World Vision, in collaboration with World Education and the Kampuchean Action for Primary Education (KAPE), a large local partner, has promoted early grade reading in Cambodia through a system of interventions that includes new teaching and learning materials, a mobile learning application and assessment protocols for gathering education data. By linking these important areas, the team developed a Total Reading Approach for Children (TRAC) with the assistance of an All Children Reading: A Grand Challenge for Development (ACRGCD) Round 1 grant.

Why take a total reading approach?

In 2011, after disappointing national reading achievement scores, the Ministry of Education, Youth and Sports (MoEYS) began replacing early grade readers for Grades 1 – 3 students in a move towards a more phonics-based approach to learning.

World Education worked with local educators from the Primary Education Department to develop short interval reading benchmarks, and to adapt early grade reading assessment frameworks to this benchmark system. The data generated by the benchmark system was linked to the Rapid Response System (RRS) utilised by literacy coaches to support children. The literacy coaches also sought to enhance parental engagement in children’s reading through a number of specialised learning activities that included the mLearning app and a reading toolkit linked to the new curriculum developed by MoEYS.

The mLearning app

The TRAC programme utilised an Android mobile application created by Education Technology for Development (ET4D) to teach reading in Khmer with a phonic pedagogy. The application supported the learning process through a three-step approach:

1. **Learn** – Letters, or combinations of letters, were presented to the user.
2. **Practise** – Over 20 activities were available: 2 – 4 practise activities were designed for each lesson. Each one also had several problem sets.
3. **Read** – Short illustrated stories were used.

World Education used ET4D’s MoToLi authoring tool to create the learning content, which provided a structured and reusable methodology for creating low-cost, early grade reading applications using a phonic approach. This authoring tool was adapted to suit the language needs of Cambodia.
The nine-step process to create the content was structured, and required the participation of a reading specialist in the language, to:

1. Establish the curriculum in correlation with the national curriculum

For each lesson:

2. Identify simple words or nonsense words
3. Choose the relevant activities
4. Create problem sets for each activity
5. Write a short instruction
6. Write and illustrate a short book or storyboard

Followed by:

7. Recording every element (words, phonem, instruction, stories, etc.)
8. Uploading to a database
9. Quality control testing

A proven ‘TRAC’ record

This project was implemented between 2012 – 2014, in Grades 1 and 2 classrooms in eight state primary schools in Kampong Cham province. Overall, a total of 2,352 children benefited from project interventions of whom 1,168 (or 50 per cent) were girls.

TRAC’s innovative and holistic system has shown promising results, with over 90 per cent of performance indicators successfully achieved. Eighty-three per cent of assessed teachers used the benchmark system following standard implementation criteria. Parental surveys indicated that, even though parental engagement was challenging, more than two-thirds of assessed parents borrowed literacy enhancement materials (from the reading toolkits provided to each school) at least once a month or more. User surveys indicated relatively high rates of usage of the mLearning app, with 70 per cent of surveyed parents indicating that they used the devices with their children at least once a month or more.

TRAC+

On August 25, 2014, the Minister of Education announced the formal adoption of the benchmark framework developed by TRAC. This announcement constitutes a remarkable achievement that exceeds original expectations and provided a fitting end to the project.

The TRAC approach was extended into the TRAC+ programme, which began in December, 2014. The new TRAC+ partnership will include 13 World Vision area development programmes, a total of 170 schools and reach an estimated 23,000 students.