



# 4-H TECH CHANGEMAKERS

#4HTechChangemakers

March 2020

## Impact of Digital Skills Among Teens Poll Report





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PART 1:

# Introduction

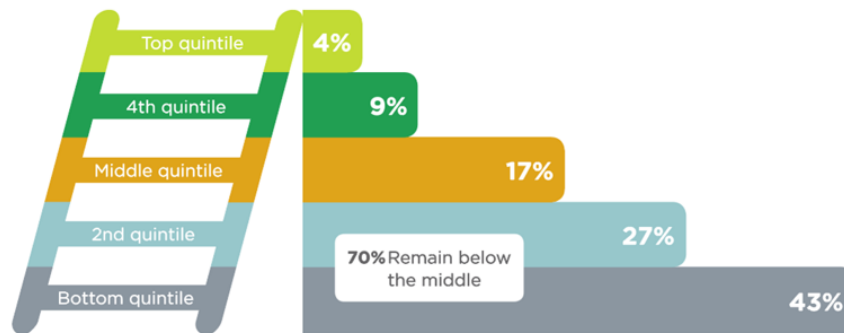


# 4-H Tech Changemakers

For many people living in the United States the American Dream of upward economic mobility is more myth than reality. **Those born into America's lowest income levels are now likely to stay there**, based on factors like race and ethnicity, geography and access to education.

In a society increasingly dependent on internet access for better health, education and opportunity, the absence of that resource—often in communities already facing challenges to economic mobility—make the possibility of a better future that much more distant. More than 24 million people living in the U.S., including 19 million living in rural communities, do not have access to broadband internet and today's youth will pay the price. The American dream is available to those with access and full of barriers for those without.

Understanding these forces and uncovering others that shape youth's future economic opportunities is critical to 4-H's mission of empowering all young people, therefore enabling greater economic mobility. The research presented was designed to give youth a voice on the digital divide and increase our knowledge about how it impacts young people's current behaviors, attitudes, opportunities and beliefs about their future.





PART 2:

# Methodology

# Hypothesis and Methodology

## Hypothesis

Having broadband access and digital skills empowers youth which leads to wider societal participation, greater social capital and positive community outcomes.

## Methodology

This survey was conducted online within the United States by The Harris Poll on behalf of 4-H and Microsoft from November 1 to 15, 2019, with 1,570 respondents ages 13-19. We also collected data from 33 4-H participants through online and paper surveys. We collected data on urbanicity, including those in urban areas (n=480), suburban areas (n=673), and rural areas (n=294), and access to Broadband Internet, including those who have access to Broadband somewhere (n=1406) and those who do not have access (n=162).





# Executive Summary

High Speed broadband internet access is not equitably distributed

- 1 in 6 rural teens do not have access to Broadband Internet
- 22% of rural teens deal with an Internet connection that is sometimes reliable at best

Lack of access to Broadband Internet interferes with teens' confidence

- They are less confident about graduating, finding a job, and financial success
- They also feel less confident when comparing themselves to the average American their age

Teens with Broadband are more optimistic about their social mobility for higher education and their careers

- 82% of teens with broadband feel they have more opportunities to be successful in life than their parents did.
- Only 59% of teens without Broadband access say their school adequately prepared them with the digital skills they need to succeed compared to 74% of teens with broadband access.

Teens with broadband access are more likely to reap the benefits of community and get invested in its future

- They are more likely to feel a sense of belonging or empowerment from their community
- Teens with access are more likely to be involved in social causes they care about



PART 3:

