School of Sustainability
Arizona State University

In Partial Fulfillment of the Requirements for the Degree of

Master of Art
Adora Shortridge

Will present her scientific paper

What Makes a HeatReady School?

Thursday, April 8th, 2021
2:00 PM (MST)
https://asu.zoom.us/j/2666310256?pwd=TkE0Y1B2aHhsTTRNdGhlNFlYcXNRUT09

Faculty, students, and the general public are invited.

Supervisory Committee:
Dr. Dave White, Co-Chair
Dr. Jennifer Vanos, Co-Chair
Dr. Melissa Guardaro, Member
Dr. David Hondula, Member

Abstract

The City of Phoenix initiated the formulation of a HeatReady program in 2018 to prepare for extreme heat, as there is currently no official tool, framework, or mechanism at the city level to manage extreme. HeatReady Schools—a critical component of a HeatReady City—are those that are increasingly able to identify, prepare for, mitigate, track, and respond to the negative impacts of schoolyard heat. However, minimal attention has been given to formalize heat preparedness in schools to mitigate high temperatures and health concerns in schoolchildren. Research objectives are to understand heat perceptions, (re)actions, and recommendations of key stakeholders, and to identify themes from stakeholder responses to gauge the effectiveness of their heat preparedness levels in their current environment.

An exploratory sequential mixed methods case study approach was used, which focused on acquiring new insight on heat perceptions at elementary schools through semi-structured interviews using thematic analysis and the Delphi survey

technique using SORT taxonomy. Participants included public health professionals and school community members at two elementary schools—one public charter, one public—in South Phoenix, Arizona, a region that has been burdened historically with environmental racism and injustices

Findings demonstrated that 1) current heat safety resources are available but not fully utilized within the school sites, 2) expert opinions further support that extreme heat readiness plans need to account for site-specific needs, particularly education as a first step, and 3) students are negatively impacted by extreme heat both inside and outside the classroom, thus these efforts are valuable.

This study set out to explore 1) the current environment of heat safety culture within two elementary schools in South Phoenix, 2) the perceptions of heat from key stakeholders in schools (and community hub), and 3) expert opinions of what elements make up a HeatReady School. The overarching goal is to improve the safety and protection measures of children exposed to extreme heat during the school day by creating a HeatReady Schools Rubric using themes that emerged from findings.