

Building Middle School Girls' Identity and Community around Science and Technology: An Evaluation of a Mixed-Reality Role Playing Game

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ABSTRACT

Click! Urban Adventure Game was a mixed-reality role-playing game where girls worked in teams to solve a fictional mystery based on a real world issue, using technology and science to conduct their investigation. Designed specifically to appeal to middle school girls, the intention of the program was to use a game, balancing reward and challenge, to interest girls in science and technology. This paper specifically looks to see if the Click! game (1) increased girls' confidence, interest, and knowledge of science and technology and (2) built a community of support and conversation centered learning for girls through friends, family, and their surroundings. Our findings indicate that Click! was successful at deepening girls' engagement with science and technology and that role-playing with their peer group allowed them to develop a community of practice based around science and technology.

KEY WORDS: Games, Middle-School, After-School Program, Female, STEM, Role-playing

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