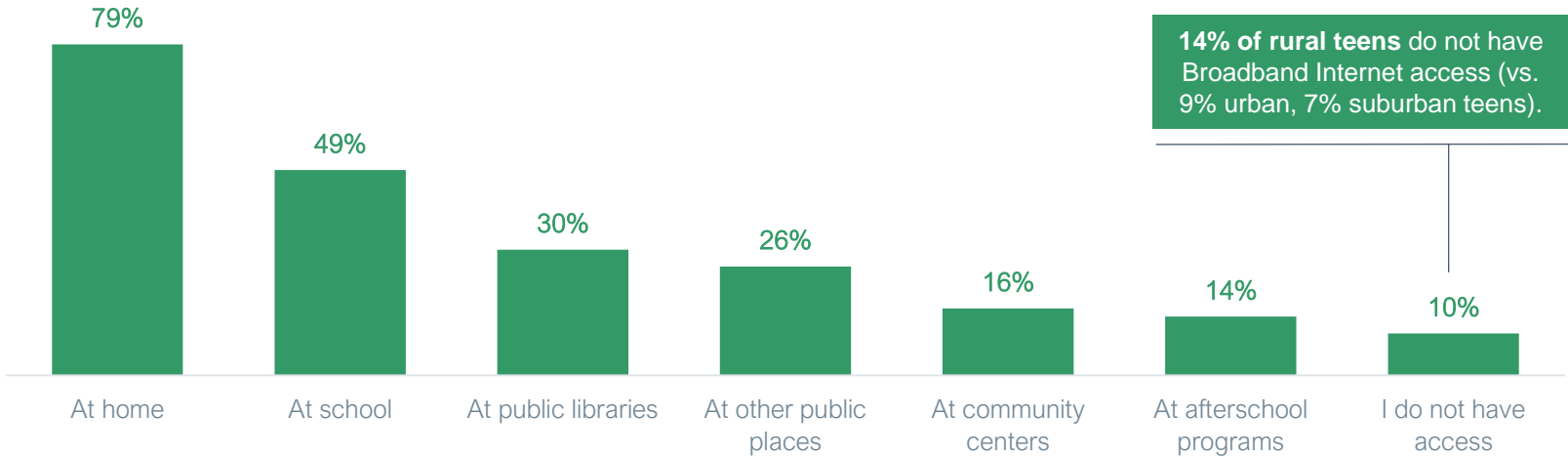
# Digital Access & Overall Confidence





# 1 in 10 American teens say they do not have access to Broadband Internet, including 1 in 6 in rural areas

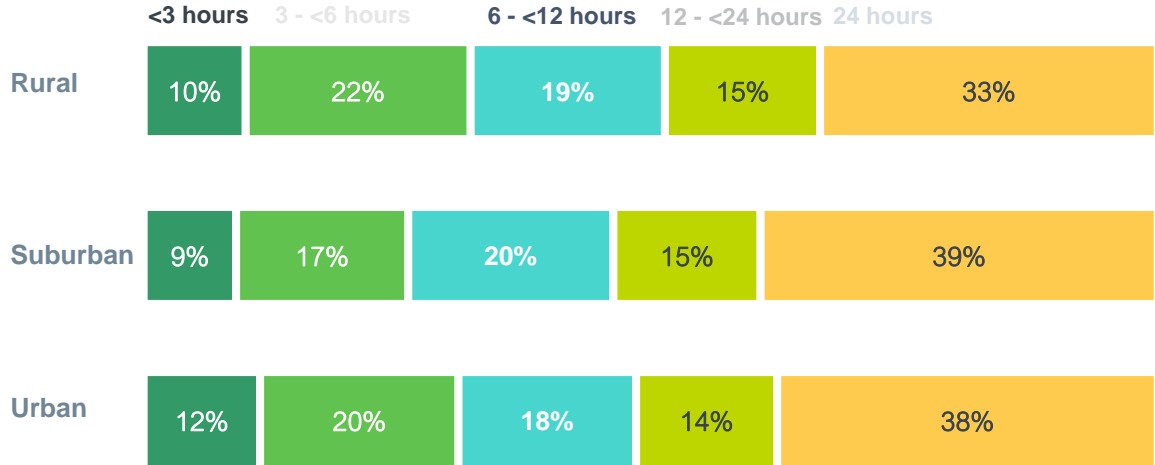
Do you have access to Broadband Internet?





# Reliability is an issue for 1 in 4 American teens, with rural teens being most likely to lack 24/7 access

On average, how many hours a day do you have access to Broadband Internet?



# 1 in 4

American teens have Broadband connections that are only sometimes or never reliable (23%).



# Beyond requiring additional time and effort to connect, slow or unreliable Broadband speeds can interfere with teens' education

Have any of the following happened to you because of a slow Internet connection?  
Unable/difficult to...



Stream content for learning or enjoyment (53%)



Complete a homework assignment (43%)



Get in touch with friends or family (39%)



Get in touch with teachers or employers (22%)

31% Unreliable Connection



Submit an application (18%)

28% Unreliable Connection



Access personal medical information (11%)

20% Unreliable Connection



Pay bills online (10%)

15% Unreliable Connection



NA – none of these (28%)

