# Black Men in Tech: Increasing Interest from High School to Careers

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## Introduction

- The computer and information field is expected to grow 13% by 2026, faster than the average growth of all occupations; however there is little progress in the number of Black men represented in computing and technology majors and fields.
- African American high school men are underrepresented in computing and technology majors across the nation. One reason is the lack of exposure to these major paths in high school.
- Black Men in Tech aims to work with schools to pilot the use of multimedia (game design, web design, and videography) at Information Hubs (iHubs) in Title I or high-minority schools. A collaboration of STEM teachers, university instructors, industry mentors, college computing/technology majors, and parents is expected to increase student interest and engagement in technology and computing majors and fields.

### Main Research Objective

**To understand whether various forms of multimedia increases African American high school men's opinion and overall interest in technology majors and fields.**

## Materials & Methods

- This is a quantitative study with 2 surveys (one for students and one for parents). The student surveys are administered at 4 periods.
- We obtained permission to use the SITS survey and modify it to understand students' interest in technology.
- Responses include 15 out of 19 participants. UROP provided additional funds to provide gift cards to survey participants.
- Surveys are electronically distributed via Qualtrics.
- Descriptive statistics are provided on the preliminary data, and inferential statistics will be provided to analyze changes in interest once all data is collected.


Survey of Ideas about Technology and Science

## Results

For the charts below, each bar represents an opinion. Blue means Strongly Agree(SA), Orange is Agree (A), Gray is Disagree(D), and Yellow is Strongly Disagree(SD).


