The Digital Lives of African American Tweens, Teens, and Parents: Innovating and Learning with Technology

Executive SummaryFall 2016

Introduction

Technology has the potential to play a critical role in empowering minority communities to create rich learning environments and improve their socio-economic conditions. Young people can use digital media tools to enhance their education, follow their passions, and deepen their skill sets. And when youth have greater digital skills, their educational, career, and economic opportunities expand as well.

Today, African Americans are under-represented in STEM occupations, holding just 6.9% of computer-related jobs. This inequity not only deprives young people of their personal potential, but also inhibits our country's ability to create and deliver products that will benefit society as a whole.

This report provides data from a large scale, nationally-representative survey of African American tweens and teens (ages 11 to 17) and their parents, supplemented by a series of ten focus groups across the country.

The primary purpose of the study is to understand to what degree and in what ways African American families are using and learning with technology outside of formal learning environments such as schools. We focus not just on consumption of media through devices, but also on innovation and content creation.

We hope the data and insights provided here will help inform the work of educators, policy makers, parents, and content creators as they seek to build a technology environment that will encourage and support the positive use of and innovation with computers and other technology by African American youth.

Key Findings

1. African American youth use computers frequently, enjoy using them a lot, and are confident about their computer-related skills.

- 63% use computers "every day" and a total of 90% use them at least once a week
- Among those who use computers, 60% enjoy using them "a lot"
- 87% of users are "very confident" of their basic computer skills and 84% of their ability to conduct online searches
- 63% of youth are "very confident" about learning how to use new technologies
- 50% are "very" confident about using computer programs such as Word, Excel, and PowerPoint (85% are "very" or "somewhat" confident)
- 35% are "very" comfortable troubleshooting computer problems (65% are "very" or "somewhat" comfortable)

2. Many African American youth have engaged in innovative and creative activities on computers.

- 80% have watched interest-driven tutorials
- 67% have created a presentation
- 52% have made digital art
- 47% have written blogs, stories or articles online for
- 45% have made digital music

3. Relatively few African American youth have engaged in more technical activities on computers.

- 21% have created or modified a video game
- 18% have created an app
- 17% have built a website
- 13% have written computer programming, or "coded"

4. Many African American youth are interested in learning much more about computers.

- About half want to learn how to create an app (51%) or build a website (48%)
- 46% want to learn how to create or modify a video game
- 35% want to learn how to start an online business
- A third (33%) want to learn how to code

5. Interest in coding is highest among tweens.

- Half (50%) of 11- to 12-year-olds who have never coded say they want to learn how
- 37% of 13- to 14-year-olds who haven't coded want to learn, as do 31% of 15- to 17-year-olds

6. Interest in learning how to code is higher among boys than girls.

- 44% of boys vs. 32% of girls who have never coded say they want to learn how
- The gap between boys' and girls' interest in coding is smallest among tweens, when girls' interest in coding is highest: among 11- to 12-year-olds, 52% of boys and 47% of girls who have never coded want to learn how, a five percentage point difference
- Among 13- to 14-year-olds, 46% of boys and 29% of girls who haven't coded want to learn how, a 17 percentage point gap; and among 15- to 17-year-olds, 37% of boys and 26% of girls who haven't coded are interested in learning, a difference of 11 percentage points

7. Parents are more likely to limit girls' than boys' online activities.

- A majority (52%) of girls' parents say they mainly limit rather than encourage their daughters' online activities, because of concerns about negative content or experiences they might encounter; 37% of boys' parents say the same
- Most boys' parents (63%) say they mainly encourage their sons' experimentation with computers and the internet, even though they can't protect them from everything they may see online; 47% of girls' parents say the same

8. African American youth from lower SES homes are less likely to learn about computers from informal sources.

- 46% of youth in high-income homes say they learned about computers from friends; 26% of those in low-income homes say the same
- 56% of those in high-income homes learned about computers from their fathers; 26% from lowincome homes say the same

9. Most African American youth prefer using a computer to a phone for important functions.

- Nearly nine in ten (88%) 13- to 17-year-olds would rather use a computer to write an essay for school
- 86% prefer a computer to a phone for writing a resume or a cover letter
- 70% would rather fill out a job application on a computer than a phone

10. African American youth recognize the importance of computers to their future, and don't adhere to negative racial or gender stereotypes about computer users.

- Nearly nine out of ten say being good at using computers will be "very important" for their future career (89%) and for their educational future (88%)
- More than eight in ten say Black people are as good at using computers as other racial or ethnic groups (87%) and that girls and boys are equally good at using computers (85%)

11. Many African American youth frequently encounter content online that is disrespectful to women and Black people.

- A third (33%) "often" see online content that is disrespectful to Black people, and a quarter (24%) "often" see content disrespectful to women
- Nearly a quarter (23%) of African American youth say they personally have been mistreated or disrespected online within the past year due to their race, and 16% say they have experienced personal mistreatment due to their gender

