

School Water Sanitation and Hygiene + Community Impact (SWASH+): Background and Research Findings

Through applied research, SWASH+ seeks to identify, develop and test innovative approaches to school-based water, sanitation and hygiene (WASH) interventions in Kenya.

Since September 2006, SWASH+ has worked in 285 primary schools in four districts in Nyanza Province, gathering data, learning about challenges and testing solutions for school water, sanitation and hygiene (WASH). We provide water sources such as boreholes or rainwater harvesting systems, give schools chlorine solution for water treatment, build latrines, provide handwashing facilities and train schools, teachers and pupils on best practices for school WASH such as water treatment and latrine maintenance.

The research component is a randomized and controlled study involving extensive surveying in 185 schools with over 10,000 pupils and almost 5,000 households in the surrounding communities. Some findings are summarized below and at right. The data point to the importance of WASH for educational outcomes.

Sustainability: A sustainability study by SWASH+ found that, while simple, WASH interventions are unlikely to last in schools without a convenient water source, adequate training of the school administration and community, availability of supplies and a sufficient budget for WASH expenses.

Training and knowledge promotion: While WASH infrastructure is important, research results show that “software,” including hygiene promotion and training on latrine maintenance,

SWASH+ Baseline Findings

The results demonstrate that good school and household water, sanitation and hygiene have an important positive impact on child health and education.

- Children in households with hand washing facilities (water and soap together) are 25% less likely to miss school.
- Children from a home with a latrine are 21% less likely to miss school.
- Children in schools that claim to *ever* provide water for hand washing are 30% less likely to miss school.
- Children in schools that are closer to the pupil:latrine ratio recommended by the Kenyan Government are significantly less likely to miss school.
- Children in schools with better-maintained latrines are 20% less likely to miss school.
- Children involved in water collection at home are 35% more likely to experience diarrhea.
- Children in households that report treating their drinking water are over 30% less likely to suffer diarrhea.
- Children in a home with a hand washing station including water and soap are 35% less likely to have diarrhea.





is also vital for effectiveness and sustainability. Recent SWASH+ research shows that, even with significant engagement and training, the transition from attitude change to behavior change is governed by complex factors. This implies that a successful scaled intervention cannot focus only on infrastructure but must address issues of knowledge promotion and behavior change.

School WASH Knowledge and Impact Outcomes – More Complicated Than It Looks

SWASH+ Second Year Findings

The results demonstrate that progress on knowledge and attitudes is being made, but that behavior change lags.

Children in intervention schools were more than:

- 37% more likely to say there is always enough drinking water available.
- 70% more likely to know how to treat water with WaterGuard.
- 33% more likely to say that soap is always available at their school.
- 13% less likely to be uncomfortable using school latrines.

Reason for pause, however is that there was no significant difference between intervention and control schools in:

- The percent of pupils who say they were absent in the past 2 weeks.
- The percent of pupils who were absent due to illness.

SWASH+ has now conducted the final survey of over 10,000 pupils, measuring knowledge, attitudes, behaviors and health and educational outcomes.

The data to the left point to the fact that the program has had a large impact on pupil knowledge and attitudes. However, this knowledge has not necessarily translated into behavior change.

Consequently, SWASH+ has seen little improvement in health and educational outcomes such as absence due to diarrhea. The data point to the need to study more closely the interplay between, for example, school latrine construction and wide adoption of handwashing.

