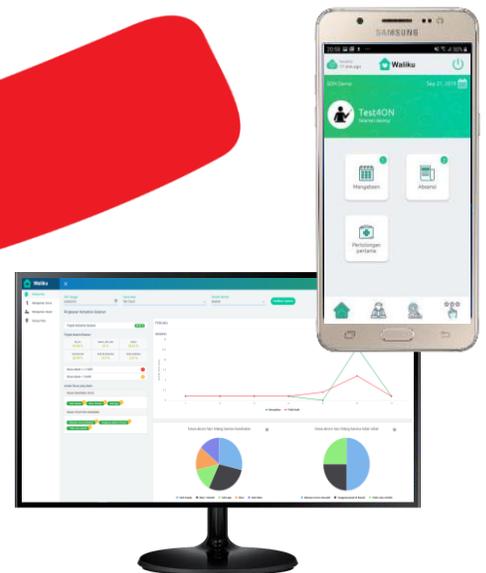




Address student absenteeism and well-being through the strategic use of technology

Proof of Concept Year Overview & Findings

2018-19



The Problem

Despite high enrolments in schools, student absenteeism is a problem in low-resource contexts. Average attendance rates tracked by school systems mask the extent of absenteeism at an individual-level, which can easily be over 10% of school days or a month of schooling during an academic year for a third of the student population. Further, current paper-based systems for recording student attendance do not provide real-time understanding of the specific reasons for each absent child neither do they flag those who are seriously absent, either from a health or personal-family reason, so schools can respond and remediate. As a result, children face the burden of health and non-health barriers to well-being. Poor communication between schools and families and their limited coordination with health and child welfare providers exacerbates the situation, especially for children who are most disadvantaged and vulnerable to chronic absence, poor performance and dropout.

Our Solution – Waliku

Waliku, or “my guardian” in Indonesian, operates on the principle that every child has the right to attend school to learn and achieve their fullest potential. Tailored to low-resource contexts and children most marginalized, the *Waliku* suite of digital tools and implementation system ensures that teachers and schools can recognize and act on critical student absences in a timely manner.

Once enrolled in *Waliku*, students’ daily attendance and absence recording happens digitally and allows the dynamic management of absent students. Every day, after teachers take attendance on the *Waliku* mobile app, their automatically generated absence task-list facilitates follow up of a prioritized list of absent students. Teachers call or meet their parents/ guardians to know the reason for absence and advise them so children receive support and are encouraged to return to school. For children who are very absent (absence episode ≥ 3 days), teachers further counsel and triage those who need interventions from a local education, health or child-welfare authority. Aggregated data about individual classrooms, entire schools and districts allow stakeholders to understand and respond to their children’s barriers to school attendance and well-being.

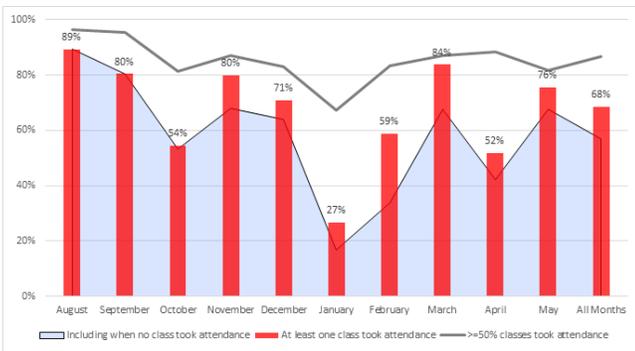
Waliku Use-Case in Sumba Barat - Indonesia



We tested the *Waliku* solution in a remote sub-district of Sumba Barat, Indonesia in the 2018-19 school year. Using an iterative process to develop the technology and train schools, we introduced *Waliku* in five schools covering 1,210 students from August 2018 to February 2019. From March to May 2019, 48 teachers used a version I mobile app, with limited offline functionality, to take attendance, and record absence. Overall, there was excellent adoption and use of *Waliku* considering the untested technology in a rural context. User experience was favourable when there was good network connectivity and app functionality. We identified multiple areas to optimize the technology for low-resource contexts, and to improve school workflows for responding to absenteeism. Along with the district government, we have introduced an improved version I across 21 schools in two sub-districts of Sumba Barat in the 2019-2020 school year, and are planning to reach more schools with the district government funding in the 2020-21 year. To learn about *Waliku*, visit www.waliku.org

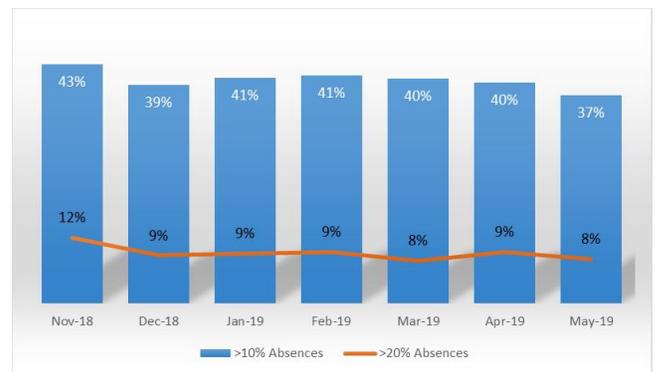
ADOPTION

Adoption of Waliku was 100% by all 48 teachers across the five schools. Daily attendance recording rate (ARR) on Waliku was close to 70% on days when at least one classroom took attendance (school day with internet access). Low performance in January was due to start of the new semester and logistical challenges of phone and data credit top-up. For Waliku to be usable at scale, it needs to remain simple, adaptive to local conditions, with expanded offline functionality and affordable data costs.



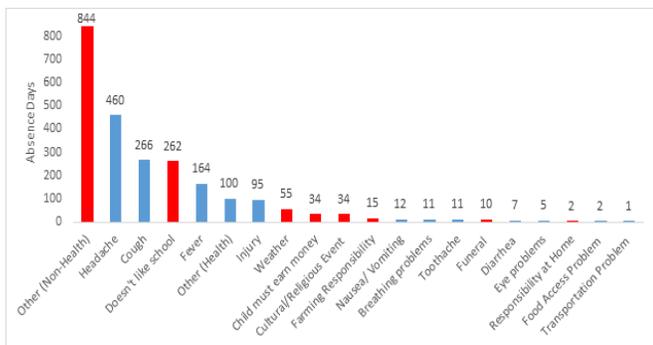
EXTENT OF STUDENT ABSENTEEISM

Waliku confirmed that schools face a huge burden of chronic absenteeism of its student population. Though average absence rates were 11% (13% boys, 9% girls), over a third of students in a pilot school were chronically absent, with 8% students severely absent. It is these groups of children, often with multiple vulnerabilities, who need education, health and welfare incentives to regularly attend school and reduce their risk of dropout.



BARRIERS TO STUDENT WELL-BEING

There was a significant increase in understanding of barriers to student well-being in Sumba Barat. Just 15% absences were followed up before Waliku; after Waliku 62% absences were followed-up (Feb-May 2019) - 42% recorded with a specific health or personal family reason, and 20% as unknown. There is a need for school-wide interventions to promote student well-being, as well as targeted responses to individual children and groups of children who face a greater burden in terms of their well-being and attendance.



TEACHER-GUARDIAN COMMUNICATION

Waliku confirmed that teacher communication on absences was two-thirds of the time through peers or directly with the student concerned, and a third of the time with parents or caregivers. However, more teachers made phone calls to contact parents than in the past. With greater use of Waliku and with new tools to motivate teachers, we expect their support to needy students and parents to improve. Future iterations of Waliku aim at school outreach to local health and welfare providers to support critically needy students.

