



Issue 154 | July 18, 2014 | Focus on Gaming Applications for WASH

The WASH sector views gaming as an increasingly popular way to engage new audiences, raise awareness, and solve problems collectively. Games have been designed to support decision making for water resource managers and to educate children on water and sanitation issues. Using the format of a game helps generate an open and creative learning environment, which can stimulate problem solving and sharing among children and adults.

WASH SECTOR APPLICATIONS

WASH 2.0: How Mobile Technology Can Improve Sanitation and Reduce the Prevalence of Disease in Africa & South Asia, 2014. Hattery Labs. ([Link](#))

This report examines how the technology revolution in the developing world might be able to improve sanitation behavior. It focuses on the potential for mobile games to drive community learning and engagement in making sanitation improvements.

Mobile Gaming Aids in Sanitary Health, 2014. D Jones. ([Blog post](#))

This post reviews a few of Hattery Labs innovative game ideas. Soap Wars makes hand washing a challenge where players use the soap dispenser as a weapon against dangerous germs. In Toilet Hunt a player searches for sanitary latrines on a basic map and uses clues to decide whether the latrine is safe. Obstacles are introduced along the course of finding a safe place to go to the bathroom.

Get Water! Decode Global. ([Link](#)) | ([Download Get Water!](#))

Decode Global is working with Charity: Water on this special edition of Get Water! Players follow Maya and learn about Charity's work in India and discover new ways to help bring clean water to the developing world. Decode Global believes that gaming is a powerful medium through which players can experience the stories of other human beings.

Innovation in Menstrual Hygiene Awareness, 2014. Project Inspire. ([Link](#))

How can games and digital technology make an impact on menstrual hygiene? Here are profiles of organizations looking at creative ways to spread awareness. Menstrupedia is an online portal that aims to shatter myths and misunderstanding around a subject considered taboo in India. Wash United is an international organization tackling the sanitation and hygiene crisis with fun and interactive gaming experiences. Wash United partnered with Quicksand to host "The Great WASH Yatra (Nirmal Bharat Yatra)," a traveling carnival with exciting interactive games aimed at promoting awareness and behavioral change around

sanitation and hygiene.

UNICEF: How Mobile Startups and Development Agencies are Improving Water and Sanitation Awareness. *Social Story*, July 2014. M Rao. ([Link](#))

UNICEF and the Digital Empowerment Foundation are in the midst of cross-sector consultations on this topic in states across India, with the aim of unearthing local best practices and sharing them across the country. At their recent event in Chennai, government officials, mobile operators, social entrepreneurs, and academics shared examples of how mobile phones could be leveraged as a tool for social and behavior change.

Stimulating Change through Gaming, 2014. J McConville. ([Link](#))

Chapter 7 of the Stockholm Environment Institute's report "Peri-Urban Sanitation and Water Service Provision" describes how the SanWatPUA Network has been working with gaming as a tool. Its game uses visualization and role-playing techniques. Actors "play" their way through a series of decisions and critical issues related to water and waste management in a given peri-urban area. In the process they come to appreciate the complexity of stakeholder interactions and organizational needs. The game aims to inspire innovative institutional and technical solutions.

The Great Games: Connecting Youth to Global Water Challenges. *WH20 Journal*, Sept 2013. L Weintraub. ([Link](#))

The author considers how to realistically promote awareness of today's gender disparities in our daily lives and raise our children to think about the implications of water scarcity on girls' education. She concludes that gaming may be part of the answer, arguing that putting these issues on the public's radar need not be complicated, formal, or forced. Effective vehicles of education must be compelling and hit minds in a way that makes learning second nature.

Grand Prize Winners of the Sanitation App Challenge, 2013. The World Bank. ([Link](#))

One of the three winners of the app challenge was SunClean. SunClean playfully teaches children sanitation and hygiene behavior in a way that captures and maintains their attention. SunClean consists of two mini games: Disposal Trash and Hand Wash for Kids.

Serious Games for Improved Cooperation on Water Issues, 2013. C Chew. ([Presentation](#))

Serious games are designed for a specific purpose other than for entertainment. They are capable of: solving complex problems collaboratively; achieving predictive modeling and real time visualization; and increasing self learning by 120 percent and retention of knowledge by 109 percent, compared to traditional methods. These games also provide a flexible and scalable learning environment.

