1194*	1172				898
	Disaggregation: Corridor, Gender, grade		**F**	*800*	1063	*1185*	1016				776
	Data source: MENFP Census; project records	**Saint-Marc G2**	**M & F**	*1600*	**1993**	*2221*	**1936**				**1744**
	Type: Output		**M**	*800*	1023	*1140*	1037				872
			F	*800*	970	*1081*	899				872
5	**Number of learners receiving reading interventions at the primary level (cont.)**	**Port-Au-Prince G1 & G2**	**M & F**			*6000*	**10104**	Dec 2013 numbers are estimated from materials distribution data and from Y2 baseline SSME gender proportions		Revised numbers for the year are based on the June 2014 School Survey (direct reports from schools)	**7462**
			M			*3000*	4908				3677
			F			*3000*	5196				3785
		Port-Au-Prince G1	**M & F**			*3000*	**5204**				**3898**
			M			*1500*	2528				1949
			F			*1500*	2676				1949
		Port-Au-Prince G2	**M & F**			*3000*	**4900**				**3564**
			M			*1500*	2380				1728
	Indicator Reference: SI 3.2.1-35		**F**			*1500*	2520				1836
	Disaggregation: Corridor, Gender, grade	**SUM**	**M & F**	*15500*	**16980**	*28600*	**30518**				**23303**
	Data source: MENFP Census; project records		**M**	*8100*	**8840**	*14781*	15792				11931
	Type: Output		**F**	*7400*	**8140**	*13819*	14726				11372
6	**Number of parent-teacher associations (PTAs) or similar "school" governance structures supported**	**Cap-Haitien**		***50***	**0**	***50***	"Achieved" values for this indicator are based on End Year 2 School Survey and FONHEP records.				23
	Indicator Reference: SI 3.2.1-18	**Saint-Marc**		***25***	**0**	***25***					4
	Disaggregation: Corridor										
	Data source: Project records	**SUM**		***75***	**0**	***75***					**27**
	Type: Output										
7	**Number of parents or community members who received training with USG support**	**Cap-Haitien**	**M & F**	***500***		***500***	"Achieved" values for this indicator are based on End Year 2 School Survey and FONHEP records.				**329**
			M	***250***	**0**	***250***					130
			F	***250***		***250***					199
		Saint-Marc	**M & F**	***250***		***250***					**97**
	Indicator Reference: Custom Indicator 01		**M**	***125***	**0**	***125***					23
	Disaggregation: Corridor, Gender		**F**	***125***		***125***					74
	Data source: Project records	**SUM**	**M & F**	***750***		***750***					**426**
	Type: Output		**M**	***375***	**0**	***375***					153
			F	***375***		***375***					273
8	**Number of students in schools benefiting from community literacy strategies implemented with USG support**	**Cap-Haitien**	**M & F**	***4200***	**3500**	***6000***	**4633**	Dec 2013 numbers are estimated from materials distributions & Y2 baseline SSME gender proportions.		Revised numbers are based on the June 2014 School Survey (direct reports from schools)	**3539**
			M	***2100***	1826	***3100***	2495				1866
			F	***2100***	1674	***2900***	2138				1673
		Saint-Marc	**M & F**	***1600***	**2044**	***2300***	**2012**				**1625**
	Indicator Reference: Custom Indicator 02		**M**	***800***	1045	***1150***	1088				826
	Disaggregation: Corridor, Gender		**F**	***800***	999	***1150***	924				799
	Data source: Project records	**SUM**	**M & F**	***5800***	**5544**	***8300***	**6645**				**5164**
	Type: Output		**M**	***2900***	2871	***4250***	3583				2692
			F	***2900***	2673	***4050***	3062				2472
9	**Percentage of principals providing regular support to teachers**	**Cap-Haitien**	**A No mob**	***Establish baseline***	**Baseline: 64%**	***10% over baseline***	61%	91%	81%	No change since June 2014	**81%**
			B Mob		**Baseline: 64%**		77%	83%	86%		**86%**
	Indicator Reference: Custom Indicator 03	**Saint-Marc**	**A No mob**				64%	86%	89%		**89%**
	Disaggregation: Corridor, Treatment		**B Mob**				100%	84%	96%		**96%**
	Data source: Project records	**Port-Au-Prince**	**A No mob**				83%	85%	86%		**86%**
	Type: Output										

10	**Percentage of schools with increased inspector visits per semester**	**Cap-Haitien**	**A No mob**	***Establish baseline***	**Avg # visits : 1.1**	***10% over baseline***	Avg # visits / teacher in Y1Q1: 1.5 ; 77% of schools increased over baseline		47%	No change since June 2014	**47%**
			B Mob		**Avg # visits: 1.3**		Avg # visits / teacher in Y1Q1: 1.3 ; 55% of schools increased over baseline		43%		**43%**
	Indicator Reference: Custom Indicator 04	**Saint-Marc**	**A No mob**				Avg # visits / teacher in Y1Q1: 0.3		54%		**54%**
	Disaggregation: Corridor, Treatment		**B Mob**				Avg # visits / teacher in Y1Q1: 0.0		46%		**46%**
	Data source: Project records	**Port-Au-Prince**	**A No mob**				Avg # visits / teacher in Y1Q1: 2.2		60%		**60%**
	Type: Output										
11	**Percentage of schools with improved opportunities to learn**	**Cap-Haitien**	**A No mob**	***Establish baseline***	**Avg OTL: 84 pts**	***5% of schools improve over baseline***	Avg OTL: 86 pts	Annual indicator. Dec 2013 values provide Y2Q1 average OTL score (baseline).	10%	June 2014 values provide % of schools improved over their Dec 2013 score	**10%**
			B Mob		**Avg OTL: 80 pts.**		Avg OTL: 86 pts		12%		**12%**
	Indicator Ref: Custom Ind. 05	**Saint-Marc**	**A No mob**				Avg OTL: 82 pts		22%		**22%**
	Disaggregation: Corridor, Treatment		**B Mob**				Avg OTL: 89 pts		15%		**15%**
	Data source: Project records	**Port-Au-Prince**	**A No mob**				Avg OTL: 85 pts		11%		**11%**
	Type: Outcome										
12	**Percentage of teachers with improved reading instruction in subset of schools in the USG Development Corridors** *(RIS = Reading Instruction Score)*	**Cap-Haitien**	**M**	***Establish baseline***	Avg score: 81 pts	***15% of teachers improve over baseline***	Avg score: 87 pts	Annual indicator. Dec 2013 values show Y2Q1 average reading instruction score	15%	June 2014 values provide % of teachers improved over their Dec 2013 score	**15%**
			F		Avg score: 80 pts		Avg score: 88 pts		8%		**8%**
	Indicator Ref: Custom Ind. 06	**Saint-Marc**	**M**				Avg score: 84 pts		22%		**22%**
			F				Avg score: 81 pts		27%		**27%**
	Disaggregation: Corridor, Gender	**Port-Au-Prince**	**M**				Avg score: 82 pts		6%		6%
	Type: Outcome		**F**				Avg score: 82 pts		14%		14%
13	**Proportion of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade-level text**	**Please see Annex Table 2 for information on this indicator.**									
14	**Number and Proportion of students with improved reading skills at the end of Grade 1**	**Please see Annex Table 2 for information on this indicator.**									
15	**Number and Proportion of students with improved reading skills at the end of Grade 2**	**Please see Annex Table 2 for information on this indicator.**									
16	**Number of officials & university & other partners trained in Early Grade Reading assessment**	**Cap-Haitien**	**M & F**	***27***	**75**	***45***	**41**	**52**	**99**	**90**	**99**
			M	***15***	51	***26***	33	44	76	**70**	76
			F	***12***	24	***19***	8	8	23	20	23
		Saint-Marc	**M & F**	***9***	**15**	***23***	**9**	**49**	**6**	**33**	**49**
			M	***5***	8	***13***	5	39	3	30	39
			F	***4***	7	***10***	4	10	3	3	10
		Port-Au-Prince	**M & F**	***18***	**23**	***34***	**28**	**0**	**55**	**45**	**61**
			M	***10***	18	***21***	13	0	20	26	26
			F	***8***	5	***13***	15	0	35	19	35
		National level	**M & F**	***36***	**81**	***0***	**54**	**0**	**11**	**3**	**54**
	Indicator Ref: Custom Ind. 09		**M**	***20***	56	***0***	25	0	10	2	25
	Disaggregation: Corridor, Gender		**F**	***16***	25	***0***	29	0	1	1	29
	Data source: Project records	**SUM**	**M & F**	***90***	**194**	***104***	**132**	**101**	**171**	**171**	**263**
	Type: Output		**M**	***50***	133	***60***	76	83	109	128	166
			F	***40***	61	***44***	56	18	62	43	97
17	**Number of administrators and officials successfully trained with USG support**	**Cap-Haitien**	**M & F**	***121***	**106**	***151***	**125**	**150**	**46**	**174**	**174**
			M	***68***	90	***85***	108	125	36	142	142
			F	***53***	16	***66***	17	25	10	32	32
		Saint-Marc	**M & F**	***40***	**42**	***50***	**48**	**45**	**0**	**58**	**66**
			M	***23***	39	***28***	32	40	0	50	50
			F	***17***	3	***22***	16	5	0	8	16
		Port-Au-Prince	**M & F**			***101***	**123**	**66**	**0**	**113**	**123**
			M			***57***	79	48	0	72	79
			F			***44***	44	18	0	41	44
		National level	**M & F**	***69***	**16**	***34***	**0**	**0**	**0**	**63**	**63**
	Indicator Reference: SI 3.2.1-03		**M**	***39***	13	***19***	0	0	0	40	40
	Disaggregation: Corridor, Gender		**F**	***30***	3	***15***	0	0	0	23	23
	Data source: Project records	**SUM**		***230***	**164**	***335***	**296**	**261**	**46**	**408**	**426**
	Type: Output		**M & F**	***130***	142	***189***	219	213	36	304	311
				100	22	***146***	77	48	10	104	115