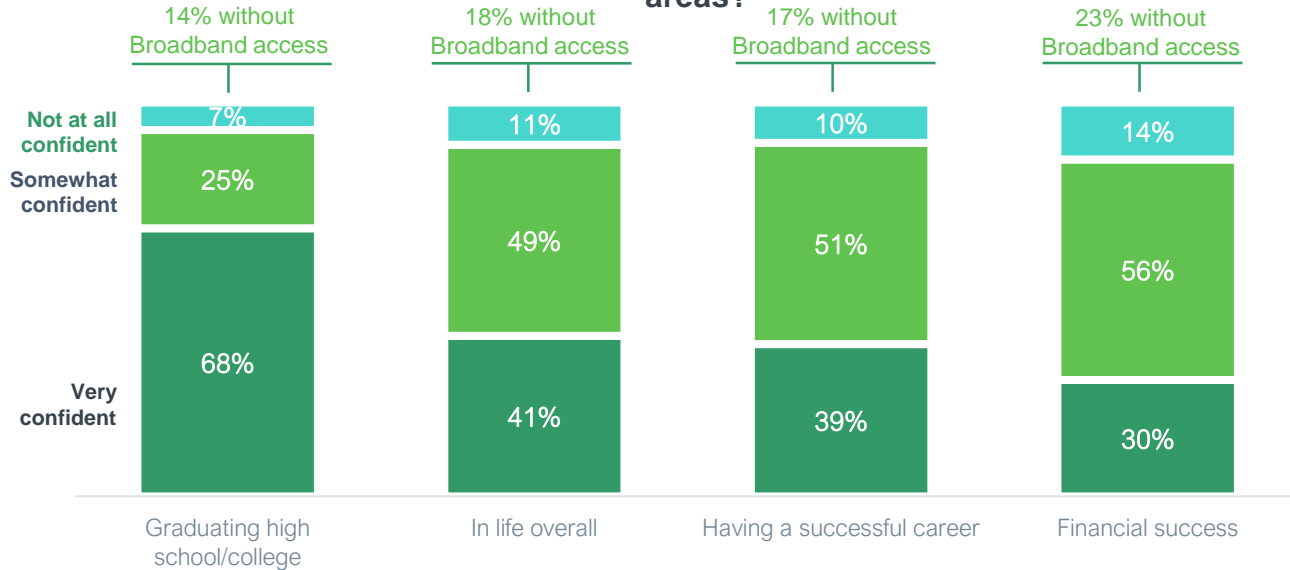
# 81%

Of American teens say, “It would be difficult to complete my school work without Internet access.”



In fact, teens who lack broadband access also tend to lack confidence across various aspects of their life, from school to work to finances to relationships

Overall, how confident are you in your ability to succeed in the following areas?



Teens without a reliable internet connection are also more likely to say they are **less confident than their peers in their community (20%, vs 13% of teens overall).**

4-H'ers, regardless of their connectivity, are more likely to be confident in their ability to be successful in life. (46% 4-Hers vs 40% non 4-Hers)



# Overall, teen confidence and optimism about the future also decreases based on Broadband access and reliability

**83%** With Broadband vs. **71%** Without Broadband

“My future is not defined by where I grew up.”

**72%** With Broadband vs. **59%** Without Broadband

“I believe in The American Dream.”

77% Rural teens

**82%** With Broadband vs. **71%** Without Broadband

“I believe I can get any job I want if I work hard.”



# Ultimately teens without Broadband access have lower perceived social mobility

**82%** With Broadband vs. **75%** Without Broadband

“I have more opportunities to succeed in life than my parents did.”

**79%** With Broadband vs. **66%** Without Broadband

“I expect to make more money than my parents did.”

**78%** With Broadband vs. **68%** Without Broadband

“I received a better education than my parents did.”



PART 4:

# Impact of Digital Access & Skills On Personal Growth



# American teens recognize the value of digital skills when it comes to productivity, exploration and education

**85%**

**American teens**

“Having digital skills allows me to be more productive.”

**85%**

**American teens**

“I enjoy using the Internet to learn about topics that are interesting to me because I can explore them in my own way.”

**84%**

**American teens**

“Having Internet access allows me to pursue creative hobbies.”





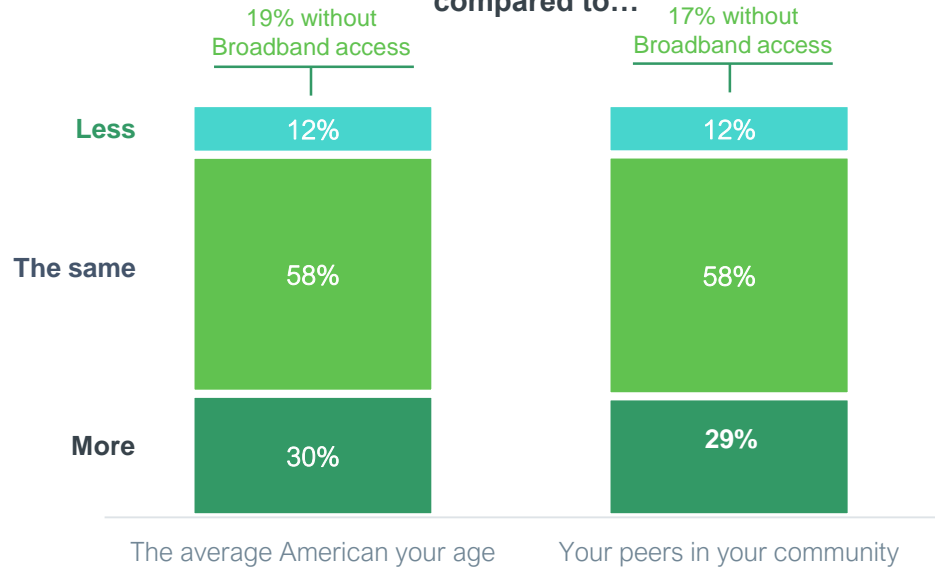
# Yet teens who lack broadband access also experience a confidence gap when it comes to digital skills

**82%**

of American teens agree, “Learning digital skills should be a core part of school curriculum.”

Yet teens without broadband access are less likely to say their school adequately prepared them with the digital skills they need to succeed (74% of those with Broadband access vs. 59% of those without Broadband access).

How confident are you in your digital knowledge and skills compared to...



4-H’ers feel they have better digital skills compared to other teens in their communities. (37% 4-Hers vs 28% non 4-Hers)



# This lack of confidence in digital skills results in increased difficulty problem-solving online

**89%** vs. **77%**  
**With** **Without**  
**Broadband** **Broadband**

“I am confident in my ability to find information I need online.”

**90%** vs. **77%**  
**Reliable** **Unreliable**  
**Connection** **Connection**

“There are a lot of outlets beyond school to learn skills for my future.”

