



1U4U  
INNOVATION FUNDING  
2020 Projects

USING SERIOUS GAMES  
TO ADDRESS AIR QUALITY

In Utah, air quality is a chronic concern for much of the state. Poor air quality contributes to health problems and reduces life expectancy, and the geography of air quality reinforces these as social and environmental justice issues. Choosing among a range of solutions is complicated by strong values, vested interests, and unequal burdens, raising the stakes for policymakers and community members.

Serious games are used to facilitate exploration of value-laden decisions and support stakeholder learning. Serious games encourage players to consider alternative paths and trial innovative approaches without threats of real consequences. In this way, players can safely and collectively confront mental models of different solutions, building capacity to negotiate complex social problems and minimizing social barriers to action.

Our team will develop a research-informed serious game to support collective learning in diverse communities. Players work to reduce emissions while avoiding stress on local economies and community health. Instead of focusing strictly on technological solutions, this game will emphasize social challenges to achieving clean air goals, especially those tied to community values. We will use a framework that assesses conditions required to promote individual-scale cognitive and relational learning and to connect this to behavioral change.

COLLABORATORS

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PROJECT INFO

**FUNDED PROJECT AMOUNT**

\$30K