IMMERSIVE VIRTUAL REALITY (IVR) GAME OF THE LEHIGH RIVER WATERSHED, PA

D8. Distance Learning and Computer-based Educational Techniques in the Geosciences

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AUDIENCE: Outreach Informal Education Adolescents to adult learners
Lehigh Watershed Exploration

Start
Quit
Options
GAME THEORY TO ENHANCE LEARNING
Between 1855 and 1874, six furnaces were built. The Thomas Iron Company was very successful until the 20th century,
This structure allowed migrating fish to bypass the dam and travel up the Lehigh River.
Looking SE
where the Lehigh River meets the Delaware River

Forks of the Delaware
Easton, PA
Now, let’s select your three top choices to recommend to the D&L to place a boat access on the river for people to stop, get out of their kayak or canoe, and explore.
CONCLUSIONS

• iVR activities offers interactive control and increased engagement over traditional methods

• The watershed focus is a motivating learning tool that can motivate people of all ages.

• The iVR technology allows for supports and is designed to provide improved access for STEM-related content for both non-native English speakers and those with mobility disabilities or transportation issues who are physically unable to visit watershed locations because they are either inaccessible or dangerous.

• Immersive VR provides a sense of immersion and the presence of being physically at specific geographic locations.

• Our polling data shows users experienced a flow state while playing the game.
Thank you!