

RIGHT TO READ 2015/16 REPORT

Background To The Project

EnglishHelper (EH) is a software provider that enables technology based reading and comprehension improvement for learners across all age groups. Since launching commercially in India in 2011, EH has successfully implemented its reading and comprehension solution, ReadToMe™ (RTM), in a number of schools in India.

In a study conducted by EnglishHelper with 20,000+ students across 100 schools in India pupils showed a marked improvement (approximately 10-15%) in their reading and comprehension skills after using RTM during the 2013/14 academic year. The schools involved were not dissimilar to many schools in Sierra Leone, as noted in the EH report:

“The learners came from poor economic backgrounds and the school settings were infrastructurally weak with lack of access to the Internet, shared computers, limited access to the software, and weak classroom facilities. In spite of such limitations, assessments of changes in proficiency levels reveal significant gains across the board in the 6 states at all grade levels and across different facets of language learning – reading, reading comprehension, vocabulary, spelling and grammar. The study provides strong validation that multi-sensory technology can improve English language proficiency levels and reading skills dramatically, with less effort, and potentially in a shorter time period.”

ReadToMe (RTM) is a software product that verbalizes any text, including students’ textbooks. It provides a multi-sensory experience that enhances the learners’ engagement and improves retention.

Love Sierra Leone (LSL) is a UK registered charity founded in 2014. The trustees of LSL have individually supported various schools in Sierra Leone since 2004 and they established LSL to continue that support. In 2015 LSL provided just over £28,000 to its schools in Sierra Leone, largely to cover teachers’ wages and also including some building works, books, etc. Donations to LSL come from a small group of individual supporters including the Trustees of the charity.

Right to Read (RTR) is the brain child of Love Sierra Leone. A major aim of Love Sierra Leone is to improve education outcomes in Sierra Leone and Right To Read was established to carry forward this aim in the area of English Language teaching. And specifically through the use of multi-sensory technology assisted English Language teaching as demonstrated by EH in its 2013/2014 India study.

Ahkom Technical and Vocational center was set up in 2003 by David Sandi and Ahkom School was started in 2005. His aim is to provide quality education and training to those most in need – orphans and children of the most deprived families.

Statement of the problem

The challenges facing education in Sierra Leone are well documented. Below are some observations from a Sierra Leone Ministry of Education publication “Education Sector Plan 2014-2018” (Sept 2013):

- *By 2015, school-age girls and boys will comprise 41 percent of the total population. There will not only be a demand for school buildings and teachers, but a demand for quality, technology-enhanced education, so they can compete with their peers globally.*
- *After three years of schooling: (i) the great majority of children do not master the alphabet correctly or understand how it works; (ii) reading and comprehension skills are weak, as children show great difficulty in reading simple words and make little meaning of a reading passage; and (iii) the majority of Grade 1 children (53 percent) could not write their own names and were reluctant to even attempt writing a simple sentence.*
- *% of students that meet reading standards for their grade – 2010 NA, 2018 (target) 60%*

The Sierra Leone Govt and others are working to address these challenges but there is a long way to go, as evidenced by the 2018 *target* of 60% grade-appropriate reading achievement. In many cases they are starting by addressing basic needs such as providing classroom chairs, textbooks and drinkable water for pupils before they can address classroom education itself.

Objectives

Overall Objective

Can the use of technology assistance improve the reading and comprehension skills of English language learners in Sierra Leone. Our focus for the pilot was on ‘verbal aptitude’.

Specific Objectives

In January 2016 Right to Read commenced a Pilot at Ahkom School and Technical/Vocational Centre in Koidu, Kono District, Sierra Leone. 94% of Kono’s infrastructure, (including schools and hospitals), was destroyed during Sierra Leones’ 11 year rebel war which raged from 1991 to 2002. This led, immediate post-conflict, to the district’s official designation by the UN as a disadvantaged location marked by high youth illiteracy – especially of the girl child; widespread unemployment, war related ill health and few, if any, opportunities. Rehabilitation was and continues to be slow.