Table A2. Proportion of children achieving reading performance indicators 13, 14, and 15 at Year 2 endline (May 2014)

PERFORMANCE MONITORING INDICATOR		LEVELS OF DISAGGREGATION		Oct 2012 - Sep 2013				Oct 2013 - Sep 2014			
				Y1 Baseline	*Relative target*	*Target at endline*	Y1 Endline achieved	Y2 Baseline	*Relative target*	*Target at endline*	Y2 Endline achieved
13	Proportion of students who, by the end of 2 grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text.	CAP-HAITIEN Treatment A	M	10%	20% over Y1 baseline	*12%*	24%	5%	30% over Y2 baseline	*6.5%*	30%
			F	13%		*16%*	44%	17%		*22.1%*	40%
		CAP-HAITIEN Treatment B	M	9%	20% over Y1 baseline	*11%*	21%	1%	30% over Y2 baseline	*1.3%*	12%
			F	9%		*11%*	46%	4%		*5.2%*	32%
		SAINT-MARC Treatment A	M	7%	20% over Y1 baseline	*8%*	22%	9%	30% over Y2 baseline	*11.7%*	27%
			F	20%		*24%*	38%	17%		*22.1%*	40%
		SAINT-MARC Treatment B	M	5%	20% over Y1 baseline	*6%*	15%	0%	30% over Y2 baseline	*0.0%*	15%
			F	8%		*10%*	28%	6%		*7.8%*	19%
		PORT-AU-PRINCE Treatment A	M					15%	52% over Y2 baseline	*22.8%*	38%
			F					20%		*30.4%*	51%
14	Proportion of students with improved reading skills at the end of grade 1	CAP-HAITIEN Treatment A	M	0%	20% over Y1 baseline	*0%*	26%	3%	30% over Y2 baseline	*3.9%*	14%
			F	4%		*5%*	31%	6%		*7.8%*	31%
		CAP-HAITIEN Treatment B	M	1%	20% over Y1 baseline	*1%*	10%	2%	30% over Y2 baseline	*2.6%*	4%
			F	1%		*1%*	9%	2%		*2.6%*	12%
		SAINT-MARC Treatment A	M	0%	20% over Y1 baseline	*0%*	9%	2%	30% over Y2 baseline	*2.6%*	12%
			F	0%		*0%*	10%	1%		*1.3%*	18%
		SAINT-MARC Treatment B	M	1%	20% over Y1 baseline	*1%*	18%	0%	30% over Y2 baseline	*0.0%*	6%
			F	1%		*1%*	8%	0%		*0.0%*	18%
		PORT-AU-PRINCE Treatment A	M					13%	52% over Y2 baseline	*19.8%*	30%
			F					12%		*18.2%*	40%
15	Proportion of students with improved reading skills at the end of grade 2	CAP-HAITIEN Treatment A	M	13%	20% over Y1 baseline	*16%*	34%	10%	30% over Y2 baseline	*13.0%*	40%
			F	20%		*24%*	51%	20%		*26.0%*	48%
		CAP-HAITIEN Treatment B	M	9%	20% over Y1 baseline	*11%*	24%	4%	30% over Y2 baseline	*5.2%*	18%
			F	12%		*14%*	54%	9%		*11.7%*	43%
		SAINT-MARC Treatment A	M	12%	20% over Y1 baseline	*14%*	41%	13%	30% over Y2 baseline	*16.9%*	32%
			F	32%		*38%*	41%	27%		*35.1%*	50%
		SAINT-MARC Treatment B	M	7%	20% over Y1 baseline	*8%*	23%	4%	30% over Y2 baseline	*5.2%*	21%
			F	9%		*11%*	33%	11%		*14.3%*	27%
		PORT-AU-PRINCE Treatment A	M					26%	52% over Y2 baseline	*39.5%*	50%
			F					31%		*47.1%*	56%

Table A3. Creole Oral Reading Fluency Sample : Number of children assessed

GRADE	CORRIDOR	TREATMENT GROUP	YEAR 1 (2012-2013)				YEAR 2 (2013-2014)			
			BOYS		GIRLS		BOYS		GIRLS	
			BASELINE	ENDLINE	BASELINE	ENDLINE	BASELINE	ENDLINE	BASELINE	ENDLINE
GRADE 1	CAP-HAITIEN	Treatment A	225	82	201	77	223	184	186	162
		Treatment B	165	71	162	74	190	201	159	189
		Control	127	130	116	108	183	136	172	144
	SAINT-MARC	Treatment A	79	75	86	60	113	114	73	75
		Treatment B	101	51	83	39	103	103	96	100
	PORT-AU-PRINCE	Treatment A					211	225	192	198
		Control					134	142	134	129
GRADE 2	CAP-HAITIEN	Treatment A	206	80	210	73	200	166	218	182
		Treatment B	191	82	147	56	201	208	176	187
		Control	135	125	100	109	214	156	161	133
	SAINT-MARC	Treatment A	76	58	76	66	93	92	99	100
		Treatment B	88	47	89	39	99	92	106	112
	PORT-AU-PRINCE	Treatment A					200	226	214	205
		Control					155	148	155	137

Details for interpretation of indicator values

Indicator 1: Four standardized learning assessments were completed as per contract, with one assessment conducted at the beginning and one at the end of each school year. Full analytical reports on the results of these studies are available.

