World wide, water-related diseases cause more than 5 million deaths each year. For more than a decade, members of the non-profit organization, Potters for Peace, have traveled to numerous countries around the world showing community after community a technique for creating low-cost, point-of-use ceramic water filters, produced mainly from local materials (http://www.pottersforpeace.org). Inspired by this work and other similar endeavors by socially conscious artists and community activists, for the past two years, a small group of faculty and students at Texas A&M University have established a collaborative dedicated to working with communities toward the production, study, and distribution of ceramic water filters and the educational and economic opportunities they enable. The TAMU Water Project has based its approach on the work of Potters for Peace through the assistance of artists Manny Hernandez (Northern Illinois University) and Richard Wukich (Slippery Rock University) who have worked closely with Potters for Peace over the past several years. Central to the mission of the TAMU Water Project, like the work of Hernandez, Wukich, and Potters for Peace, is the development and implementation of appropriate technology to respond to real world living conditions.

In reference to his work in Nicaragua, Honduras, and other countries, Hernandez (2001) notes the term “appropriate technology” refers to devices and applications “designed to function in rural areas that were off the power grid but would also have the capacity to function with electricity when it was available” (p. 97). The appropriate technology ceramic water filters are produced mainly from local materials and, with the added application of a coating of colloidal silver, render contaminated water potable. Dr. Fernando Mazariegos of the Central American Research Institute for Industry (ICAITI) first developed the filters in Guatemala in 1981 (Hernandez, 2008; Sinclair & Stohr, 2006). The point of use ceramic water filters are made from a clay body composed of 50% clay and 50% sawdust or another similar material that will burn out at bisque temperature. The filters are then coated with a thin application of colloidal silver, a natural antimicrobial agent.

Potters for Peace responds to requests from individuals and communities around the world to help establish water filter production facilities. Like other affordable and ecologically responsible projects that have been used successfully around the world, the ceramic water filter has been used and distributed by Red Cross, Red Crescent, Doctors Without Borders, UNICEF, and other organizations (Potters for Peace, 2009). While the efforts of Potters for Peace are directed
toward helping people in other countries, similar living conditions, needs, and issues exist within the United States. The TAMU Water Project has focused its efforts primarily in south Texas in the rural, low-income communities known as the colonias. The TAMU Water Project embodies an interdisciplinary public pedagogy of social justice that includes an ongoing collaboration among artists, engineers, community workers, and educators dedicated to working with and helping colonias residents in Texas who are in need of access to clean water.

The TAMU Water Project (http://tamuwaterproject.wordpress.com) was initiated in 2006 as a joint educational, research, and social action project focused on the production of ceramic water filters and the development of related social, community, and educational initiatives. The project is committed to providing clean drinking water to colonias residents in Texas, rural communities in Mexico, and other parts of the world. In Texas, colonias are unincorporated, low-income communities that lack one or more basic services, such as access to clean water, wastewater treatment, paved roads, or adequate healthcare. Traditionally, these communities are populated primarily with Americans of Mexican descent, lie within counties adjacent to the Texas-Mexico border, and are among the poorest neighborhoods in Texas. On average, colonias residents are estimated to have annual incomes of $10,000 to $14,000, and poverty and injustice prevent sustained community development, educational opportunities, and general welfare. In response to the shortage of potable water for nearly 500,000 colonias residents in Texas, Oscar Muñoz (Deputy Director of the Colonias Program in the Center for Housing and Urban Development at Texas A&M University) and I established the TAMU Water Project. The project has since expanded its interdisciplinary focus in collaboration with Bryan Boulanger, an assistant professor at Texas A&M University who specializes in environmental and water resources engineering. Artists and social activists Richard Wukich and Manny Hernandez serve as project consultants. Our graduate and undergraduate students also contribute to the production of filters, the presentation of public demonstrations of the water filter technology, and the design of visual arts-centered interdisciplinary curriculum documents for K-12 stu-

Figure 38.1 Water filter production public demonstration in front of the J. Wayne Stark University Galleries, Texas A&M University, Fall 2007. Used with permission of the TAMU Water Project.