Against this backdrop Love Sierra Leone devised three specific objectives for the RTR pilot:

- a) To improve English language reading / comprehension skills of 70 Ahkom School pupils and 30 Ahkom Tec Voc trainees, using English Helper’s RTM multi-sensory technology software as a basic implementation tool.
- b) To see if EH’s India English Language teaching pilot could be successfully transported to Africa.
- c) If successful, to determine strategy for program expansion.

Details of the pilot

- The initial plan was to commence a pilot in September 2015 to July 2016. Scaling up would have occurred in academic years 2016/17 and 2017/18. Year 3 should have seen establishment of a technology centre of excellence in Kono, with the program expanded to the wider literate general public and to teachers who could become trainers of trainers.
- This plan was disrupted as additional time was required to raise funds to procure start-up training equipment and finalize the digitization of the set textbook for the RTR project in

India (the main delays being getting the book to India and then being able to download the digitized version via a weak internet connection in Kono). The lingering Ebola outbreak in Sierra Leone also led to delay in opening of schools from September 2015 to January 2016. This constriction of the academic year was made up by adding additional time, (including extension into the opening half of the summer holiday), which in effect allowed the project to enjoy a normal one year academic life span.

- The varying timetable requirements of target beneficiaries meant RTR teaching sessions had to be held out of school hours.
- Beneficiaries were of mid and lower level ability in English

Significance of The Study

The English Helper RTM pilot in India proved that multi – sensory technology assisted English learning can impact positively on the reading and comprehension outcomes of majority of learners.

Feedback from the RTR pilot in Sierra Leone supports this assertion, indicating the software program is transferable from one continent to another; one cultural paradigm to the next. With this consideration in mind Love Sierra Leone has committed to continuing its RTR program in Sierra Leone, albeit in the form of a pilot prolongation of another year until adequate funds can be secured to ensure additional pupils and trainees in Kono may benefit by expansion of the project to more schools and training centres within the district.

Project Methodology

RTR uses technology to help pupils improve their English reading and comprehension skills. Schools in Sierra Leone are English-medium so improving English language skills of students helps them in other subjects as well.

Love Sierra Leone and EnglishHelper™ are working together to deliver the RightToRead (RTR) initiative in Sierra Leone. EnglishHelper™ are providing their software and support at no cost, Love Sierra Leone will administer the program, engaging local resources in Sierra Leone.

The RTR program fits into the school curriculum and uses existing school textbooks, schedules and teachers. As such, the burden on schools (teachers and students) is relatively small. The bulk of the effort is in setting up the technology, training the teachers in how to use it and providing ongoing support as required. Note that in 2015/16 due to the compressed academic year RTR classes were held in after-school sessions (for which teachers and students stayed behind). In 2016/17 RTR will be used in the classroom during normal school timetabled lessons.

In the RTR program, ReadToMe™ is deployed in a group-learning mode using a computer, projector and speakers to read a text to a class of children. Teachers are able to stop/start the reading, explore the meaning of words and phrases (including in local languages and contexts) and are able to mute the computer while children read back what they have just heard. This “shared learning” model is very cost-effective and it promotes class camaraderie and group-working, skills that are carried over to other lessons. And it achieves results, as evidenced by the study in India and Sierra Leone.

In the future we may work with other organizations such as NGOs that have an established presence in particular schools in Sierra Leone.

Target Population and Sample

Ahkom Secondary School & Ahkom Tec-Voc Centre

Ahkom School is in Koidu town in Kono district. None of the children attending Ahkom school can afford to pay school fees – many are orphans.

Ahkom Technical / Vocational Center is near to Koidu and provides practical training for disadvantaged youth & young adults – some are former child labourers / prostitutes. Training at the tech-voc center includes sewing, motor vehicle repairs, carpentry and other such skills.

