WEB ADVENTURES
ONLINE EDUCATIONAL GAMES FOR MIDDLE & HIGH SCHOOL STUDENTS TO LEARN ABOUT HEALTH & SCIENCE

RICE School Mathematics Project

What is it?

- 50+ free educational game sessions/activities
- State and national science learning standards alignment
- Problem-solving and critical-thinking learning
- Broadening STEM participation as the overarching goal
- 10+ federally funded grants from 2000–2015

Are they good?

- 10+ million student users across the globe
- Positive impact on students' knowledge and motivation

"…I cannot stress enough **how valuable** these labs are to classroom teachers **across the nation** in this content area."

[a science teacher from North Carolina]

"…Of all the things I do in my science classes, [CSI–Case 1] stands out as **inspiring kids to science**… I wanted you to know **how impacting** that program is to my students."

[a science teacher from Washington State]

What is going on?

- Web Adventures was developed in Flash to be played online
- Flash reached its end-of life

An archival website built through NSF ITEST EAGER grant in Jan 2021 as a temporary solution to play offline, which still attracted more than **140,000 users**

What needs to be done?

- Redeveloping the games in new technologies
- Developing a uniform game engine for all games
- Updating content to align with recent learning standards
- Creating new interactive and teacher features

"…I just wanted to go on record as saying that these are **the BEST labs** available for my high school science class … PLEASE do all you can to find an alternate player or alternate virtual labs to replace these."
[a science teacher from North Carolina]

What is next?

- Raising funds

$500K+ for technical programming development
$500K for science content update
$100K for at least two high-need school computer labs
$35K for annual maintenance and user help
$50K per a new game in other areas of STEM

https://webadventures.rice.edu   https://stemforall2022.videohall.com/presentations/2570