Figure 38.2 Students mixing clay during a water filter production public demonstration, California State University, San Bernardino, Fall 2008. Used with permission of the TAMU Water Project.
dents. The curriculum engages conceptual, thematic, and production-based approaches as a form of multi-linear, integrated curriculum (Taylor, Carpenter, Ballengee-Morris, & Sessions, 2006). In other words, the curriculum is an evolving collection of overlapping educational experiences that center on social, cultural, political, historical, and environmental issues central to and inspired by the global water crisis and the work of artists and humanitarians who respond to these situations. For example, students who experience this curriculum may view and interpret historical and contemporary works of art inspired by water; research statistics and news stories about water-related issues; debate the ethical, economic, and moral foundations of selling bottled water for more than the price of milk or gasoline; collaborate on the construction of an installation about local sources of fresh water; or produce point of use ceramic water filters from local materials.

As a collaboration among clay artists, educators, housing and urban development activists, engineers, community members, and students, the TAMU Water Project is dedicated to enacting creative responses to social realities primarily through the creation of low-cost ceramic water filters based on and modified from the Potters for Peace design. In 2005, Richard Wukich curated a traveling exhibition of ceramic water filter receptacles at Slippery Rock University. These vessels were designed by nationally known contemporary potters, created in the style of each artist, and designed to hold the standard ceramic water filter. The exhibition serves as a means to draw attention to the global water crisis and to promote humanitarian work and action. This original exhibition featured ceramic receptacles created by contemporary ceramic artists such as Val Cushing, Sharif Bey, Edward Eberle, David MacDonald, Ron Mazanowski, and Bobbie Scroggins. The exhibition has traveled to galleries in Pennsylvania, West Virginia, North Carolina, Georgia, Michigan, Kentucky, Ohio, Texas, and Missouri, and has served as a vehicle for promoting social awareness about the global water crisis. At each venue, artists were encouraged to add work to the exhibition. Money raised from the sale of the work in the exhibition supports organizations that create and distribute the water filters. In February 2009, Wukich initiated a second exhibition originating in Braddock, Pennsylvania.

In the field of ceramics, the tradition and spirit of the visiting artist has a long history. As a contemporary interpretation of this tradition, members of the TAMU Water Project conduct public demonstrations of the appropriate technology production of the

Figure 38.3 B. Stephen Carpenter, II (left) and students mixing clay during a water filter production public demonstration, California State University, San Bernardino, Fall 2008. Used with permission of the TAMU Water Project.

Figure 38.4 Richard Wukich, (seated, right), art professors Billie Sessions and Alison Petty Ragguette (standing, right), and students during a water filter production public demonstration, California State University, San Bernardino, Fall 2008. Used with permission of the TAMU Water Project.
ceramic water filters in public spaces at universities, schools, pottery studios, parks, and other sites. These demonstrations are most often held outdoors in the middle of campus or in other highly visible locations and can be one or multiple day events. During these demonstrations, artists, faculty, and students in the TAMU Water Project serve as visiting artists who work with demonstration attendees to mix clay, produce filters using appropriate technologies, share information about the global water crisis, distribute handouts, and brainstorm ways to further the mission, outreach, and impact of the project. For example, in fall of 2007, Carpenter, Muñoz, Hernandez, and Wukich, along with graduate students at Texas A&M University set up a steel and hydraulic water filter press outside the student union and university art gallery where they produced water filters for an entire afternoon (see Figure 38.1). Wukich and Carpenter traveled to California State University, San Bernardino, in the fall of 2008 to conduct a similar two-day demonstration that took place in the clay studio and in the open public green space in front of the student union in the middle of campus (see Figures 38.2, 38.3, and 38.4). In all cases, these public events include the participation of observers and passers-by who are initially intrigued by the visual spectacle they encounter but stay and participate in the educational experience. These workshops are a form of public pedagogy as embodied social justice and have become an effective means of reaching individuals and groups and who may otherwise not attend more formal presentations.

References