Drinkable Book Combines Sanitation Manual and Filters for Contaminated Water. *Dezeen Magazine*, May 2014. ([Link](#))

A team of American scientists and designers have collaborated to create the drinkable book, using a combination of typography, nanotechnology, and specially designed filter paper. Launched by communications group DDB New York for the charity WaterisLife, the Drinkable Book is a sanitation manual with pages that double as water filters. It was created by researchers from Carnegie Mellon University and the University of Virginia. The book's pages contain unique technology, invented by chemist Dr. Theresa Dankovich, which can help decrease the bacteria count of contaminated drinking water by more than 99.9 percent.

Safe Water School Training Manual, 2014. SODIS. ([Link](#))

The Safe Water School Manual combines school lessons in water, sanitation, and hygiene (WASH) with scientific experiments, games, and art activities. The lessons are based on the life-skills approach, and are inspired by participatory teaching and learning methods.

Handwashing Games: WASH Your Hands Before You Eat, 2013. WASH Advocates. ([Link](#))

This guide provides instructions for two role-playing hand washing games for school children: Let's Go to the Market! and Mystery in WASHstan.

Canadian Start-Up Develops Mobile Game to Pioneer Social Change. *The Guardian*, Sept 2013. E Cipin. ([Link](#))

Behind their first mobile game, Get Water!, comes the story of five fellows who came to Montreal to work together on a game about the most precious, yet scarce natural resource of our times: water. The result is an optimistic and solution-oriented game that subtly introduces youth to the reality of water scarcity in developing countries and its impact on girls' education.

Water Resource. WaterAid. ([Link](#))

The Water Resource is available to order online and is full of engaging and interactive resources, such as an activities sheet, a water technologies poster, a wall planner, stickers, and WaterAid's little book of teaching and fundraising ideas. There are additional useful teaching materials available online, which include classroom worksheets on the connection between water and deadly diseases and the cycle of water from draining a sink and flushing a toilet, to watering a lawn. Art, music, and drama activities are also included.

OTHER SECTORS

Guide to Apps for Social Change. *Peace & Collaborative Development Network*, July 2014. V Oliphant. ([Link](#))

This guide will look at some of the key issues and considerations around using apps in peace and development work, as well as offer some examples of how they are being used.

How "Minecraft" is Transforming Developing Cities Around the World, *Mashable*, Apr 2014. C Stark. ([Link](#))

In Haiti, a waterfront in the poorest part of Le Cayes is getting a makeover. The area was prone to flooding from the ocean, affecting the slums. But before the project began and workers picked up tools, community members were asked to pick up a keyboard and mouse and reimagine this park inside of Minecraft. It's part of the United Nations' Block by Block program, which asks community members to redesign public spaces in need inside the popular sandbox game that allows players to build anything within the limits of their imaginations.

What if Health Was a Game? 2014. V Primo. ([Blog Post](#))

Named one of Forbe's Top 30 Social Entrepreneurs under 30, Egyptian physician Mohamed Zaazoue engages 600 volunteers in his globally recognized initiative Healthy Egyptians. Through a curriculum of coloring books, puppet shows, and games, he explains to children why medicine is not only for doctors.

Half the Sky Movement. ([Link](#))

The Half the Sky Movement is cutting across platforms to ignite the change needed to put an end to the oppression of women and girls worldwide, the defining issue of our time. Inspired

by journalists Nicholas Kristof and Sheryl WuDunn's book of the same name, *Half the Sky: Turning Oppression into Opportunity for Women Worldwide* brings together video, websites, games, blogs, and other educational tools to not only raise awareness of women's issues, but to also provide concrete steps to fight these problems and empower women.

WASHplus Weeklies will highlight topics such as Urban WASH, Indoor Air Pollution, Innovation, Household Water Treatment and Storage, Hand Washing, Integration, and more. If you would like to feature your organization's materials in upcoming issues, please send them to Dan Campbell, WASHplus Knowledge Resources Specialist, at dacampbell@fhi360.org.



About WASHplus - WASHplus, a five-year project funded through USAID's Bureau for Global Health, supports healthy households and communities by creating and delivering interventions that lead to improvements in access, practice and health outcomes related to water, sanitation, hygiene (WASH) and indoor air pollution (IAP). WASHplus uses at-scale, targeted as well as integrated approaches to reduce diarrheal diseases and acute respiratory infections, the two top killers of children under five years of age globally. For information, visit www.washplus.org or email: contact@washplus.org.