**83%** vs. **66%**  
**Reliable** **Unreliable**  
**Connection** **Connection**

“When I have problems I’m not sure how to solve, I often turn to the Internet for advice.”



## Coding is another skills gap among teens who lack Broadband access

**78%** With Broadband vs. **61%** Without Broadband

“Knowing coding creates more career growth opportunities in the future.”

**78%** With Broadband vs. **62%** Without Broadband

“Regardless of future career path, being knowledgeable about computer science and coding is valuable.”

**55%** With Broadband vs. **41%** Without Broadband

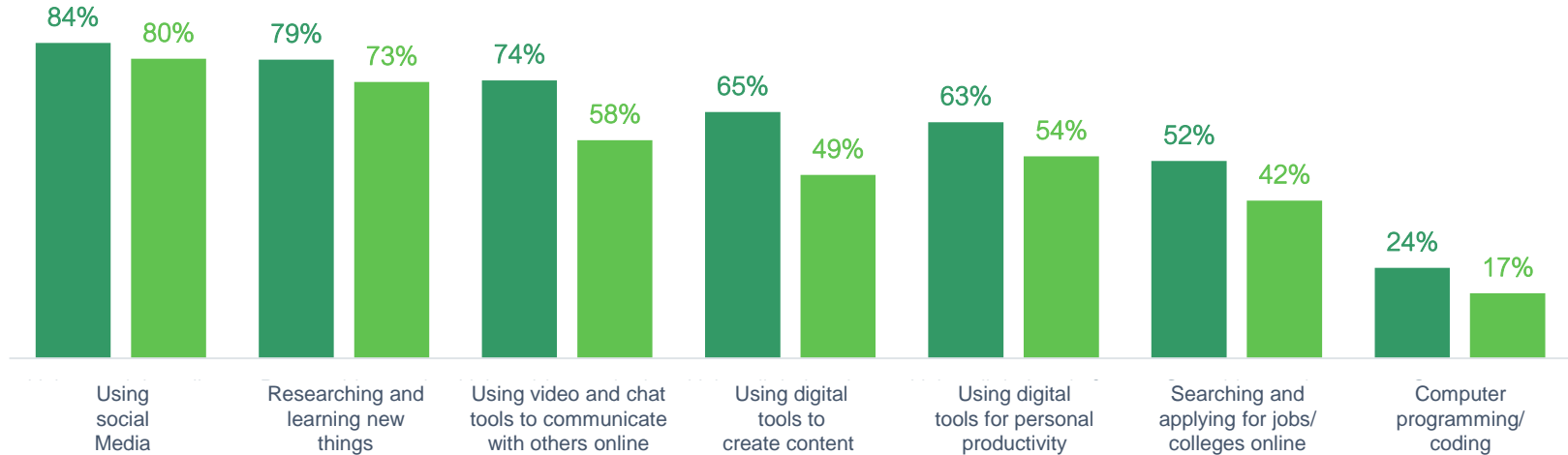
“I am confident in my ability to create new things with my coding and digital skills.”

4-H'ers, regardless of their connectivity, are more confident than their peers in using their digital skills to create things. (61%)



# Overall, teens without Broadband access feel less equipped online when it comes to connecting, creating and learning

Please rate your abilities for the following tasks...



**79% With Broadband vs. 70% Without Broadband**

“Having access to the Internet enhances my relationships because I can catch up more frequently with those who are far away.”



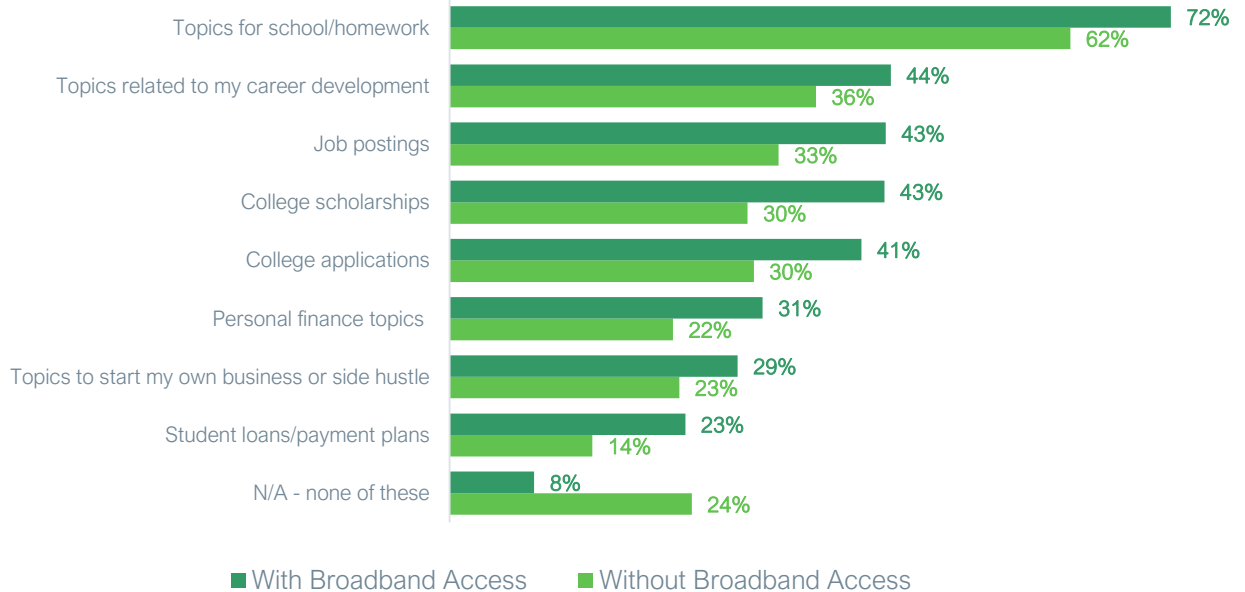
# Teens who lack Broadband access are less likely to turn to the Internet to help equip them for the future

