What are the best models for sustaining and maintaining school WASH?

Background

Provision of water, sanitation, and hygiene services is an integral component to the overall quality of primary schools. Findings from assessments of WASH programs in Kenyan schools demonstrate that services are either not being delivered, or are not being delivered consistently to provide a benefit to students. There are likely three main factors contributing to inefficient WASH service delivery in Kenyan primary schools:

1) low prioritization of WASH services,
2) overextended staff,
3) insufficient funds.

WASH services at schools are often not prioritized by teachers and school committees due to limited awareness of the potential health and educational gains of improved WASH services for students.

The purpose of this research was to determine what factors can have the greatest impact on improving the delivery of water, sanitation and hygiene services in rural primary schools in Kenya.

Research

Mixed-methods data collection was utilized starting May 2011 for a total of 21 weeks of observation during the school year. Data analysis of in-depth qualitative data from focus groups and key stakeholders interviews validated and expanded upon quantitative data from facility observations and structured surveys. All intervention schools received 37Ksh ($0.44 US Dollar) per pupil for purchase of water, sanitation and hygiene supplies. Schools were randomly divided into four groups:

1. Votehead Only (VH) 15 schools were given guidance documents on how to budget for items such as water treatment and handwashing soap, but no specific purchase requirements were placed on the schools.
2. Votehead Plus (VHP) 15 schools were given additional allocation of 5,000Ksh (about $60 USD) for minor repairs to existing school infrastructure. A list of suggestions for minor repairs was given to schools, but schools were free to prioritize repairs. Hiring a WASH attendant – a parent volunteer to assist with duties such as latrine cleaning and water collection, was an additional option. Stakeholders were given a list of the potential benefits and drawbacks of employing a WASH attendant. An additional 10,000Ksh (about $120 USD) was allocated to VHP schools that decided to employ a WASH attendant over the course of the two 12-week terms.
3. Roles & Responsibilities (RR) 15 schools received the basic VH package along with a set of monitoring tools for student use. Teachers were trained on use of the sheets, given a binder of 25 blank sheets, and left with guidelines for executing a student monitoring program. Information and guidance on how to engage parent volunteers to monitor and represent health issues to the School Management Committee (referred to as an SMC health rep) was also provided. The stakeholders were trained on SMC health rep monitoring sheets and copies were left at the school.
4. Control setting (note: 25 control schools received full intervention at the conclusion of the study).

Findings

Water Treatment, Soap & Water Containers - On average, 53-67% of containers at intervention schools had detectable chlorine residuals (a statistically significant improvement) compared to and 24% of containers at control schools. Across the four rounds of the post-intervention period 36%-43% of containers at intervention schools had soap nearby while only 6% of containers at control schools had soap nearby. When comparing any intervention group to controls the average number of water containers used per school and the proportion of containers with functioning taps had non-significant improvements.

Latrine Conditions - Latrines in the VH and R&R intervention schools were less likely than control schools to have feces or a strong smell. Latrines in all intervention schools were less like than controls to have any smell. VH and VHP schools were significantly less likely than control schools to have latrines that were “very dirty.” The proportion of latrines with doors, doors that closed completely, and doors with locks on both the inside and outside of the latrine was similar for all study groups.

Dirty and deteriorating school latrines. Latrine cleanliness and quality are important for use.
School Supplies Data: Intervention schools had more cleaning supplies available during follow-up data collection visits than control schools. Detergent and disinfectant (presumably for latrine cleaning), along with soap (detergent or bar soap) for handwashing, and chlorine for water treatment, were among the most commonly observed supplies in intervention schools. Toilet paper (defined as at least 5 rolls) was more likely to be found at VH and RR schools than control schools and sanitary pads (defined as at least ten pads) were much more likely to be found at RR schools than control schools.

Sanitary pads: A number of schools elected to use some of their WASH votehead budget to purchase sanitary pads for emergency use since money was not enough to provide a regular supply for all girls. The subject of sanitary pads helping girls stay in school came up in numerous interviews, initiated by the respondents themselves. Even a number of elderly SMC chairmen (who do not attend government meetings where sanitary pads have been discussed) brought up the importance of providing pads to support keeping girls in school.

A number of interview respondents reported that they opted not to buy sanitary pads with the money because they had heard the government would soon be supplying them to all primary schools. Roles and Responsibilities schools were most likely to have decided to purchase sanitary pads.

Conclusions

Schools across all intervention groups achieved improved conditions of their WASH facilities compared to control schools: cleaner latrines, chlorinated drinking water and soap provided for handwashing. Out of each intervention group, the Roles and Responsibilities schools were most likely to have latrine doors that worked and sanitary pads in stock — both outcomes that were not significant for the other two intervention groups. These findings suggest that either pupil monitoring and engagement, or increased involvement of a parent in school WASH, leads to improved school conditions. Although the Votehead Plus schools received a stipend for minor repairs, such as fixing latrine doors, the Roles and Responsibilities schools appeared to perform better in this area. At Votehead Plus schools, having a WASH attendant for latrine cleaning did not necessarily lead to cleaner latrines.

All intervention schools emphasized a consistent theme: parent involvement in school matters — especially school WASH. SMC chairmen and head teachers both discussed the importance of parents attending the WASH budgeting meetings for reasons of accountability and transparency. A number of schools pointed out the positive effect parental engagement in WASH meetings could have; it would improve their understanding of the important role of WASH in the school environment and in the health of their children.

While interventions provided promising results, additional research is needed to understand how improved conditions can be more consistent. Schools that had the required inputs (soap, chlorine, cleaning supplies) still did not provide services to students daily. According to observations made during the final four visits post implementation, all intervention schools had purchased the appropriate supplies and had them in stock. It is still unclear why schools did not chlorinate their water or place handwashing soap outside next to containers when they had these items at the school.

Findings from previous SWASH+ studies suggest that if the health patron is absent, or not on duty, the other teachers in the school will not assist in ensuring water is collected and chlorinated, latrines are cleaned and soap is provided.

Researchers formed specific recommendations based on the results from this study: Allocation of a School WASH Budget, Improved or Alternative Monitoring System, Alternative Cleaning Management, Plan for Latrine Emptying. Further research, increased government funding, community collaboration and implementation of evidence-based recommendations are needed in order to sustain school WASH service and delivery standards.