Indicator 2: The values presented for numbers of teachers trained exclude double counting of the same individual *within a given quarter*, but should not be added across quarters, as the same individual may have been trained in multiple quarters. For this reason, the year-end count uses the maximum reported quarterly value per corridor as the final annual value for the corridor. In this way, the year-end count excludes double-counting across quarters. It should also be noted that the "Achieved Year 2" column for Indicator 2 (as well as Indicators 16 and 17), subtotals and the overall sum of persons trained are calculated vertically, given the use of maximum quarter values for a given detail row.

The values for Year 2 Quarters 1 to 3 (October 2013 to June 2014) are based on the number of participants present on the day of lowest attendance for a given training event, producing a conservative estimate of the number of people benefiting from the training. The counts for Year 2 Quarter 1 (quarter ending December 2013) include individuals who were trained for the 2013–2014 school year in August–September 2013. These individuals were not included in the Achieved column for Year 1, as doing so would have constituted double-counting for that year.

For Year 2 Quarter 4 (quarter ending September 2014), a system of tracking unique individuals was put in place and utilized. This new system allowed for greater granularity of tracking individual participation in training by the day, and provided a more precise estimate of individuals trained, days present, and hours trained. A person was considered "trained" and counted only if s/he had attended all days of the training for trainings of 1 to 3 days, and for at least 70% of the days of trainings that were longer than 3 days (thus, 3 out of 4 days; 4 out of 5 days; 5 out of 6 or 7 days, etc.).

Overall, Project ToTAL trained 770 teachers during Year 2 compared to a target of 885, achieving 87% of the target. Interestingly, while the project fell short of its Year 2 target for male teachers with 284 (achieved) versus 549 (target), the project exceeded its target for female teachers by over 40% with 486 (achieved) versus 336 (target). The Year 2 results for Port-au-Prince were 21% above the target, at 278 (achieved) versus 270 (target). Results for Cap-Haitian and Saint-Marc were below target, but considerably above the previous year results achieved in these two corridors.

The MS Access database used for recording and tracking unique participants has been provided to USAID for use on future projects and for sharing with the MENFP.

Indicator 3: Project ToTAL achieved a combined 102,072 person hours of teacher training in Year 2, representing 150% of the Year 2 target of 67,900 person hours and almost three times the 35,136 person hours of training achieved in Year 1. Project ToTAL vastly exceeded targets for number of person hours trained due to beginning of the school year teacher trainings, in-service trainings in January and March, Grade 2 Pilot trainings in March and April, summative assessment trainings in July, as well as trainings on Grade 1 and Grade 2 materials in August and September 2014. While the reported number of person hours is substantial, it is conservative because the hours counted in the first three quarters of Year 2 are based on the conservative attendance protocol used during those three quarters. For the fourth quarter, tracking of unique participants allowed for a more precise estimate of person hours trained.

Indicator 4: Overall, Year 2 results for materials distributed were above target for teacher materials, with 3,867 teacher materials distributed versus a target of 1,770. Results were somewhat below target for student materials with 63,117 achieved versus a target of 72,200. It should be noted that the purpose of Project ToTAL's teaching and learning materials distributions was not to meet or exceed specific numeric targets per se, but to ensure that teachers and students in Project ToTAL schools had access to sufficient teaching and learning materials.

In contrast with the values reported in the Year 1 Annual Report and Year 2 quarterly reports through June 2014, in this final reporting table, we have moved the counts of materials that were distributed in August–September 2013 but intended for use in School Year 2013–2014, to the first quarter of Year 2 (ending December 2013) to facilitate comparison to the year's target. In addition to ad hoc follow-on distributions in response to reports of insufficient materials in schools, major follow-on distributions were conducted in December 2013 and April 2014 to provide newly completed French teacher's guides to all treatment schools.

As per the Performance Monitoring Plan,

- Teacher materials distributed included Creole Teacher's Manuals Volumes 1, 2, and 3 (counted as a single item), and French Teacher's Manual Volumes 1 and 2 (counted as a single item), French language poster, and a small "library" of books suitable for early grade learners (entire library counted as a single item).

- Student materials distributed included the ToTAL Creole Reading Book and the ToTAL Creole Writing Book (each item counted separately). Other materials distributed (pencils, erasers, pencil sharpeners, and notebooks) are not included in the count.

In October 2014, after the completion of the period covered by the Performance Monitoring Plan, RTI distributed school libraries to the control schools of Project ToTAL to honor an agreement to compensate them for participating in the applied research activity. RTI distributed a combined 83 libraries to control schools in October. Of these, 36 were provided to schools in the Cap-Haitian Development Corridor and 47 to schools in the Port-au-Prince development quarter. As part of this agreement, control schools will also receive priority in any expansion or follow-on program to Project ToTAL.

Indicator 5: For this indicator, Year 1 student enrollment numbers are based on 2012-2013 MENFP enrollment estimates for treatment schools. For Year 2, we present two sets of enrollment numbers. At the beginning of the school year (quarter ending December 2013), enrollments are based on the estimate used for materials distributions (a combination of projection from Year 1 census figures, and specific requests of shortages from schools), with gender proportions estimated from those observed in the Y2 baseline sample school survey. Revised enrollment numbers presented for the quarter ending June 2014, on the other hand, are based on the June 2014 School Survey (direct reports from schools). The June 2014 School Survey enrollment numbers were considerably lower than those reported in December 2013, likely reflecting not only the difference in methods used but also real variability in enrollment across the school year.

Indicator 6: The number of parent-teacher associations (PTAs) or similar "school" governance structures supported is based on Treatment B schools that participated in at least one Parent Reading Event according to FONHEP community mobilization records. The results of 23 schools for the Cap-Haitien corridor compared to a target of 50 and 4 schools for the Saint-Marc corridor compared to a target of 25 indicate that the Parent Reading Event component of the Community Mobilization program was not fully implemented. In addition, only 31 events were reported overall (with most schools engaged in only one event), compared to FONHEP's contractual obligation of 300 events across the 75 schools.

Indicator 7: The number of parents or community members who received training with USG support is based on reports of attendance at Parent Reading Events made by the school director in the June 2014 School Survey. The combined number of parents reached for both corridors that received community mobilization support was 426 compared to a target of 750. This result is due to the fact that Parent Reading Events were held in only 27 of the 75 Treatment B schools, all of which were intended to be engaged in such events (see Indicator 6).

