Water, Sanitation, and Hygiene: A Global Crisis with Real Solutions

By Elynn Walter

Each year, children worldwide lose 443 million school days because of water-related illnesses. Malnutrition and repeated episodes of diarrhea caused by water, sanitation, and hygiene (WASH)—related diseases during childhood can impair physical growth and cognitive function throughout life. Children who live long enough to attend school often start off at a disadvantage.

WASH Advocates (www.washadvocates.org) in Washington, D.C., is a nonprofit initiative dedicated to helping solve the WASH crisis by providing more water, sanitation, and hygiene, more sustainably, to more people throughout the developing world. Our work entails increasing awareness of WASH challenges and solutions and, most importantly, converting that heightened awareness into financial, technical, and human resources. We partner with a diverse group of stakeholders including academia, corporations, foundations, NGOs, civic and faith groups, museums, and science centers.

THE CRISIS AND ITS SOLUTIONS

Water is vital for health, environmental conservation, agriculture, and education, yet 780 million people still do not have access to safe drinking water, and 2.5 billion lack access to sanitation. In Africa, Asia, and Latin America, women and children often spend most of their day collecting water. On average, they walk for four hours only to find dirty water that they have no choice but to drink. With access to basic water and sanitation services, what could they do with those hours? Women could be participating in economically productive activities and creating...
a better lifestyle for themselves and their families. Children could be learning in school or playing and would enjoy better health.

Fortunately, simple and affordable solutions to the global WASH crisis already exist: handwashing with soap, which can reduce the incidence of diarrhea by 45%; harvesting rainwater; constructing boreholes with hand or electric pumps; and treating water with methods like ceramic filters, solar disinfection, and chlorination. Hygiene education is also important. Both infrastructure and behavioral change are needed to create lasting solutions.

**WASH IN SCHOOLS**

Many of these simple solutions are applied in schools in more than 100 countries through a growing effort called WASH in Schools. This movement calls for better integration of WASH facilities and practices into school programs to enhance the learning, health, and well-being of school-age children. Key goals include more girls attending school, more schoolchildren washing their hands, and fewer schoolchildren with worms and diarrhea.

Other initiatives are also addressing WASH issues for students in many countries. For example, in 2008, the Indian government funded the Jalmani program for 100,000 schools to receive safe drinking water (ddws.gov.in/jalmani). In the Philippines, the Ministry of Education is providing a hygiene package in all schools through the Fit for School program (www.fitforschool.ph).

**BATHROOM PASS: A HANDS-ON EXHIBITION**

In 2010, WASH Advocates collaborated with nearly 30 international organizations to create the **Bathroom Pass** exhibition, which provides information about the millions of children worldwide who now attend school in a healthy environment due to the collaborative work of WASH in Schools. The exhibition was shown at the Academy for Educational Development, Washington, D.C., from October to December 2010. Visitors from the general public and local schools learned about real individuals directly affected by the WASH crisis.

One of these individuals is 15-year-old Sarita, who faces many challenges growing up in Nepal. Her school does not have separate toilets for girls and boys, and the few existing toilets are often broken. Sarita and her classmates won’t use them for fear of being harassed or even attacked, so they go outside in the field. Without privacy, Sarita and millions of girls like her stay away from school during their menstrual period each month and, as a result, miss as much as 10–20% of the school year.

The exhibition displayed the stories of Sarita and three other children representing different regions of the world: 12-year-old Adán, from Honduras, who experiences daily water and sanitation struggles; 10-year-old Mamisoa, from Madagascar, who—like Sarita—is currently involved in WASH in Schools; and 17-year-old Nathan, from the United States, who is involved in fundraising and community awareness through a school club.

**Bathroom Pass** featured videos explaining WASH’s role in the world and included hands-on and interactive exhibits. For example, visitors could place their hands under an ultraviolet light to see previously invisible germs (making most people eager to wash their hands!) A favorite exhibit was

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Students from an H2O for Life club in Philadelphia play a game at the Bathroom Pass exhibition in Washington, D.C. Photo courtesy WASH Advocates

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the Jerrycan Walk, in which visitors could pick up a full jerrycan—weighing about 44 pounds (20 kilograms)—and walk on painted footsteps to get a sense of the labor involved in hauling water. Students participated in scavenger hunts that allowed direct interaction with each exhibit as they searched for information like the word for “poop” in five languages and the key “ingredients” of handwashing.

The exhibition also explained what individuals, groups, companies, and governments are doing to meet the challenge. Visitors could try out innovative and simple solutions such as a “tippy tap,” a handwashing station with a container of water and a foot pedal to control water flow.

WHAT CAN SCIENCE CENTERS DO?

Science centers worldwide have a significant and unique role to play in raising awareness of the global WASH challenge through their interactions with funding organizations and decision makers, as well as through exhibitions and educational programs.

Specific initiatives that science centers could become involved with include:

- Recreating the Bathroom Pass exhibition from the template, which is available to museums and educators. (If interested, contact the author at ewalter@WASHadvocates.org.)

- Partnering with other organizations dedicated to raising awareness of WASH issues and solutions. For example, H2O for Life (www.h2oforlifeschools.org) has created WASH curricula and activities to engage U.S. youth. Project WET (www.projectwet.org) reaches children, educators, parents, and communities around the world with water education materials and training.

- Highlighting local or global WASH success stories in newsletters, social media, websites, and interactions with teachers and other educators.

Science centers in developing countries can also play a critical role by:

- Coordinating with local and national government agencies to promote collaborative efforts like WASH in Schools.

- Holding an exhibition or event about WASH for national or local decision makers to encourage their engagement and increase funding for WASH.

WASH in Schools has made a significant difference in many regions. Sarita’s school now has a health club, started with the assistance of Save the Children (www.savethechildren.org), where students learn about handwashing and good hygiene practices. The school also has new toilets, separated for girls and boys. Sarita and her classmates now attend school more often, are able to concentrate on learning, and have a greater chance of growing up healthy and strong.

While the students at Sarita’s school no longer experience as many lost school days, many other children still do. Raising awareness and putting simple, yet effective, solutions in place must continue. The more people learn about WASH, the more they can help.