**83%** Of American teens say, "Digital skills will help me get a better job and financial situation in the future." (vs 70% those without)

**Teens with Broadband access are more likely to say they:**

- Frequently think about how to make more money (84% with Broadband, vs. 77% of those without)
- Want to live their adult life in a place where high speed Internet is easily accessible (80% of those with Broadband access (vs. 64% of those without)

Have you ever researched any of the following online?



4-H'ers are more likely than their peers to use the internet for career planning and entrepreneurship. (50% of 4-Hers use the internet for career development and 35% for starting their own business or side hustle)



## In turn, they have lower expectations than other teens for their future career

**82%**  
With  
Broadband

vs.

**75%**  
Without  
Broadband

“I have more opportunities to succeed in life than my parents did.”

**80%**  
With  
Broadband

vs.

**72%**  
Without  
Broadband

“I expect to make more money than my parent’s do.”

**84%**  
With  
Broadband

vs.

**70%**  
Without  
Broadband

“Digital skills will help me get a better job and better financial situation in the future.”



PART 5:

# Impact of Digital Access & Skills On Community



## While all American teens acknowledge the empowerment supportive communities offer, these benefits are less available to those without Broadband

**Teens across America believe in the impact of community...**

**87%**

Of American teens say, “A positive community is a good influence on young people.”

**81%**

Of American teens say, “Seeing success stories of people like me makes me feel empowered.”

**...Yet those with Broadband access feel more empowered and supported with their community behind them**

**80%** **With Broadband** vs. **68%** **Without Broadband**

“With a supportive community, anything is possible.”

**77%** **With Broadband** vs. **65%** **Without Broadband**

“I feel empowered when I have my community to back me up.”





# Teens who lack broadband are less likely to feel connected and invested in their communities

They feel less in touch and recognized by others for their contributions

**80%**  
Reliable Connection  
VS.  
**68%**  
Unreliable Connection

“I feel more confident in myself when I feel a sense of belonging in my community.”

**63%**  
With Broadband  
VS.  
**55%**  
Without Broadband

“I feel invested in my community’s future.”

**62%**  
With Broadband  
VS.  
**51%**  
Without Broadband

“I feel in touch with my community.”

**61%**  
With Broadband  
VS.  
**51%**  
Without Broadband

“In my community, I feel welcomed and recognized for my contributions.”

4-H’ers are more likely than their peers to feel invested in their community’s future.  
(89%)



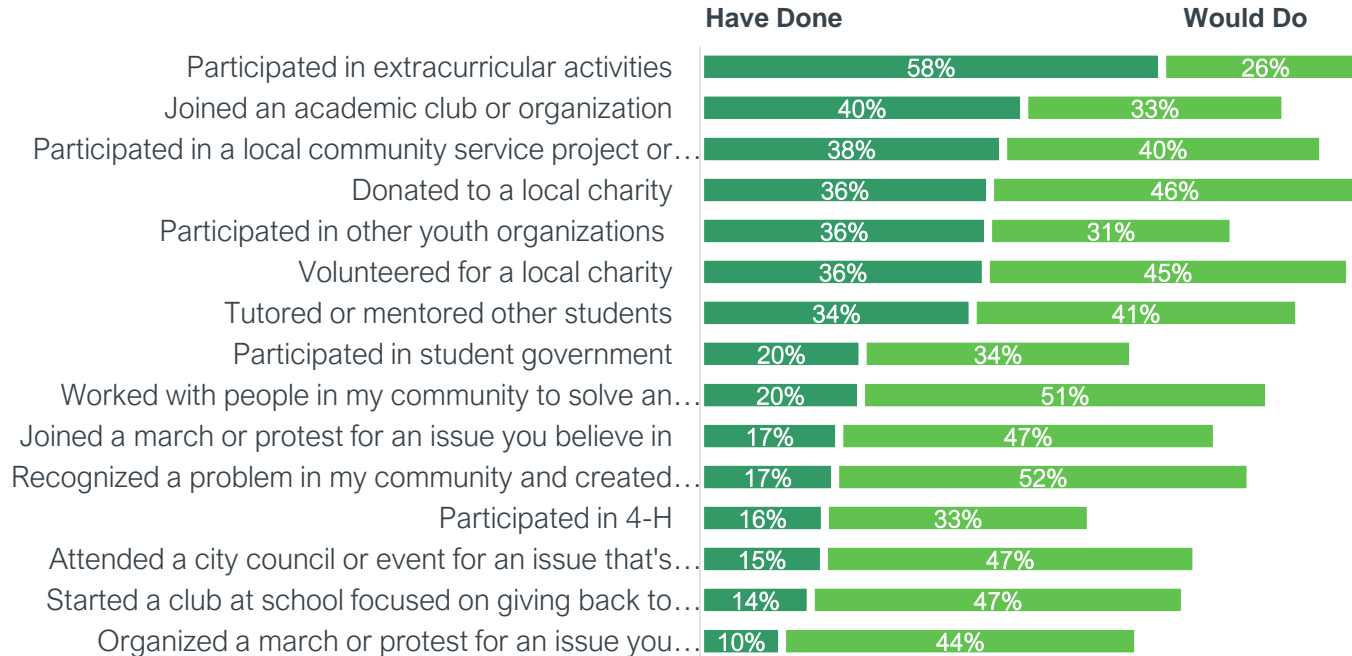
As a result, there is less confidence and perceived ability when it comes to active participation to fix community issues among teens without Broadband access