Sample Size

- Junior Secondary 1,2 & 3 – 70 participants (about 50/50 girls and boys)
- Tec-Voc (16yrs and above) – 30 participants
- Total = 100

During the year 8 pupils (6 girls and 2 boys) who were in the RTR program dropped out of school for various reasons.

Instrumentation

To deduce a more detailed assessment of project impact the following instruments were utilised in addition to class participation:

Interview

Beneficiaries were interviewed individually, in pairs and in groups to hear views on project implementation. This was appreciated especially by the more shy participants.

Focus Group Discussion

Focus group discussions were facilitated by staff to gain insight into beneficiaries' thoughts on project implementation. They were a helpful source for gauging group reactions and opinions on various aspects of the project. One such notable moment was when staff were notified by beneficiaries of the need to provide refreshments as some felt hungry during the after school sessions - a major source of classroom irritability.

Observation

All staff were instructed to observe and record individual and group actions and reactions during the course of the project in order to gain further insight into how best to adapt the program to ensure maximum benefit to beneficiaries.

Results and Observations

Results of the pilot

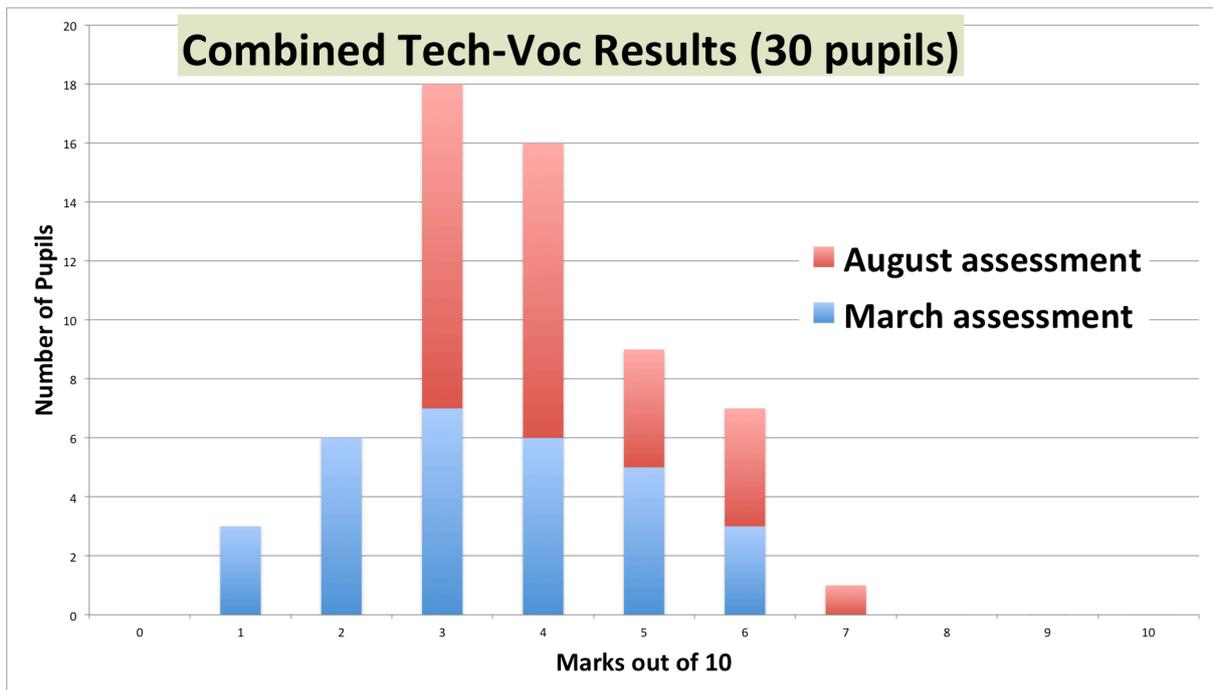
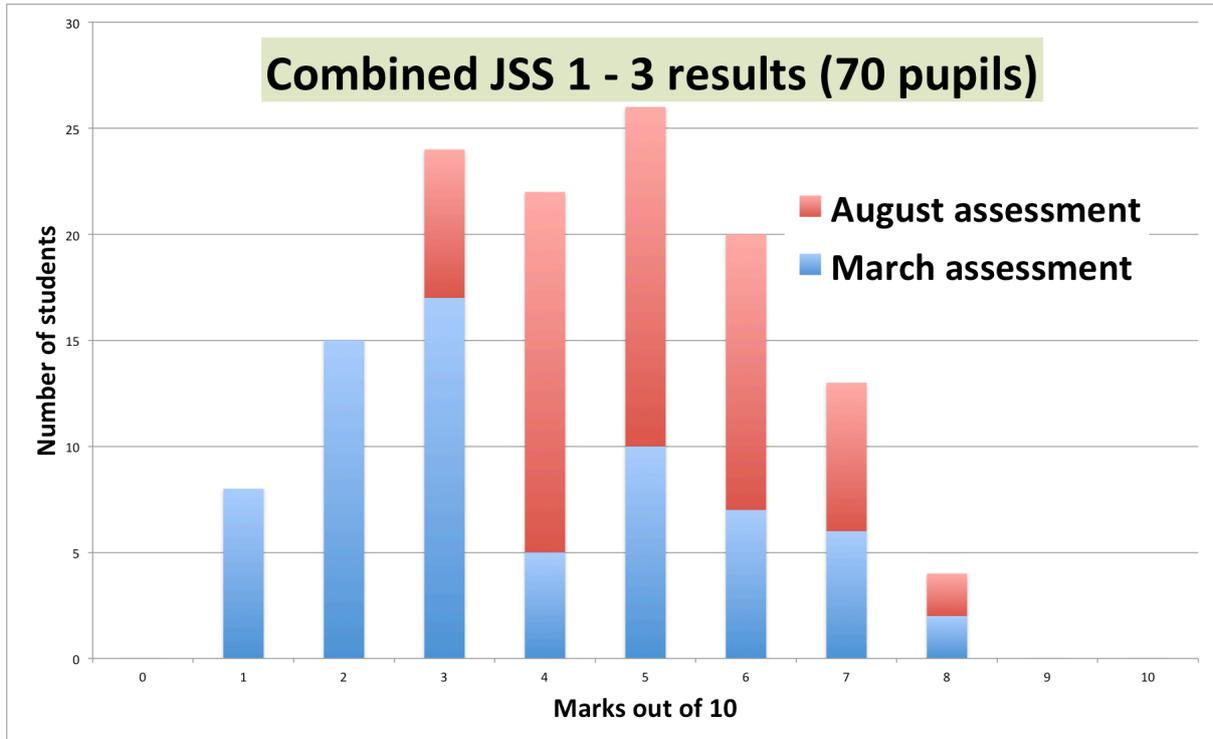
- Assessments were performed in March and August. Assessments involved participants being given a passage to read from New Focus in English Book 1 (the national school curriculum text book). These passages have grown progressively longer and more complex. The final assessment was conducted in August 2016 over a period of 5 days.

- Both assessments focused on the same language skills, namely: fluency, vocabulary, pronunciation, punctuation discipline and comprehension.
- Grade given for assessed capability on a scale of 0 to 10 where 0 is very poor and 10 excellent.

Below are the results of each assessment for Junior School classes 1-3 and the two Tech-Voc centers. The numbers in the shaded areas show how many students achieved a particular mark (0 to 10) in each assessment. Note: 1 girl dropped out of JSS 2 in April, 5 girls and 2 boys dropped out of JSS 3 in June/July.