12. African American youth attitudes about and use of computers are strongly related to those of their parents.

- Among young people whose parents are frequent computer users, 72% use computers every day, compared to 54% of young people whose parents are light computer users
- Among young people whose parents have a high degree of confidence about computers and technology, 92% are "very" confident about their own computer skills, compared to 71% of young people whose parents have low confidence
- Among young people whose parents say being good at computers will be "very" important to their child's future, 92% of youth say the same; but among young people whose parents say computers will only be "somewhat" important for their child's future, only 59% of kids say computers will be "very" important to their future

Conclusion

The results of this study point us to one over-arching conclusion: that the shortage of young African Americans going into tech or STEM fields does not appear to be due to a lack of interest in, enjoyment of, or confidence about using computers. African American youth enjoy learning about new technology, they enjoy using computers, and they have done a lot with computers. But they also have great unmet interests in learning more about computers. There is no lack of aspiration on young people's parts – but the adults, educators, and policy makers in their lives now need to do their part to build the environments that will catalyze those aspirations. The findings from this study point us toward several key recommendations:

We must do far more to address the unmet need for advanced computer education among African American youth.

There are far too many young people who haven't yet learned how to do things they want to do on computers, from creating digital music to starting an online business. And despite their confidence in their basic computer skills, as many as half of African American youth feel no more than "somewhat" confident about their abilities with essential software programs such as Word, Excel, and PowerPoint. And perhaps most important, the types of skills young African Americans are most interested in acquiring are the most complex, including learning how to code, create an app, build a website, or program a video game. We should nurture and respond to these desires instead of letting them wither on the vine.

2. Computer education needs to start young, especially for girls.

African American tweens are interested in learning computer skills, but for many that interest level goes down rather than up during the teen years, especially among girls. Capturing the imaginations of tween girls is critical – we can't afford to neglect this window of opportunity.

3. Parents and care-givers must be included in digital learning opportunities.

Children's informal learning ecologies are critical. The survey documents that African American children's confidence in their computer skills, their sense of selfefficacy when it comes to learning about new technology, their attitudes about the importance of computers to their future and the frequency with which they use computers are all related to their parents' attitudes and behaviors. Policy makers, educators, community leaders, and industry all need to work together to support parents' own tech skills. While the vast majority of African American parents use computers extensively and feel confident of their tech-related skills, there is still an unmet need for more training among a subset of the population. It's not that parents who aren't skilled at computers lack the interest or drive; there is a palpable desire for continued learning. In addition, the survey indicates that parents should be encouraged to consider the possibly different ways they respond to their children's online activities, based on their child's gender.

4. Along with expanding high-speed internet access, we also need to step up efforts to get computers into low-income homes.

It makes a difference to young people whether their home access is mobile-only or not. Most youth prefer to use computers for tasks such as writing school papers, conducting job searches, or preparing a resume. Programs that provide affordable, well-functioning computers to low-income families should be strongly supported. High speed internet access is one part of the equation; computers are the other.

The good news uncovered through this study is that enhancing young African Americans' technical abilities is not a matter of having to stimulate interest. Rather, it is a matter of providing the education and opportunities these young people already seek. The worrisome news is that in the meantime, a lot of young people's potential is being unrealized, through no fault of their own. We can and must change that – and soon.

Methodology

This executive summary is based on a nationally representative survey of 1,041 pairs of African American 11- to 17-year-olds and their parents, and a series of ten focus groups conducted in various locations across the country. Several parents and youth who participated in the focus groups also created personal **digital stories**, which can be accessed at https://cgest.asu.edu/DigitalLives/Videos.

The survey was conducted online by the research firm GfK. The sample includes respondents from GfK's KnowledgePanel (KP), a probability-based web panel. KP members were randomly recruited through address-based sampling methods and households were provided with access to the internet and hardware if needed. Additional respondents were drawn from nonprobability, opt-in survey samples. The data were then weighted to match benchmarks

for African American parents and youth from the March 2015 Current Population Survey. In addition, a calibration weighting adjustment was used to improve the representativeness of survey respondents beyond geodemographic indices.

Because the survey was administered online using a combination of probability and convenience samples, the results are best interpreted as offering an in-depth perspective of the attitudes and behaviors of online African Americans. The margin of sampling error is +/- 4.9% for the parent sample and +/- 4.3% for the youth sample.

A copy of the full report from the study, as well as a complete methodology, questionnaire, and topline findings, can be accessed at https://cgest.asu.edu/DigitalLives

Credits

The research was directed by Victoria Rideout of VJR Consulting, under the guidance of the project's principal investigators, Professor Kimberly A. Scott of Arizona State University and Professor Kevin Clark of George Mason University. The project was informed by an expert advisory group, whose members can be accessed at https://cgest.asu.edu/DigitalLives/People. The survey was fielded by GfK; focus groups were conducted under the auspices

of V&L Research and Consulting in Atlanta; and the digital stories were created under the direction of Joe Lambert and the Story Center (www.storycenter.org). The research was funded by the Bill and Melinda Gates Foundation. This executive summary was written by Victoria J. Rideout, Kimberly A. Scott, and Kevin Clark. Data analysis was conducted by Chun Tao. The document was designed by Nathaniel Boettcher.

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