ALL CHILDREN READING:
A GRAND CHALLENGE FOR DEVELOPMENT

TRACKING & TRACING BOOKS
DESTINED FOR CLASSROOMS

THE CHALLENGE
STUDENTS DO NOT HAVE BOOKS

Books are essential to reading instruction. However, oftentimes when textbooks and supplemental reading materials are ordered for developing countries, they do not end up in the hands of the students who need them.

Textbooks and materials can go astray at any stage in the delivery process—from the point-of-entry for imported textbooks, to central warehouses for nationally produced materials, to transportation across difficult and sometimes insecure routes or even during final distribution to regional offices and classrooms.

Experience in developing countries suggests that when parents, teachers, and other local stakeholders know what books are to be delivered and when, they will advocate for on-time delivery. But they rarely have this information and even when they do, they are not able to track books while in transit.

Your participation is key to developing a solution that can be used to help ensure textbooks arrive in the hands of learners around the world.

PHOTO: EDUCATION DEVELOPMENT CENTER

A QUEST FOR SOLUTIONS
TRACKING & TRACING BOOK COMPETITION

This year, *All Children Reading: A Grand Challenge for Development* launched a Tracking and Tracing Books prize competition. The competition solicited innovations to track books destined for classrooms and learning centers in low-income countries and allow stakeholders, ranging from parents to Ministries of Education (MoE) and donor agencies, to quickly and easily access tracking information.

A WINNING SOLUTION
SYSTEM OVERVIEW

The Track and Trace systems submissions being considered are supply chain solutions comprised of software and hardware.

THE SOFTWARE aspect of the solution focuses on the collection of data that identifies packages of books on their route from point-of-entry to a school. In addition to data collection, the software supplies MoE users with delivery status reports and can help identify deficiencies in the process. The data is envisioned to be contained in a cloud data store (Software As A Service/SAAS) model and does not rely on servers or architecture residing at the MoE as a *primary* repository.

THE HARDWARE components of the systems rely upon devices that can read a code (such as a barcode), allow for serial number entry, as well as facilitate a user in querying the system as to the location of books being delivered. The hardware currently focuses on feature phones, smart phones and bar code readers to varying capabilities.

RESOURCING YOUR STUDENTS
PILOT TEST THE SOLUTION IN YOUR COUNTRY

To sign up as a pilot test location to bring this solution to the schools and learners in your country, please contact us at info-acrgcd@worldvision.org.

USAID FROM THE AMERICAN PEOPLE

World Vision

Australian Aid

COMMUNITY SYSTEMS FOUNDATION (CSF) WEB, MOBILE

OpenEMIS Logistics, developed by CSF, is an open-source software that tracks the delivery of textbooks to schools. This tool leverages existing OpenEMIS technologies to provide Ministries of Education (MoE) with an integrated system for data collection, management and analysis that can be easily customized to meet the specific needs of member countries.

KEY FEATURES:

1. Local system administrators manage users, subscriptions and system configurations.
2. MoE officials enter package and shipment details, including preferred routing.
3. OpenEMIS Logistics uses SMS and email alerts to send out and respond to queries from school personnel and parents.
4. Supply chain actors confirm deliveries via OpenEMIS Logistics web, mobile or SMS interface.
5. OpenEMIS integrates the latest mapping technologies through geo-coordinates to track shipments.
6. OpenEMIS Logistics is designed to be fully customizable, providing multiple language support and options to track any school supplies.

JOHN SNOW, INC. (JSI) WEB, MOBILE

JSI's software system combines functionality from three software solutions–Salesforce, TaroWorks, and an SMS provider–with the use of simple barcodes, which support the tracking and tracing of textbooks by education officials and enable parents, teachers, and local officials to receive up-to-date information on the status of books and educational materials. JSI has also partnered with World Education, Inc. to leverage their expertise and experience in education in developing countries.

KEY FEATURES:

1. Administrators setup the User Interface to reflect the structure of the education system.
2. MoE officials place orders via the Web Interface which generates a delivery note with a unique delivery identification number.
3. Supply chain actors scan each book and each box and use the delivery note to link the items to the order and to the destination.
4. Parents register with the system and receive tracking information from the system website via SMS or Interactive Voice Response (IVR).
5. Teachers confirm arrival of the order via SMS and can notify the system if there are issues.
6. MoE officials can track orders via the dashboard and will receive alerts if supplies are delayed, missing or damaged in transit.

OUTCOMES

- Improved coordination and communication among stakeholders
- Timely, cost-efficient delivery of Books
- Students have access to reading materials
- Communities empowered to advocate for their children's education
- More opportunities to practice reading
- Increased transparency and accountability