	With Access	Without Access
“I am passionate about an issue that directly impacts my community.”	70%	57%
“My perspective is unique and valuable in helping solve problems in my community.”	70%	61%
“I have the digital skills I need to solve problems for myself and my community.”	70%	55%
“If I care about an issue in my community, I know how to find others who can help me solve it.”	67%	53%
“I am confident in my abilities to recognize a community issue and take action to help solve it.”	65%	53%



# Teens with access show interest in getting involved in community and political issues

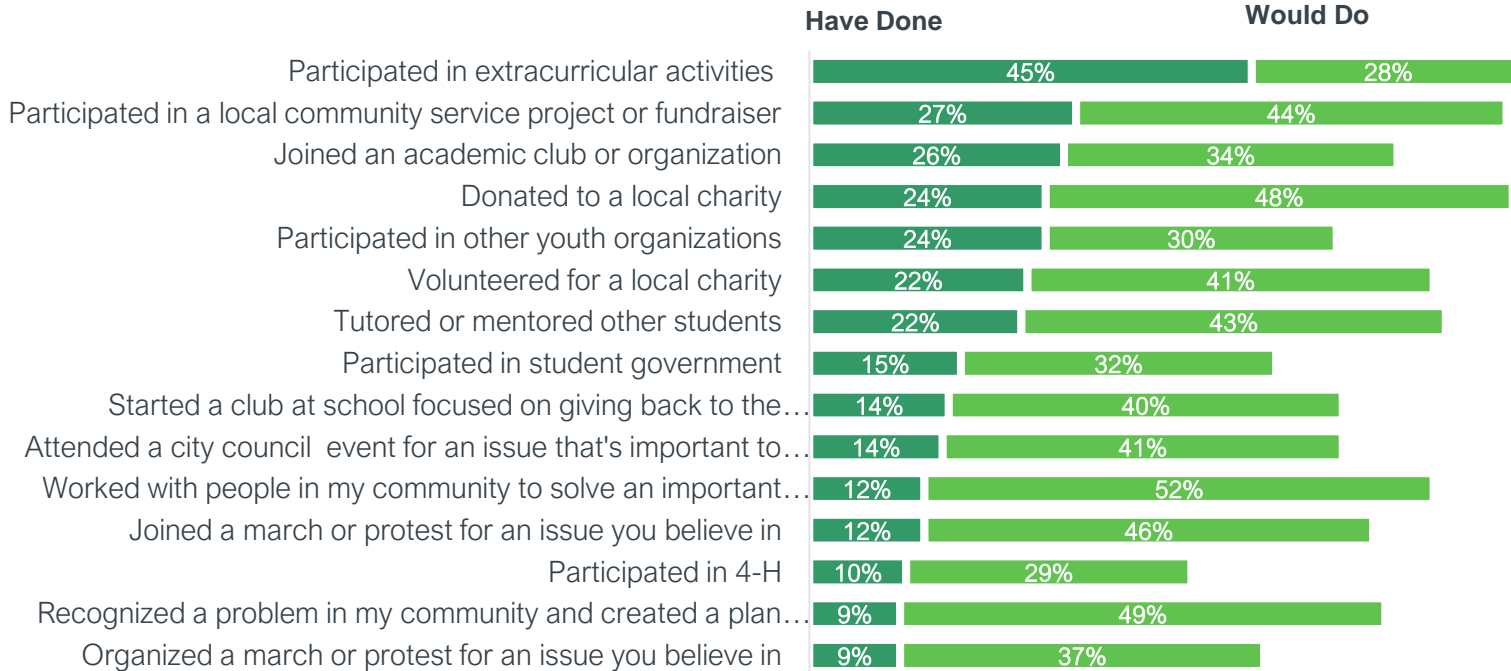
Have you done or would you do any of the following?  
(Those with Broadband Access)