	JSS 1 (19 pupils)		JSS 2 (12 / 11 pupils)		JSS 3 (39/32 pupils)	
	Mar	Aug	Mar	Aug	Mar	Aug
0	0	0	0	0	0	0
1	6	0	0	0	2	0
2	8	0	2	0	5	0
3	4	4	0	1	13	2
4	0	6	2	2	3	9
5	0	7	1	2	9	7
6	1	1	3	3	3	9
7	0	0	4	3	2	4
8	0	1	0	0	2	1
9	0	0	0	0	0	0
10	0	0	0	0	0	0
Average	2.1	4.5	5.3	5.5	4.0	5.2

	Tech-Voc Kambaima St (11 trainees)		Tech-Voc Koaquima (19 trainees)	
	Mar	Aug	Mar	Aug
0	0	0	0	0
1	0	0	3	0
2	3	0	3	0
3	2	5	5	6
4	3	3	3	7
5	2	1	3	3
6	1	2	2	2
7	0	0	0	1
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
Average	3.6	4.0	3.3	4.2



Observations

- There was an overall improvement in participants' reading and comprehension skills over the course of the project.
- During the course of the RTR project teachers observed an increase in participants' confidence and also noted that this confidence spilled over into other lessons. We made no attempt to measure this increase in confidence or the impact that it had on students' overall results, however one would assume that it would only be for the better.
- Teachers noted that school year-end examinations had an impact on students' attendance at post-school RTR sessions though overall attendance remained high.

Challenges

No surprises here – poverty and lack of infrastructure impact everything.

- Lack of a reliable Internet connection of electricity supply made setup of the RTM computers a long and frustrating task. Fortunately, once set up, RTM runs stand-alone so classes themselves were not impacted.
- Teachers, pupils and support staff – everyone is poor and often living hand-to-mouth. In asking teachers to run lessons after school we often caused them to forgo other post-school work that they might have done, so we had to pay the teachers extra.
- Students often missed their evening meal at home when they stayed for post-school lessons. So we had to provide some food and drinks for the children.
- School buildings are not secure so we were unable to leave RTR equipment at the school overnight. Ideally we would have set up an RTR lab where students could use the equipment as and when, but this was not possible.
- The pilot built everything from the ground up - we had no 'platform' to build on (e.g. existing computer labs, or other NGOs who were engaged in similar activities). This had a time and cost impact.

Conclusions and Recommendations

Conclusions

Our primary goal was to improve pupils' reading and comprehension skills and the results show that this was achieved. As such the project was an overall success.

Feedback from teachers indicates that in addition to language skills they noted an improvement in the overall confidence of participants which is a positive sign.

Total cost of the RTR project In 2015/16 was £10,700. The pilot engaged 100 pupils (8 students dropped out of school during the program) at a cost of approximately £107 per student per year.

Our plan is to continue the RTR program through 2016/17 and to look to expand it in subsequent years. Forecast cost for 2016/17 is £8,100. The reduction in cost is due to a) no major capital expense and b) some reduction in payments by running RTR during school hours

Recommendations

For 2016/17 and beyond, we recommend and plan to:

- Integrate RTR lessons into the normal school routine rather than in post-school sessions
- Use year-specific textbooks for all years (Junior School 1-3) and an adult/vocation centric textbook for Tech-Voc trainees. In 2015/16 we used JSS books 1 for all classes (due to time required to obtain, digitize and set up separate books for each group)
- Additional recommendation - from IT Technician: The RTR software installation restriction must be flexible so whenever the computer crashes it can be reinstalled immediately without prolonged disruption to learning. Like many other computer training programmes, it is possible that either the operation system or the hard drive develops a flaw; in which case you could, subject to the above, get rid of any unsuitable counterfeit

During academic year 2016/17 Love Sierra Leone will seek sponsors / funders to allow us to expand the program to 20-50 schools during 2017/18.

Links

English Helper: <http://englishhelper.com>

Love Sierra Leone: <http://lovesierraleone.org>

Right To Read blog: <http://rtrsl.wordpress.com>