Indicator 8: For Year 2, the number of students in schools benefiting from community literacy strategies implemented with USG support reached 5,164 students, based on enrollment reported in the year-end school survey (or 6,645 students based on beginning of the school year enrollment estimates) compared to a target of 8,300. Schools included in this calculation were the 72 Treatment B Schools that conducted one or more Student Reading Clubs during the year,

according to community mobilization records provided by FONHEP. It should also be noted that the number of Student Reading Club sessions carried out was far below FONHEP's contractual obligation to RTI. The 72 schools participated in 525 Reading Clubs, compared to 1,800 initially envisioned.

Indicator 9: Year 1 baseline values for this indicator are available for Cap-Haitien corridor only. In Year 1, "Regular support" was operationally defined to mean that the principal reviewed teachers' lesson plans and/or observed classrooms at least 3 days a week, estimated on the basis of the average of the numbers of days reported for these activities by the head teacher and by teachers surveyed in a given school on the Year 1 baseline SSME. By this method, the Year 1 baseline was established at 64% of principals in the Cap-Haitien corridor; a target of 10% improvement for all corridors was set.

For Year 2, values for this indicator are based on a question posed to teachers during every coaching session, "Did the principal regularly provide support to the teacher in his/her efforts to implement better reading instruction? (classroom visits, lesson observations, feedback, discussions)". Schools with at least 75% of teacher responses of "yes" during a given quarter are counted as having a principal who provides regular support for that quarter.

Overall Year 2 results for percentage of principals providing regular support to teachers were considerably above targets for all three corridors and for both A and B treatment schools (see ***Exhibit A1***). In addition, in most cases the proportion improved from the first to the third quarter of the year, suggesting that ToTAL may have helped to bring about a positive change in principals' behavior in this respect. For the final quarter of the 2013–2014 school year, results for Cap Haitien were 81% for Treatment A and 86% for Treatment B. In Saint-Marc, results were 89% for Treatment A and 96% for Treatment B. For Port-au-Prince, 87% of principals provided regular support to teacher.

Exhibit A1. Percent of schools reporting regular principal support % "Yes" > 74%

CORRIDOR	STATISTIC	Y2Q1	Y2Q2	Y2Q3
CAP-HAITIEN Treatment A	Average % "Yes"	64%	91%	83%
	Count of schools reporting	18	91	68
	Number of schools with > 74%"Yes"	11	83	55
	% Schools with >74% "Yes"	***61%***	***91%***	***81%***
CAP-HAITIEN Treatment B	Average % "Yes"	77%	86%	86%
	Count of schools reporting	13	53	36
	Number of schools with > 74%"Yes"	10	44	31
	% Schools with >74% "Yes"	***77%***	***83%***	***86%***
SAINT-MARC Treatment A	Average % "Yes"	62%	87%	89%
	Count of schools reporting	11	28	28
	Number of schools with > 74%"Yes"	7	24	25
	% Schools with >74% "Yes"	***64%***	***86%***	***89%***

CORRIDOR	STATISTIC	Y2Q1	Y2Q2	Y2Q3
SAINT-MARC Treatment B	Average % "Yes"	100%	87%	96%
	Count of schools reporting	2	25	24
	Number of schools with > 74%"Yes"	2	21	23
	% Schools with >74% "Yes"	***100%***	***84%***	***96%***
PORT-AU-PRINCE Treatment A	Average % "Yes"	85%	90%	89%
	Count of schools reporting	23	91	87
	Number of schools with > 74%"Yes"	19	77	75
	% Schools with >74% "Yes"	**83%**	**85%**	**86%**

Indicator 10: A substantial number of treatment schools reported an increase in the number of inspector visits from one quarter to the next during Year 2, and especially between the second and third quarters. As shown in ***Exhibit A2***, the average number of inspector visits per teacher (reported by teachers during coaching observation sessions) ranged from 0.0 (none) to 2.2 for a given quarter, and remained quite stable over time within each corridor. Cap-Haitien presents completely stable average numbers of visits (1.5 per quarter per teacher in Treatment A schools, and 1.3 visits per quarter per teacher in Treatment B schools), Saint-Marc low but steadily increasing numbers of visits, from an average of 0.3 and 0.0 in the first quarter for Treatment A and Treatment B schools, respectively, to an average of 1.0 and 0.8 visits by Quarter 3. Port-au-Prince schools display the most variable numbers of visits—high in Quarters 1 and 3 (2.2 and 1.7 visits on average), but relatively low (1.1 visits) in Quarter 2.

Exhibit A2 also presents the numbers of schools responding, and those of schools that that report increases across quarters; these numbers underlie the calculation of Indicator 10.

Exhibit A2. School-level average number of inspector visits reported per quarter, and comparison of number of visits across Year 2 reporting quarters

YEAR 2 QUARTER	DESCRIPTION	CORRIDOR AND TREATMENT GROUP				
		CAP-HAITIEN - A	CAP-HAITIEN - B	SAINT-MARC - A	SAINT-MARC - B	PORT-AU-PRINCE - A
Y2Q1	Total number of schools responding	18	13	11	2	23
	Average number of Inspector visits reported	1.5	1.3	0.3	0.0	2.2
Y2Q2	Total number of schools responding	90	53	28	25	91
	Average number of Inspector visits reported	1.5	1.3	0.6	0.3	1.1
	Count of schools with Q1 & Q2 data	18	13	11	2	22
	Number of schools in which Q2 > Q1	7	4	4	0	3
	% Q2>Q1	***39%***	***31%***	***36%***	***0%***	***14%***

YEAR 2 QUARTER	DESCRIPTION	CORRIDOR AND TREATMENT GROUP				
		CAP-HAITIEN - A	CAP-HAITIEN - B	SAINT-MARC - A	SAINT-MARC - B	PORT-AU-PRINCE - A
Y2Q3	Total number of schools responding	67	37	28	24	88
	Average number of Inspector visits reported	1.5	1.3	1.0	0.8	1.7
	Count of schools with Q2 & Q3 data	66	37	28	24	87
	Number of schools in which Q3 > Q2	31	16	15	11	52
	% Q3>Q2	*47%*	*43%*	*54%*	*46%*	*60%*

Port-au-Prince Corridor has the highest percentage (60%) of schools reporting an increase in inspector visits to teachers between Quarter 2 and Quarter 3. Other groups range from 43% of Cap-Haitien Treatment B schools reporting an increase, to 54% of Saint-Marc Treatment A schools. In Cap-Haitien in particular, the fact that the average number of visits remains unchanged, indicates that for other schools, the number of visits declined between the two quarters.

Indicator 11: To calculate this indicator, an "Opportunity to learn" (OTL) measure was operationalized in terms of average scores of schools obtained across six distinct variables on which classroom observations were made by trained observers (coaches). These six variables were the following:

- Average student attendance rate on the date of observation
- % of classes observed in which all students can see the teacher
- % of classes observed in which all students are participating in the lesson
- % of students in class with book
- % of classes in which the lesson is on time (within 4–5 lessons) relative to the program
- Average teacher performance score (across a series of teacher performances observed) for the school.

