

## Learning Links: the "Lyft" of learning – tapping underutilized human capacity to teach literacy and numeracy in rural areas

## SID Innovation Challenge Entry 2018

## **Executive Snapshot**

Liberian girls who become pregnant drop out of school, fall behind academically, usually never return, and become trapped in a cycle of poverty. Kaizen is implementing an innovative approach in rural Liberia that connects literate and numerate Liberian women with these at-risk girls to serve as tutormentors. Drawing from successful private sector collaborative consumption business models (e.g. Lyft, Upwork), and leveraging existing SMS and mobile money functionality present in Liberia, Kaizen provides micro-incentives to both learners and tutor-mentors for demonstrated learning progress verified by SMS. This model is supporting more than 300 girls, and is in the process of scaling up to 2,500 at a marginal cost that will fall to less than \$100 per head per year, and will have exciting potential to scale to literacy and numeracy programs across the developing world.

Problem Definition: Liberia, even before the Ebola crisis, had one of the highest rates of teenage pregnancy in the world at 31% for 15-19 year olds. This situation is even more acute in Bong County where nearly half of all teenage girls have either given birth or are currently pregnant. These high teen pregnancy rates are detrimental to girls' education: pregnant girls usually must drop out of school; they fall behind academically; reenrollment becomes much more challenging; and girls and their children subsequently find themselves further trapped in the cycle of poverty.

If these vulnerable out-of-school girls can access an alternative literacy and numeracy education source that 1.) is high quality, 2.) is flexible enough to address their specific psychosocial needs, and 3.) provides modest incentives for learning performance, then they will continue to learn while out of school, face fewer barriers in returning to school, and have greater chances to escape the cycle of poverty.

Innovation/Resources: Kaizen/Learning Links's innovation taps into on an exciting but underutilized resource: literate and numerate Liberian women who want to help their communities and



Figure 1: A Learning Links learner learning to read from a literacy curriculum (in her right hand), holding her child, an preparing to answer an SMS quiz question (note the mobile phone to her right on the bench)

supplement their incomes. Despite low levels of female education in Liberia, the 44% of women who are literate comprise a massive, and potentially game-changing, educational resource. With the right mechanisms, incentives, support, and oversight in place these women could provide education support



to pregnant girls and new young mothers in Bong County, and more broadly to out-of-school children across Liberia.

Kaizen/Learning Links has trained literate and numerate women to serve as tutor-mentors for the Liberian Ministry of Education's (MOE) Alternative Basic Education (ABE) curriculum, and connects them to girls who have dropped out of school due to pregnancy. We use daily Short Message Service (SMS)-based evaluation questions to track learners' progress, and provide micropayments to both learners and tutor-mentors via mobile technology for learning performance. The SMS-based evaluations paired with financial incentives will generate rich data on a daily basis, and increase learner engagement and retention. The core of the Learning Links model borrows from the tech-enabled freelance contractor business model made famous by Lyft and other gig economy businesses, and which has spread across the world, including throughout Africa.

Product Definition: Figure 2 shows how the Learning Links Model works.

Kaizen/Learning Links recruits literate community women to serve as literacy tutors, and trains them in delivering an established literacy and numeracy curriculum. We connect the tutors with groups of out-of-school girls to form learning groups that meet when and where the girls and tutors choose. On a daily basis Kaizen/Learning Links sends SMS-based evaluation questions to verify learners' learning progress. Tutors receive performance-based payment when students learn.

**User and Customer Definition:** There are two sets of customers: the learners and the tutors.

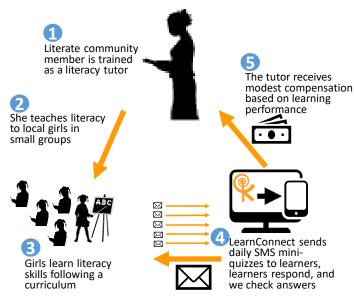


Figure 2: The Learning Links model links literate women to out-of-school girls and provides an incentive structure and monitoring mechanism to promote and measure learning

Learners are Liberian girls who have

been forced to leave school due to pregnancy. They live in the communities in and around Gbarnga in Bong County, Liberia. They all are currently pregnant or have young children and sincerely want to continue learning.

Tutors are literate women living in the same communities as the learners. They use their literacy in their daily lives, but they have spare hours which they could use to teach other women and girls. Tutors may have families of their own, but it is not a requirement. Their family constraints must not prohibit them from meeting with other unrelated females.

**Sustainability:** Since Learning Links fills a gap in a public service, we define the potential for sustainability as when the marginal cost for an additional learner is "competitive" with the cost of educating a child through the national education system in Liberia. The cost to educate one student in



government schools is approximately US\$80/year. Based on the incentive structure we are using, the total cost for a learner to progress through all three levels of the literacy and numeracy ABE curriculum is US\$150 over 18 months, which translates to US\$100/year. Half of this cost goes to the learner in the form of incentives, and the other half goes to the tutor-mentor.

Kaizen/Learning Links is testing permutations of the incentive structure to reduce the cost of incentives that the program provides. For instance, we are experimenting with reducing the incentives/learner a tutormentor receives as the number of learners they support increases. In this way the tutor-mentors' income will still increase as they support more learners, but the costs to the program will decrease. Table 1 shows how tutormentor incomes will increase and program costs decrease if the tutormentor receives equal



Figure 3: A learning group of young women, accompanied by their children. Learning Links has gained unanticipated momentum because the learning groups also serve as a social activity that attract intense interest wherever they happen

incentives as the learners for up to four learners, and 50% of the incentives for each student in excess of four. Kaizen/Learning Links is exploring other incentive structures for learners as well, possibly reducing costs further. In addition, the program is testing micro incentives in the form of phone credit instead of mobile money. Since mobile providers offer discounts on large bundles of airtime credits, this could reduce incentive costs by a further 10%.

Table 1

| # of Learners   | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Tutor-mentor    | \$200 | \$225 | \$250 | \$275 | \$300 | \$325 | \$350 | \$375 | \$400 |
| Income/year     |       |       |       |       |       |       |       |       |       |
| Cost to         | \$100 | \$95  | \$92  | \$89  | \$88  | \$86  | \$85  | \$84  | \$83  |
| LL/learner/year |       |       |       |       |       |       |       |       |       |

<sup>&</sup>lt;sup>1</sup> Calculated from recurrent government spending projections for secondary education from <a href="http://planipolis.iiep.unesco.org/upload/Liberia/Liberia Sector Plan.pdf">http://planipolis.iiep.unesco.org/upload/Liberia/Liberia Sector Plan.pdf</a>, and the share of household expenditure for secondary education from Liberian MOE's Education for All 2015 National Review Report: Liberia <a href="http://unesdoc.unesco.org/images/0023/002332/233218e.pdf">http://unesdoc.unesco.org/images/0023/002332/233218e.pdf</a>. This figure is in line with the \$78/year cited by Bridge International Academies e.g. <a href="http://www.nytimes.com/2016/06/14/opinion/liberia-desperate-to-educate-turns-to-charter-schools.html">http://www.nytimes.com/2016/06/14/opinion/liberia-desperate-to-educate-turns-to-charter-schools.html</a>



**Team:** Learning Links is being implemented by a stellar team. Lovesun Parent is Kaizen's Chief of Team, and a former USAID employee working at the Mission in Haiti. She is supported by 15 Liberian staff who recruit tutors and learners, monitor learning progress, and provide psychosocial support to learners (an important function of Learning Links, but not the focus of this innovation application).