



## Using Digital Games to Promote Equity in Career and Health Education: A Prototype of Caduceus Quest

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Ellen McCammon MPH, Jessica Law, Crystal Tyler PhD, Mason Arrington, Patrick Jagoda PhD, Melissa Gilliam MPH, MD

### INTRODUCTION

Research suggests that racial and ethnic diversity in the health and biomedical science workforce can improve both access to and the quality of health care for underserved communities. Research has also shown that increasing student interest in these fields is one way to increase diversity of the health field. Ci3's Caduceus Quest builds on prior work exploring game-based learning, focusing on health education, career interest, and skill-building as a strategy to promote interest in STEM careers for students in urban schools.

Published in the journal of *Urban Education*, Ci3 researchers conducted a pilot study with Chicago high school students to explore their interest in health and biomedical science careers after playing Caduceus Quest, a theory-based digital role-playing game. Caduceus Quest provides health education and aims to encourage health and biomedical science career interest in Black and Latinx young people. In this pilot study, participants included Black and Latinx adolescents between the ages of 13-18 who reside primarily on the South or West sides of Chicago. Researchers conducted a gameplay session and pre and post-intervention surveys.



### FINDINGS

After playing the game:

- Adolescents' interest in health and biomedical science careers increased.
- Adolescents' knowledge related to HIV and PrEP awareness also increased.
- Participants reported that Caduceus Quest had high feasibility, usability and acceptability.

### IMPLICATIONS

Our research suggests that games are a promising avenue for providing career development and health education programming to urban racial and ethnic minority students, including in schools.

Ci3 researchers are currently conducting a national study of Caduceus Quest, evaluating the effectiveness of the game at teaching young people science skills and increasing interest in STEM/health careers using a national sample of 120 adolescents. To learn more about our games and to participate in future game-related studies, please subscribe to our newsletter: <https://bit.ly/SubscribeToCi3>

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