Why Track and Trace?

Despite investing decades of funding for books in low-income countries, many early-grade classrooms have insufficient textbooks and supplemental reading materials to meet the needs of students. Textbooks and materials can go astray at any stage in the delivery process. 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. Government and donor agency officials may discover that materials have not arrived at schools, but without the availability of tracking information, they do not know where they were lost in transit.

What is Track and Trace?

Track and Trace (TnT), developed by John Snow, Inc. (JSI) and World Education Inc. (WEI), with funding from the All Children Reading Grand Challenge, is a technology solution that enables ministry officials, partners, and distributors to track in real-time the ordering and distribution of books and other supplies. Tracking these orders ensures they reach the schools they were destined for in a timely manner and in the right condition. TnT improves the transparency and accountability of the education supply chain by enhancing the central government and community’s visibility into the location of textbooks during the distribution process.

TnT is designed to make the primary school textbook supply process more efficient by three main features:

1) Schools report timely data and TnT assists in accurately projecting book needs for budgeting and procurement by the central ministry

2) Tracking “real-time” distribution of textbooks and providing visibility of issues – delayed, missing or damaged – for taking timely action

3) Engaging school communities to confirm books arrive and conducting classroom spot checks post-delivery to ensure textbooks are available

TnT allows for governments to monitor contractors’ performance in delivering books and other supplies to schools as per their contracts. TnT will allow procurement agencies to track usage and use TnT to better forecast need for more accurate procurement. TnT allows school-community bodies, principals, administrators, and teachers to access information needed to advocate for improved supply chain performance through standard mobile phones.

TnT utilizes various communication technologies to enable reporting of information and tracking of books and school materials throughout the ordering and distribution process. Technologies include barcodes, short messages service (SMS), interactive voice response (IVR), smartphone applications, chat-bots, and web-based dashboards with maps.

TnT was first piloted in two schools in Malawi using SMS. TnT is now being scaled to 400 schools in Cambodia with an additional request feature and using chat-bots.