Watershed Computer Game

Whithurst, Benjamin (School: Pearl City High School)

Watersheds are regions where water flows into a common outlet, commonly considered with respect to terrain, climate, vegetation, fauna, and human constructions. Watersheds are particularly indispensable to us because they provide us with water, our most urgent need, but watersheds also play an enormous role in maintaining ecosystems, mitigating floods, regulating pollution, enhancing culture, and more. A watershed computer game was considered as a potential way of reaching the public in an interactive fashion to provide education about watersheds, their importance, and what can be done to protect & care for them locally in Hawai‘i. Thus, the research goal was: “Can computer games be a viable tool for watershed education?” First, a short test was created to provide a measure for learning. A computer game centered around watershed principles was then developed, and afterwards participants were asked to take the test before and after playing the computer game until completion. Whilst the computer game seemed to have little impact on the average overall test scores, adults specifically showed noticeable improvement. For this reason, it appears that adults were the most effective target demographic for education via the game, most likely because adults are more willing to read instructions and information throughout the game. All in all, this experiment seems to provide some substance to the idea that computer games could be used as a supplemental educational resource if age demographics are targeted properly.

Awards Won: