Catalyst

The new literacy

Youth gain knowledge and skills while creating learning games

World Wide Workshop, Globaloria

In San Jose schools and Boys & Girls Clubs, a new way of learning science, mathematics, design, computing, and social responsibility is catching fire among students and their teachers. Microsoft joined a group of funders launching the Globaloria Learning Platform in California in 2011. In 2013, 5,000 local students aged 10 and up will participate in the program.

The Globaloria social learning network gives students ways to learn from each other in person and online, from their teachers and from experts available virtually. Globaloria can be integrated into existing classes or afterschool programs, or used as a digital design, gaming, or computing course. The daily curriculum takes approximately 100-150 hours to implement fully, and typically spans an academic year.

Students' end goal is to design, prototype, and develop an online educational game. It's a complex process, but they master it. Their experience simulates what happens in many modern workplaces: teams work together on a lengthy effort that requires content and process knowledge to take their project from start to finish. They follow a curriculum that promotes vital workplace skills like innovation, transparency, online communication, collaboration, critical thinking and digital leadership.

Based in research, and proven by it

The Globaloria idea (including its playful name, GLOBAL explORations with medIA) is the brainchild of Dr. Idit Harel Caperton. She began her career as a research scientist at the Harvard Graduate School of Education and the MIT Media Lab. She has since led award-winning research and startups. In 2004, she established the World Wide Workshop, and with her team launched Globaloria in 2006.

"Coding is the new literacy," says Harel Caperton. "It's a new form of self-expression and creativity. Kids like to play educational games to learn math concepts, civics, climate change and figure out complex systems. But playing without making is like doing reading without writing. Our students follow a structured curriculum that guides them step-by-step how to develop apps and games. They learn through projects, learn-by-doing, much like learning creative writing, and over time they become smart players of games, critical readers of game media, and creative game-makers. They become literate and ready to contribute to the digital economy."

Independent researchers find that Globaloria students have improved cognitive skills and learning behaviors and habits, as well as higher scores on academic assessments; the program has been particularly effective for students at low-income, low-performing schools and for girls. Teachers also benefit from professional development and mentoring, and when their schools join the program they themselves learn to master and teach the "new literacy."

To play students' games, watch research videos, or make a donation that will help more schools join Globaloria, visit *globaloria.org/ MicrosoftGives*.

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