A school's overall "OTL score" for a given quarter was calculated as an average of the above scores (each score is expressed in terms of a percentage) obtained during the quarter. Scores were calculated for all schools having usable data on at least four of these variables. ***Exhibit A3*** presents the number of schools in each Corridor and Treatment Group having adequate data, as well as the proportion of schools whose scores showed improvement in the third quarter of Year 2 relative to the first and second quarters.

Exhibit A3. Proportion of schools with improved OTL scores at end 2013–2014 school year (Y2Q3)

CORRIDOR / Treatment Group	Number of schools in analysis *	% Y2Q3 > Y2Q1	% Y2Q3 > Y2Q2	% Y2Q3 > Y2Q1 & Y2Q2
1 CAP-HAITIEN	***93***	***11%***	***52%***	***9%***
A	61	10%	54%	10%
B	32	12%	47%	6%
2 SAINT-MARC	***43***	***19%***	***58%***	***12%***
A	23	22%	57%	17%
B	20	15%	60%	5%
3 PORT-AU-PRINCE	***74***	***11%***	***45%***	***4%***
A	74	11%	45%	4%
OVERALL	**210**	***12%***	***50%***	***8%***

* Only schools having information for all three quarters of Year 2 are included in this analysis.

The Year 2 results demonstrate substantial progress in improved opportunities to learn, with results exceeding the target of 5% of schools improving across all corridors from Quarter 1 to Quarter 3 (the comparison used for Indicator 11). Eleven percent of Cap-Haitien and Port-au-Prince schools improved between Quarter 1 and Quarter 3, while 19% of Saint-Marc schools improved (with 22% of Treatment A schools improving). Even greater proportions of schools improved from Quarter 2 to Quarter 3, although only 8% of schools overall registered improvements at Quarter 3 relative to both previous quarters.

Indicator 12: To calculate this indicator, a "Teacher's Performance Score" measure of reading instruction practice in the classroom was produced on the basis of observation of a series of behaviors associated with effective reading instruction and promoted by ToTAL training. Coaches observed teachers and for each named behavior, indicated whether the teacher used it in the lesson or not. Some behaviors were ranked by frequency of use categories rather than simple presence or absence; in these cases "always" and "frequently" were given value of 1 and "seldom" or "never" were given a value of 0, so that all behaviors in the overall score would have an equal weight. The overall score obtained by a given teacher during a given lesson observation is the proportion of identified effective reading instruction behaviors that were observed to be in use (number of behaviors observed to be used / total number of named behaviors in the observation instrument).

Within a given school and reporting quarter, performance scores were further averaged for male and female teachers, respectively, prior to comparison of one quarter to another, as the data collection was not adequate to rigorously track individual teachers' performance over time. This method resulted in an "average" score for female teachers, and another "average" score for male teachers in a given school and quarter. It is these "average" scores that are then used in comparing

performance across quarters for each school and teacher gender, from which the final indicator values are calculated.

On this indicator, while teacher performance gains were observed for some school s in all corridors and treatment groups, only Saint-Marc met or exceeded the target of 15% of schools improvement. ***Exhibit A4*** provides detail on the results obtained.

Exhibit A4. Proportion of schools with improved teacher performance scores at end 2013–2014 school year (Y2Q3)

CORRIDOR / Treatment Group	Number of records in analysis *	Average Teacher performance score at Y2Q1	Number of schools in which Y2Q3 score > Y2Q1 score	% Y2Q3 > Y2Q1
1 CAP-HAITIEN	119	88 points / 100	17	**7%**
M	52	88 points / 100	4	
F	67	87 points / 100	4	**6%**
2 SAINT-MARC	51	**82** points / 100	18	**27%**
M	26	81 points / 100	6	**23%**
F	25	84 points / 100	8	**32%**
3 PORT-AU-PRINCE	80	**85** points / 100	10	**13%**
M	14	81 points / 100	1	**7%**
F	66	85 points / 100	9	**14%**

* Only schools having information for all three quarters of Year 2 are included in this analysis.

Indicator 13: For the purposes of reporting on Indicator 13, the threshold of 41 or higher words read per minute on the Creole Oral Reading Fluency subtask is selected as our operational definition of demonstration of ability to read and understand the meaning of grade level text. This same threshold was used in Year 1.

Overall, girls generally outperformed boys and some treatment groups outperformed their respective control groups. In the Cap-Haitian corridor, only treatment A boys performed better on this task than their control group (30% versus 15%). Performance in Saint-Marc for both treatment groups was approximately in line with Cap-Haitian. In Port-au-Prince, Treatment A girls tied with their control group with 51% of both groups able to read a grade level text. Treatment A boys in Port-au-Prince outperformed their control group (38% versus 34%). For more information and discussion on the relative performance of treatment and control schools, please see *Tout Timoun Ap Li – ToTAL Year 2 EGRA and SSME Endline Report*, REVISED (RTI, 2014).

Indicator 14: Comparison of baseline and endline results reveals considerable improvement overall in Grade 1 students' reading ability. Values shown indicate the percent of Grade 1 students scoring at least 21 words per minute on ORF at a given time period. "Proportion improved" can be roughly estimated by subtracting the baseline value from the endline value,

although it should be noted that this method of estimation is conservative, as improvements within either side of the 21-word threshold are also likely to be occurring but are not captured by this method. As with improvement in grade-level reading, female cohorts outperformed male cohorts and control groups also showed achievement. One of the Cap-Haitian treatment cohorts (Treatment A boys) and both of the Port-au-Prince treatment cohorts performed above the level of the control group. In the Cap-Haitian corridor, Treatment A girls performed in line with the control group (31% versus 31%) but Treatment B girls were below at 12%. Among boys in the Cap-Haitian corridor, Treatment A outperformed the control group (14% versus 11%), while Treatment B lagged behind 4%. In Saint-Marc, Treatment A and Treatment B girls were in line (18% versus 18%), while Treatment A boys considerably outperformed their Treatment B counterparts (12% versus 6%). In Port-au-Prince, Treatment A girls outperformed their control group (40% versus 27%) and Treatment A boys also outperformed their control group by a wide margin (30% versus 14%).

Indicator 15: Strong progress was also seen among Grade 2 students with girls outperforming boys in general. However, boys' treatment groups were much more likely to demonstrate greater achievement than their control groups. Values shown indicate the percent of Grade 2 students scoring at least 31 words per minute on ORF at a given time period. "Proportion improved" can be roughly estimated by subtracting the baseline value from the endline value, although it should be noted that this method of estimation is conservative, as improvements within either side of the 31-word threshold are also likely to be occurring but are not captured by this method.

In Cap-Haitien, Treatment A boys outperformed their control group by a very impressive margin (40% versus 20%), but Treatment B boys lagged behind with 18% demonstrating improvement. For Cap-Haitian girls, neither treatment group outperformed the control group. In Saint-Marc, Treatment A girls outperformed Treatment B girls (50% versus 27%) and the same pattern was seen among boys, with 32% of Treatment A boys demonstrating improvement versus 21% of Treatment B boys. In Port-au-Prince, Treatment A girls performed approximately in line with their control group (56% versus 59%), while Treatment A boys performed better than the control group (50% versus 43%).