Technology Careers


Technology in Education


Thoughts on Videography


Thoughts on Web Design


Thoughts on Game Design
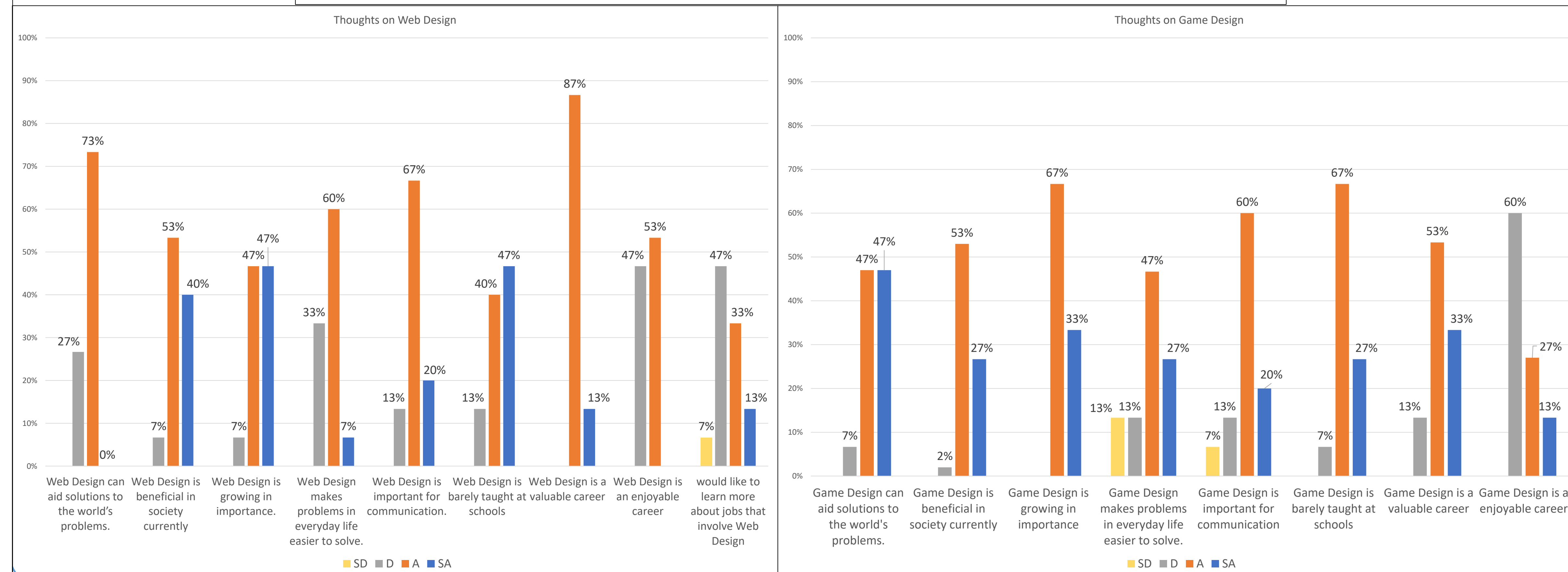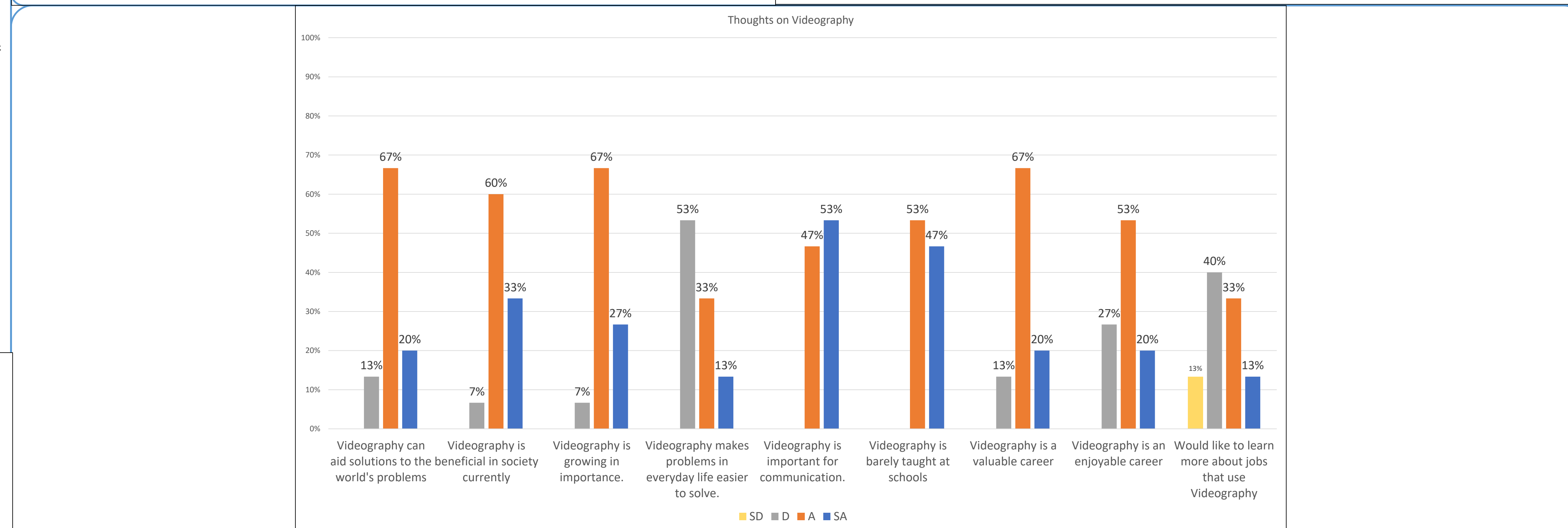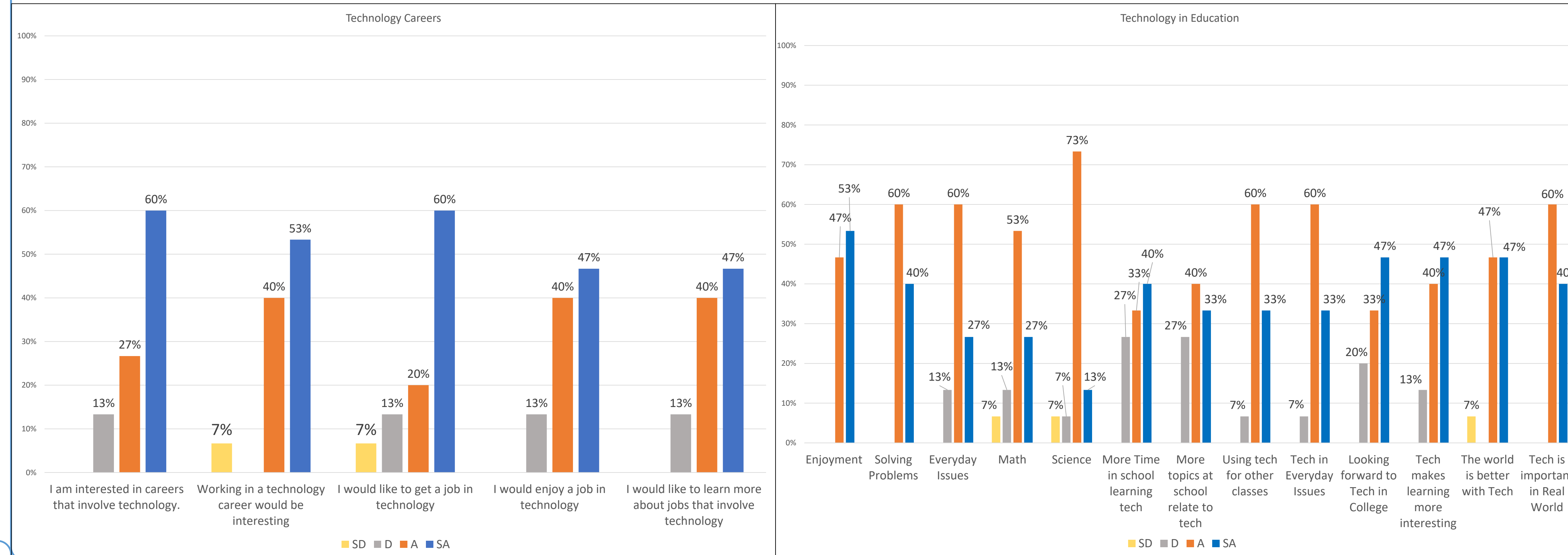
## Analysis/Discussion

