Frierson and Environmental and Forest Sciences’ Josh Lawler lead EarthGamesUW, a nationally recognized group based at the University of Washington that designs and develops climate-centered games of all varieties.

“Kids have anxiety about climate change. They need ways to deal with that and think about how they can solve it,” Frierson said. “That’s the goal: to show how we can envision a better world through this digital world, with actions you could actually take.”

Today, UW faculty and students, as well as a handful of others, are currently developing three games as part of EarthGamesUW:

In one, 8-bit climate disasters unfold across the United States, and four heroes, each with their own specialty, jump into action. This game, ClimateQuest, recently won the national Climate Game Jam competition and will be showcased at the American Museum of Natural History in Washington, D.C., in early 2016.

In another, a pika works through a landscape filled with close calls and near misses while trying not to fatally overheat. Pikas are a poster species for climate change because of their inability to acclimate to temperature changes.

Players in the third, a turn-based board game, lead fictional cities; make decisions on trade, preparation, and investments to balance resources; and keep their cities operational while impending climate disasters loom.

“Studying the Earth is a tremendous amount of fun. Putting it into game-form is a way scientists can express how it feels doing research,” Frierson said. “Research is puzzle solving. There are similarities between what I do and games like SIM Earth, and it’s just as fun.”

Fun is a big priority for Frierson and the EarthGamesUW team. Climate change is a dense topic, but it might be especially so for kids interested in understanding their own roles in combatting it. Frierson says connecting with heavy issues through cathartic fun is just what kids need.

“That’s how you deal with things. When you’re heartbroken, you write a song about it, and it helps you work through it. For us, we’re suggesting that kids can work through their feelings about climate change through gaming and walk away with intentions of being part of the solution.”

EarthGamesUW’s effort is part of a larger push by the UW’s College of the Environment and the broader scientific community for more and better science communication, or the public communication of science to nonexperts.

“As environmental scientists, we need to communicate with people of all ages about what we do. We’re working on some pretty urgent issues,” Frierson said.