Indicator 16: The number of officials, university staff and other partners trained in early grade reading assessment reported for Year 1 represents a downward revision of previously reported numbers, due to RTI's practice of ongoing examination of data, notably the removal of duplicate records discovered after the fact. Even with these corrections, the total number of persons trained (194) substantially exceeds the target number for the year (90). Year 2 results also substantially exceeded their target, with 263 persons trained compared to the target of 104.[10] For Year 2, Indicator 16 includes the Baseline EGRA training in October 2013, presentations of EGRA and SSME results to stakeholders in Trou-du-Nord in February 2014 and Saint-Marc in March 2014, the Endline EGRA and SSME Training held April–May 2014, the June 2014 Training of Trainers in EGRA and Summative Assessments, the school principals trained with teachers on summative

[10] As previously noted for Indicator 2, in the "Achieved Year 2" column for indicators 2, 16, and 17, subtotals and the overall sum of persons trained are always calculated vertically, given the use of maximum quarter values for a given detail row.

assessment in July 2014, and a national-level EGRA data analysis session in which a number of MENFP personnel participated, in August 2014 (see ***Exhibit A5***). Data presented exclude double counting of the same individual within a given quarter, but should not be added across quarters, as the same individual may have been trained in multiple quarters. For this reason, the year-end count uses the maximum reported quarterly value per corridor by gender as the final annual value for the corridor. Participation in all reading assessment trainings was tracked by individual participant. A person is considered "trained" and counted only if s/he has attended all days of training for trainings of 1 to 3 days, and for at least 70% of the days of trainings that are longer than 3 days (thus, 3 out of 4 days; 4 out of 5 days; 5 out of 6 or 7 days, etc.).

Exhibit A5. Training events on reading assessment held during Year 2

YEAR 2 READING ASSESSMENT TRAINING EVENTS	LOCATION	DATES
EGRA – Assessor and supervisor training - Participants Cap-Haitien	Hotel Kaliko, Montrouis	13 – 20 October 2013
Partner meetings on EGRA ToTAL-MENFP on EGRA	Saint-Marc; Trou du Nord	21 March 2014
Training of Y2 Endline EGRA assessors	Saint-Marc - Hotel Indigo	27 April – 2 May 2014
Training of trainers on Summative Assessment	Saint-Marc - Hotel Indigo	26 – 27 June 2014
School director training on Summative Assessment (with Teachers)	Multiple sites in each Corridor	17 – 18 July 2014
MENFP EGRA Data Analysis Session	Port-au-Prince	12 August 2014

Indicator 17: As with Indicator 16, data presented exclude double counting of the same individual within a given quarter. The year-end counts are not made by adding across quarters, since the same individual may have been trained in multiple quarters. Rather, the year-end counts exclude double-counting across quarters by taking the highest number of men or women trained in any one quarter as the annual result.

The counts for Year 2 Quarter 1 (ending December 2013) include individuals who were actually trained in the previous quarter (August–September 2013) for the 2013–2014 school year. These individuals were not included in the Achieved column for Year 1, as doing so would have constituted double-counting for that year. The numbers shown in this indicator primarily represent school principals and local inspectors who participated in trainings on ToTAL instructional methods and materials, as well as Ministry and private education system administrators, officials, and supervisors.

The numbers provided include some corrections to "achieved" numbers previously reported (resulting in a revised total of 164 individuals trained during Year 1, for example). For Year 2, the total number of personnel trained reached 426 (311 men and 115 women), well above the overall

target set for Year 2, although women were underrepresented in nearly all cases with the exception of Port-au-Prince. ***Exhibit A6*** lists the Year 2 trainings conducted in which education system officials, administrators, and supervisors participated.

Exhibit A6. Trainings conducted during ToTAL Year 2 for education system officials, administrators, and supervisors

YEAR 2 TRAINING EVENTS FOR SYSTEM OFFICIALS	LOCATION	DATES
School directors trained in ToTAL methods (alongside teachers) in preparation for Year 2 classroom interventions	Multiple sites in Cap-Haitien and Saint-Marc corridors	5-14 August 2014
School directors trained in ToTAL methods (alongside teachers) in preparation for Year 2 classroom interventions	Multiple sites in Port-au-Prince corridor	19-28 August 2014
School directors trained in ToTAL methods (alongside teachers; in-service training)	Multiple sites in all corridors	7-10 January 2014
Creole Pilot training	Limonade	17-18 March 2014
French Pilot Training	Fort-Liberté	14-17 April 2014
Inspectors Training for Pilot Classroom Observation	North	24-25 April 2014
Training of trainers on Grade 1 and 2 materials	Moulin-Sur-Mer	24-30 August 2014
Training on G1 and G2 materials - School directors & inspectors	Multiple sites in all corridors	1-6 September 2014

Annex B

List of Suggested Corrections for Haitian Creole and French Curricular Materials Emerging from November 2014 Policy Dialogue Workshop

Creole Grade 1 Teacher Guide

- Presentation of the book. The image of the book should be introduced in color to facilitate children's understanding.
- Lesson theme. Each lesson's theme should be in bold to enable the student knows what the lesson is about.
- Reinforcement materials for lessons. Books should be provided on "CD" to accompany written materials so students can sing rhymes (in one and the same tone).
- Lesson objective. Each lesson should have its objective clearly mentioned in the teacher guide.
- Lesson titles and images. In some lessons, there are images missing titles; ensure that all images have titles.
- Name the authors who write every text.

French Grade 1 Teacher Guide

- The volume must be identified on the cover page of the master guide.
- The toolbox should be placed at the end of the teacher's guide that is to say, after the lessons.
- Formative assessment should be a mandatory step in the presentation of the lesson.
- The methodological steps in the teacher's guide 3 looks much more like the presentation of a reading lesson and should be addressed.

French Grade 2 Student Reading Book

- Rita and the little ball should be replaced by "Rita and her doll."
- Rita and Cabrits: according to illustration one finds Rita, the cabrit and chickens (the picture does not match what is found in the book) p. 1.
- The text recounts the ball is pink, whereas according to the image, it is black. Since the students' books are not in color, they will be confused (p. 2).
- Instead of saying: "L'ami de Rita au dispensaire," we must say "Les amis de Rita au dispensaire" p. 73.

French Grade 2 Teacher Guide

- A soundtrack should be provided to support letter sound pronunciation support.
- A section describing the use of posters for a good marriage between the image and the lesson would support good planning.

Pilot Support Team's Recommended Edits to Grades 1 and 2 Haitian Creole Materials

Grade 1 Work Plan (Creole)
1. Reduce the introductory/warm up activity: too many places (no need to respond each time).
2. Leson oryantasyon – correct certain instructions (poor use of "tou pa m / s ann fè ansanm / se tou nou pa" [leson oryantasyon]).
3. Reformulate certain instructions in the lessons on sounds.
4. Shorten certain poems/rhymes.
5. Vocabulary: redo method.
6. Prediction: precision in the instructions (remove student names).
7. Uppercases should be removed in titles.
8. In the clarification of the activity "Konsyans fonemik," introduce sounds already seen.
9. Specify the page instead of putting "the page 'x'" for example.
10. Give the regional variations of certain words (in texts and drawings).
11. Several corrections to make in the texts / correct contractions in the texts.
12. Correct how the visualization activity is done.
13. Ensure consistency among Gid mèt / Kaye ekriti / Liv elèv.
14. Author – add preface.