# Yet teens without Broadband access are less likely to get involved

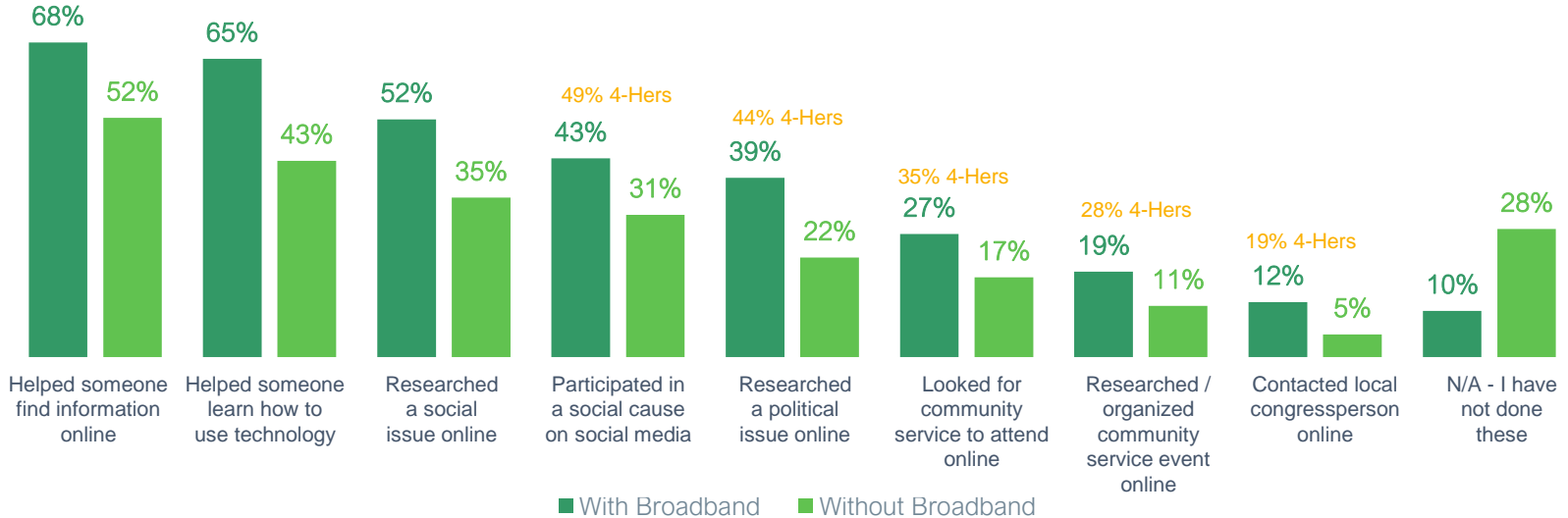
**Have you done or would you do any of the following?  
(Those without Broadband Access)**





# More than 1 in 4 teens without Broadband access have not participated in any social causes online

Have you done any of the following?

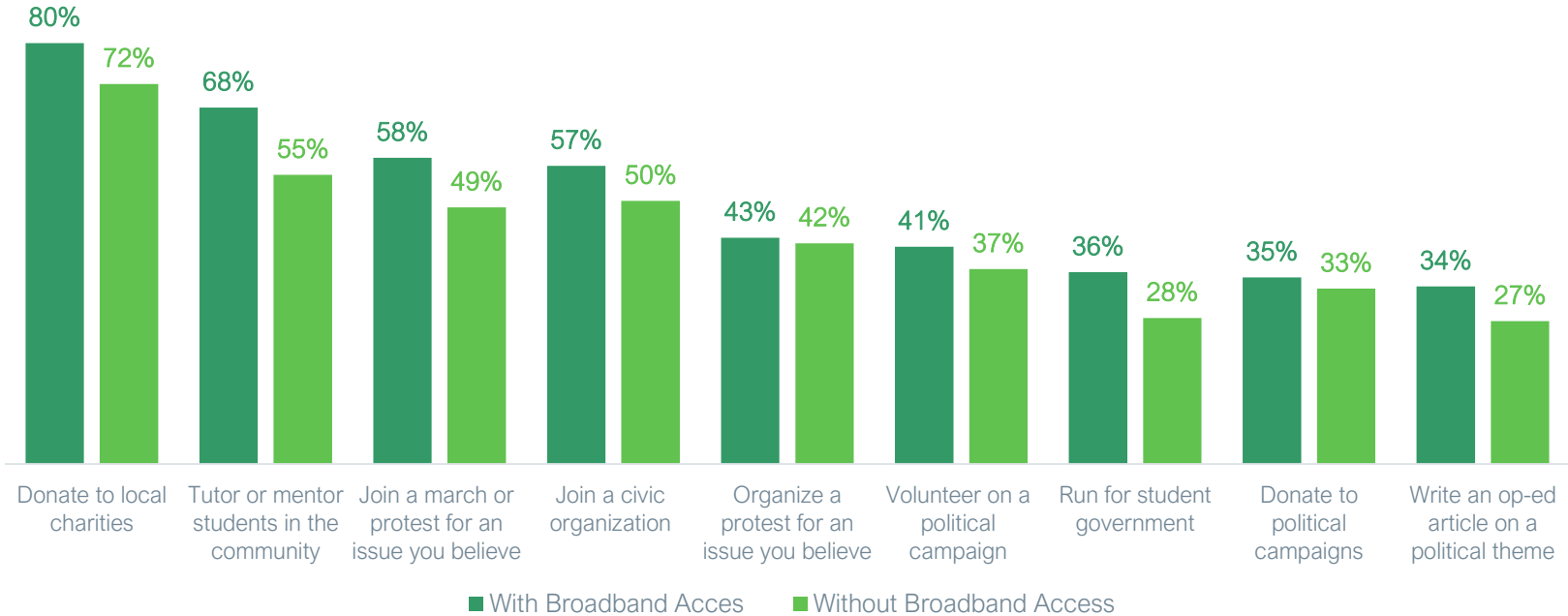


4-H Teens are more likely than other teens to use the Internet for Good.



