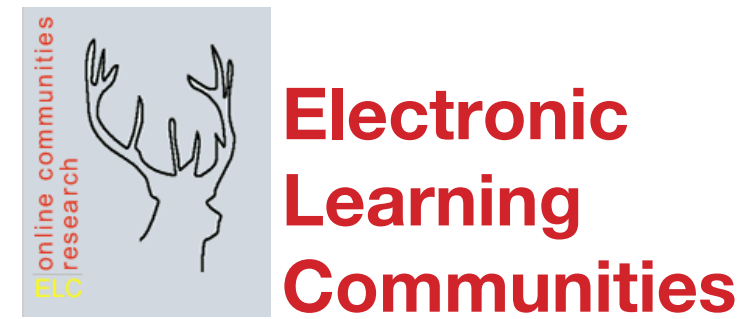


# Design Research for Culturally Significant Educational Interventions in Computing with African-American Males



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## Introduction

African-American males are underrepresented in the field of Computer Science. We seek to create learning interventions to help develop young African American men's passion for video games into an interest in computation and agency with technology. Using Design Research methods we have conducted a series of studies with young African American men to develop dialogues with them about creating a culturally appropriate and meaningful educational intervention.

### Video Game Testing Experience

In partnership with Cartoon Network, we were able to provide students with an alpha testing opportunity for the Massively Multi-player game Fusion Fall. They were taught to look for different kinds of coding "bugs" and write bug reports for the Fusion Fall game. Students were enthusiastic about contributing to the authentic game development process.

### Future Work

Our long term objective is to develop a video game testing company where students can experience a hands-on opportunity for a further understanding of computing. We will continue to hold workshops that expose students to the computational aspect of videogames, as well as finding culturally significant ways to present the activities.

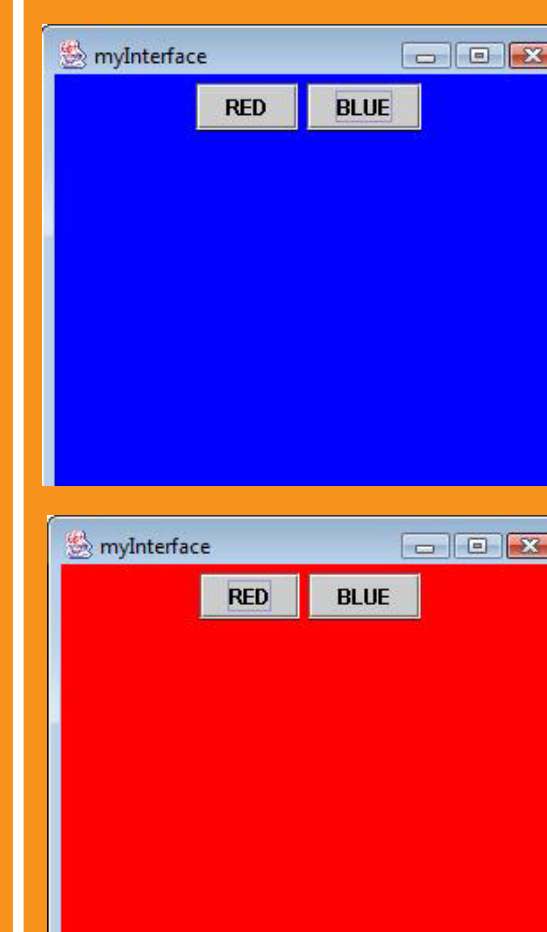
## Educational Interventions

### 1 Logo Design Activity



Logos from the Logo Design Activity. We refined designs created by students for the Glitch: Video Game Testers.

### 3 GUI Building Activity



Participants developed a functional GUI. We encouraged the students to tinker with their code and observe the ways the code affected the GUI.

### 2 "Make-a-Game" Activity

Students made cover art for their own video game. This created a way to develop dialogue with the participants about the significance of games in their lives.



### 4 MADLIBS GUI Activity

This project introduced students to programming constructs through a MadLibs educational activity. Participants selected names, media, and graphical elements in a paper questioner. Then built a user interface upon these choices, allowing them to experience coding based upon their personal interests.