Grade 2 Work Plan (Creole)
1. Adjust certain poems/rhymes.
2. Vocabulary: change the structure of the pedagogical approach (all lessons).
3. Visualization: change the structure in the first 5 lessons; change some of the words to be visualized.
4. Modify and change some stories (3 volumes).
5. Modify the structure of the prediction activity.
6. Adapt themes.
7. Insert the words/groups of words suggested by the Pilot support team in different lessons.
8. Change/modify some exercises.
9. Change questions in the reworked texts.
10. Add new artwork/modify certain illustrations (not accurate).
11. Ensure consistency among Gid mèt / Kaye egzèsis / Liv elèv.
12. Modify and adjust the structure of the pronoun/determinant (article) comprehension activity.
13. Modify and adjust a few sentences in the structure of comprehension activities (sekans / karaktè).
14. Adjust a few sentences in the structure of the comprehension activity (multiple strategies).
15. Adjust the progression chart.
16. Proofread Gid mèt, Kaye egzèsis, Liv elèv (after the work of the graphics team).
17. Read and correct the introduction.

Pilot Support Team's Recommended Edits to Grade 2 French Materials

Grade 2 Work Plan (French)
Activities
1. Modify the template for decoding lessons.
2. Modify the template for comprehension lessons.
3. Modify the template for decoding review lessons.
4. Modify the template for comprehension review lessons.
5. Modify the template for interim review lessons.
6. Modify the tests.
7. Define all créolismes in a lexicon (e.g., dodine, chaudière).
8. Draft the template for oral communication lessons.
9. Draft the curriculum guide (oral communication lessons).
10. Draft the scope and sequence (oral communication lessons).
11. Develop the 6 oral communication lessons.
12. Translate the templates into Creole (modification (6) and new (1) templates).
13. Proofread the documents.
Module 1
Lesson (decoding)
14. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
15. Draft the 6 hypotheses for Activity 2a.
16. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
17. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
18. Integrate changes in the lessons (1-25) (change of words, adaptation of instructions, time / volume of items in each exercise).
19. Modify illustrations (Rita et la petite balle).
20. Write out the script for the illustration.
21. Integrate changes in the reading book (indefinite article, decodable words – balle / boule).
22. Integrate changes in the reading book (vocabulary lexicon).
23. Propose a model for the lexicon.
24. Integrate changes in the exercise book (verify images or words with instructions).
25. Proofread Module 1 (teacher's guide, exercise book).
Progression
26. Proofread progression.

Module 2
Lesson (decoding)
27. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
28. Draft the 6 hypotheses for Activity 2a.
29. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
30. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
31. Integrate changes in the lessons (26-50) (change of words, adaptation of instructions, time / volume of items in each exercise).
32. Change illustrations (Rita à la mer)
33. Write out the script for the illustration.
34. Integrate changes in the reading book (indefinite article, decodable words).
35. Integrate changes in the reading book (vocabulary lexicon).
36. Integrate changes in the exercise book (verify images or words with instructions) – verify Tamamouchi, Greek writing Lesson 40 and Lesson 45.
37. Proofread Module 2 (teacher's guide, student book, exercise book).
Module 3
Lesson (decoding)
38. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
39. Draft the 6 hypotheses for Activity 2a.
40. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
41. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
42. Integrate changes in the lessons (50-75) (adaptation of time / volume of items in each exercise).
43. Integrate changes in the reading book (illustration, article).
44. Integrate changes in the reading book (vocabulary lexicon).
45. Integrate changes in the exercise book (verify images or words with instructions).
46. Proofread Module 3 (teacher's guide, student book, exercise book).
Module 4
Lesson (decoding)
47. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
48. Draft the 6 hypotheses for Activity 2a.
49. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
50. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
51. Integrate changes in the lessons (75-100) (adaptation of time / volume of items in each exercise).
52. Integrate changes in the reading book (illustration, article).
53. Integrate changes in the reading book (vocabulary lexicon).
54. Integrate changes in the exercise book (verify images or words with instructions).
55. Proofread Module 4 (teacher's guide, student book, exercise book).

Module 5
Lesson (decoding)
56. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
57. Draft the 6 hypotheses for Activity 2a.
58. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
59. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
60. Integrate changes in the lessons (101-125) (adaptation of time / volume of items in each exercise).
61. Integrate changes in the reading book (illustration, article).
62. Integrate changes in the reading book (vocabulary lexicon).
63. Integrate changes in the exercise book (verify images or words with instructions).
64. Proofread Module 5 (teacher's guide, student book, exercise book).
Module 6
Lesson (decoding)
65. Draft the answer options (5) and questions to guide children (5) (Activity 1).
Lesson (comprehension)
66. Draft the 6 hypotheses for Activity 2a.
67. Write out the definitions of the three vocabulary words for each lesson (Activity 2b).
68. Select 2 correct hypotheses from the 6 hypotheses proposed in Activity 2a.
69. Integrate changes in the lessons (126-150) (adaptation of time / volume of items in each exercise).
70. Integrate changes in the reading book (illustration, article).
71. Integrate changes in the reading book (vocabulary lexicon).
72. Integrate changes in the exercise book (verify images or words with instructions).
Progression
73. Proofread the progression.
74. Proofread Module 6 (teacher's guide, student book, exercise book).
Introduction
75. General Part
76. Modify the toolbox (BAO) and see if it is possible to make it a separate section.

Annex C

EGRA 2013–2014 Mean Results by Corridor, Treatment, Language, and Grade—Baseline and Endline

		2013–2014 Baseline				2013–2014 Endline			
		Haitian Creole		French		Haitian Creole		French	
		Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Oral Language Ability (max. 20)									
Cap-Haitien/ Saint-Marc	Control Means	--	--	13.64	15.01	--	--	14.70	15.32
	Treatment A Means	--	--	13.96	15.05	--	--	14.71	15.88
	Treatment B Means	--	--	12.66	14.38	--	--	14.40	15.66
Port-au-Prince	Control Means	--	--	14.93	16.32	--	--	15.62	16.15
	Treatment A Means	--	--	14.88	16.02	--	--	15.31	16.05
Listening Comprehension (max. 5)									
Cap-Haitien/ Saint-Marc	Control Means	2.43	3.04	0.72	1.25	2.43	3.20	0.86	1.58
	Treatment A Means	2.47	3.10	0.78	1.14	2.55	3.28	0.80	1.59
	Treatment B Means	2.30	2.80	0.69	1.08	2.47	3.05	0.51	0.90
Port-au-Prince	Control Means	2.80	3.63	0.93	1.67	2.76	3.16	1.10	1.88
	Treatment A Means	2.95	3.62	1.20	1.62	2.82	3.36	1.02	1.86
Initial Sound Identification (max. 10)									
Cap-Haitien/ Saint-Marc	Control Means	1.73	2.17	2.03	2.49	1.89	2.57	2.29	2.68
	Treatment A Means	1.18	3.94	1.40	4.35	5.21	7.55	5.23	7.69
	Treatment B Means	0.84	3.39	1.01	3.23	4.40	6.78	4.46	6.91
Port-au-Prince	Control Means	0.98	1.33	1.11	1.82	1.38	2.57	1.62	3.11
	Treatment A Means	1.40	2.79	1.34	3.01	5.76	7.69	5.66	7.85
Letter Name Knowledge (clpm)									
Cap-Haitien/ Saint-Marc	Control Means	7.00	23.32	8.58	26.83	18.99	32.61	23.62	41.54
	Treatment A Means	8.73	22.19	11.28	26.22	18.70	34.85	18.57	34.83
	Treatment B Means	5.01	16.17	5.90	19.91	14.93	27.63	16.27	28.13