# Teens without Broadband access are also less likely to get engaged in the community and at school

How likely are you to consider doing any of the following in the future?  
(% Somewhat/Very Likely)





# From a social perspective, teens without Broadband access have greater difficulty finding connection and belonging online

**89%**  
Reliable Connection  
VS.  
**68%**  
Unreliable Connection

“Access to the Internet gives me a lot of opportunity to connect with others.”

**83%**  
With Broadband  
VS.  
**72%**  
Without Broadband

“I am able to connect to pop culture through the Internet.”

**77%**  
With Broadband  
VS.  
**65%**  
Without Broadband

“I want to find other like-minded individuals through the Internet.”

**73%**  
With Broadband  
VS.  
**59%**  
Without Broadband

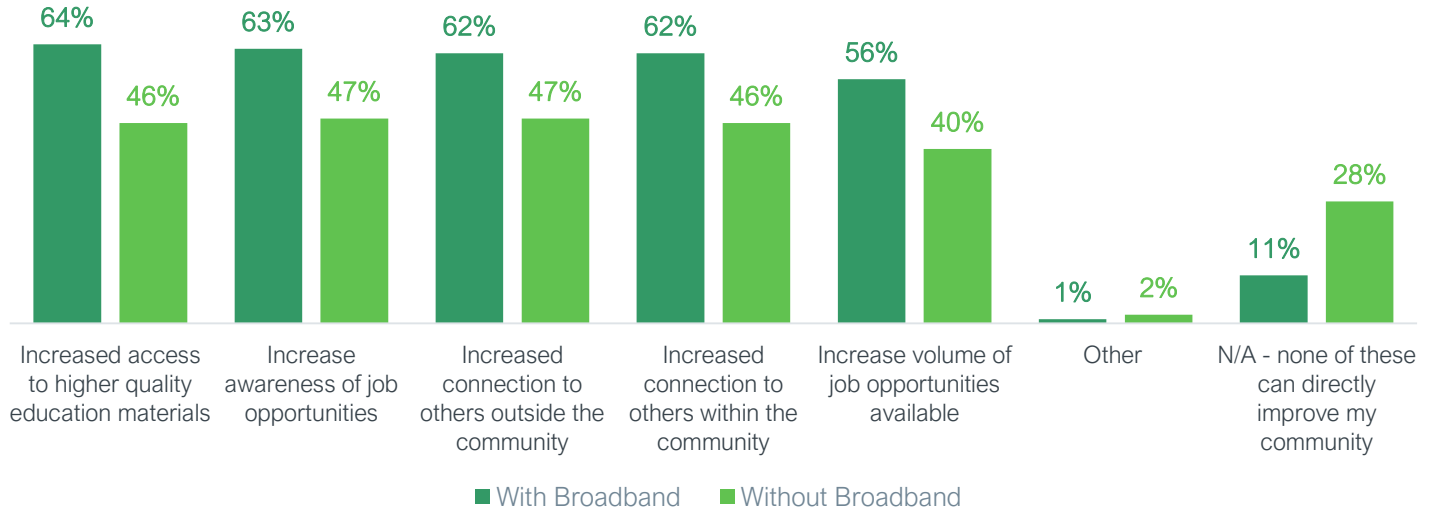
“I feel a sense of belonging when I am aware of culturally relevant online trends.”



# They are also less familiar with the benefits broadband internet can provide to their communities

8 in 10 American teens say high-speed internet access can change their community for the better

Do you believe high speed Internet access can help your community in any of the following ways?







While all teens see the value of connecting and sharing ideas as critical to moving their communities forward, Teens without access to Broadband are much less likely to realize the power of connection through the Internet

**82%** With Broadband VS. **72%** Without Broadband

“High speed Internet access makes it easier for me to relate to people outside my community.”

**82%** With Broadband VS. **64%** Without Broadband

“High speed Internet access can change my community for the better.”

**76%** With Broadband VS. **62%** Without Broadband

“Connecting and sharing ideas online is crucial to bettering my community.”

**75%** With Broadband VS. **59%** Without Broadband

“My community would be more economically successful with high speed Internet access.”



PART 6:

# Conclusion

## Further Study

Findings from the study on Digital Skills supports National 4-H Council's 2018 study on [Social Mobility in Rural America](#). It identified six factors that create ideal environments for young people to achieve economic advancement. Simply stated, **communities who focus on impacting youth create more opportunities for them.**

Eighty-seven percent of youth surveyed in the Digital Skills study agree that "A positive community is a good influence on young people." Unfortunately, the positive connection to a community varied drastically between groups with and without broadband access, therefore potentially closing an important avenue to upward mobility.

Further research is needed to examine how community engagement impacts broadband access and youth mobility outcomes over the long-term.

### Six factors that seem to support young people's economic advancement