**Chart 1 ( Technology Careers)**
Participants expressed that they were interested in technology careers, would enjoy a job in technology, and would like to know more about technology-related jobs.

**Chart 2 ( Technology in Education)**
Participants greatly enjoy technology in the classrooms and most believed that technology helps in solving problems, with classroom work, and in everyday issues.

**Chart 3 ( Thoughts on Videography)**
When exposed to the specific topic of Videography, the participants enthusiasm decreased. Compared to Graph 1 and 2, a lot more participants disagreed with statements. When asked about wanting to explore this career more, a majority disagreed.

**Chart 4 ( Thoughts on Web Design)**
When exposed to Video Design, participants seemed to have mixed feeling about the certain topic. Compared to Chart 3, their agreeability increased, but there are still participants disagreeing when asked if they want to pursue a career in this field.

**Chart 5 ( Thoughts On Game Design)**
Finally, in the Game Design chart, the agreeability tendency maintained from Chart 4, as well as the trend of a majority not wanting to pursue this topic as a major.

## Conclusions/Future Work

- Preliminary findings suggest that young Black high school students in this study recognize the increased effects of technology on our society and want to see changes in their classrooms, but there is little evidence that they know about jobs in these fields.
- Next steps include 3 additional surveys to identify whether interests in technology change after participants are exposed to multimedia in game design, web design, and videography. It is expected that interactions with multimedia will increase student interest in technology and also allow researchers to understand the use of multimedia to engage more young Black men in high school.
- A survey will also be administered to parents to compare whether there is a relationship between parents' initial perceptions about technology and their students'.

## References

Romine, William, et al. "Student Interest in Technology and Science (SITS) Survey: Development, Validation, and Use of a New Instrument." *International Journal of Science and Mathematics Education*, Springer Nature, 3 Oct. 2021, https://www.academia.edu/26191685/Student_Interest_in_Technology_and_Science_Sits_Survey_Development_Validation_and_Use_of_a_New_Instrument?email_work_card=view-paper