		2013–2014 Baseline				2013–2014 Endline			
		Haitian Creole		French		Haitian Creole		French	
		Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Port-au-Prince	Control Means	11.73	32.71	14.82	40.26	25.40	42.19	29.69	49.34
	Treatment A Means	11.75	32.89	14.75	38.21	24.65	41.15	26.27	43.85
Letter Sound Knowledge (clpm)									
Cap-Haitien/ Saint-Marc	Control Means	5.87	12.64	7.29	14.15	12.88	18.61	10.78	16.40
	Treatment A Means	4.68	15.51	6.53	15.76	16.87	33.70	12.58	27.17
	Treatment B Means	3.14	11.71	3.60	12.04	14.09	26.21	10.56	18.67
Port-au-Prince	Control Means	5.90	14.03	6.85	16.27	10.63	17.56	11.80	19.81
	Treatment A Means	6.32	15.32	7.73	16.74	19.94	33.27	17.11	29.31
Familiar Word Reading (cwpm)									
Cap-Haitien/ Saint-Marc	Control Means	1.72	9.20	--	--	8.82	21.20	--	--
	Treatment A Means	1.03	8.49	--	--	7.64	21.86	--	--
	Treatment B Means	0.45	4.44	--	--	5.79	14.34	--	--
Port-au-Prince	Control Means	3.01	13.30	--	--	9.03	24.08	--	--
	Treatment A Means	2.82	13.09	--	--	12.83	27.46	--	--
Invented Word Decoding (cwpm)									
Cap-Haitien/ Saint-Marc	Control Means	1.70	6.50	--	--	6.95	15.76	--	--
	Treatment A Means	0.62	5.57	--	--	4.57	15.15	--	--
	Treatment B Means	0.16	2.78	--	--	3.93	9.09	--	--
Port-au-Prince	Control Means	1.60	9.51	--	--	6.90	17.30	--	--
	Treatment A Means	1.60	8.68	--	--	8.73	19.10	--	--
Oral Reading Fluency (cwpm)									
Cap-Haitien/ Saint-Marc	Control Means	3.52	14.57	--	--	10.96	26.33	--	--
	Treatment A Means	1.81	13.35	--	--	8.54	27.78	--	--
	Treatment B Means	0.83	7.29	--	--	6.03	16.59	--	--
Port-au-Prince	Control Means	4.62	22.71	--	--	11.15	33.20	--	--
	Treatment A Means	4.90	20.98	--	--	14.95	34.95	--	--

		2013–2014 Baseline				2013–2014 Endline			
		Haitian Creole		French		Haitian Creole		French	
		Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2	Grade 1	Grade 2
Reading Comprehension (max. 5)									
Cap-Haitien/ Saint-Marc	Control Means	0.09	0.44	--	--	0.36	1.02	--	--
	Treatment A Means	0.04	0.43	--	--	0.32	1.09	--	--
	Treatment B Means	0.02	0.25	--	--	0.25	0.66	--	--
Port-au-Prince	Control Means	0.09	0.78	--	--	0.30	1.23	--	--
	Treatment A Means	0.11	0.73	--	--	0.53	1.31	--	--
Letter Dictation (max. 5)									
Cap-Haitien/ Saint-Marc	Control Means	1.21	3.02	--	--	2.63	3.62	--	--
	Treatment A Means	1.08	2.78	--	--	2.49	3.72	--	--
	Treatment B Means	0.72	2.37	--	--	2.30	3.35	--	--
Port-au-Prince	Control Means	1.55	3.39	--	--	3.10	3.94	--	--
	Treatment A Means	1.56	3.47	--	--	3.00	3.99	--	--
Word Dictation (max. 3)									
Cap-Haitien/ Saint-Marc	Control Means	0.08	0.36	--	--	0.25	0.70	--	--
	Treatment A Means	0.04	0.42	--	--	0.68	1.53	--	--
	Treatment B Means	0.01	0.30	--	--	0.45	1.12	--	--
Port-au-Prince	Control Means	0.08	0.54	--	--	0.35	0.82	--	--
	Treatment A Means	0.09	0.54	--	--	0.92	1.42	--	--

Overall EGRA Results from Year 1 (2012–2013) Baseline to Year 2 (2013–2014) Endline, in Cap-Haitien/Saint-Marc

Subtask	Group	Year 1		Year 2		D-in-D	D-in-D ES[11]
		Baseline Mean	Baseline SE	Endline Mean	Endline SE		
Initial Sound Identification	Control	2.08	0.49	2.57	0.29		
	Treatment A	1.14	0.13	**7.52***	0.20	**5.89***	1.46
	Treatment B	0.61	0.23	**6.77***	0.49	**5.67***	1.42
Listening Comprehension	Control	3.42	0.14	3.20	0.10		
	Treatment A	3.34	0.09	3.29	0.08	0.16	0.10
	Treatment B	3.18	0.13	3.04	0.18	0.08	0.05
Letter Name Knowledge	Control	10.91	1.31	32.61	2.23		
	Treatment A	8.57	1.21	35.28	1.87	5.01	0.23
	Treatment B	6.94	0.94	27.58	2.94	-1.06	-0.05
Letter Sound Knowledge	Control	9.12	1.49	18.61	1.42		
	Treatment A	6.34	0.61	**33.60***	1.77	**17.77***	0.98
	Treatment B	5.38	0.73	26.17	2.76	**11.30***	0.63
Familiar Word Reading	Control	6.02	0.85	21.20	3.55		
	Treatment A	4.04	0.54	22.28	2.05	3.06	0.15
	Treatment B	2.42	0.44	14.30	1.68	-3.30	-0.17
Invented Word Reading	Control	3.57	0.74	15.76	3.23		
	Treatment A	2.13	0.42	15.50	1.67	1.17	0.07
	Treatment B	1.32	0.24	9.06	1.07	-4.45	-0.28
Oral Reading Fluency	Control	4.24	0.77	24.91	4.12		
	Treatment A	1.84	0.36	26.83	2.64	4.32	0.17
	Treatment B	1.02	0.42	15.66	1.75	-6.03	-0.25
Reading Comprehension	Control	0.22	0.05	1.44	0.23		
	Treatment A	0.04	0.01	1.56	0.16	0.30	0.19
	Treatment B	0.04	0.03	0.94	0.15	-0.32	-0.21

SE: standard error; D-in-D: difference in differences over time between control group and treatment group.
*$p < 0.0083$[12]

[11] The effect size (ES) calculations reported in this document use Cohen's D, controlling for the control group in the effect size calculation of the treatment group(s).
[12] The p-value of $p < 0.0083$ reflects a Bonferroni adjustment (0.05/6) due to the large number of comparisons being conducted.