The Missing Middle

Reimagining a Future for Tweens, Teens, and Public Media BY/WITH/FOR YOUTH

► INSPIRING

NEXT GEN ► ►

PUBLIC MEDIA

► AUDIENCES

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The Joan Ganz Cooney Center at Sesame Workshop
The Corporation for Public Broadcasting

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/ FOREWORD /

After a year of research, writing, and collaboration, we are pleased to present *The Missing Middle: Reimagining a Future for Tweens, Teens, and Public Media*, the second report in our exploration of young people's media practices.

Who is the missing middle? For the purposes of this report, it is the key demographic of young people ages 10 to 17, members of Gen Z who inhabit an oversaturated media environment but are still looking for high-quality content they can trust. The interviews conducted for this report help establish a knowledge base for By/With/For Youth: Inspiring Next Gen Public Media Audiences, an ongoing partnership between the Joan Ganz Cooney Center and the Corporation for Public Broadcasting designed to help public media play a more central role in young people's lives.

Today's youth are true digital natives. Most have never known a world without smartphones. Media play an increasingly significant role in how youth shape their identities, develop relationships, and seek information that matters to them. The shift in influence from family to peers and other authoritative sources takes place across an ever-expanding range of content and platforms. As media creators strive to offer more breadth and depth, they help create an ecosystem that has redefined who can contribute and where young people look for content they like and trust.

We know from the Pew Research Center's work that Gen Z youth, more than previous generations, are more diverse, more likely to attend college, and more motivated to tackle the world's biggest challenges without waiting for adulthood.¹ We have been inspired by the increasingly visible efforts of youth leaders around the world to address climate change, gun safety, mental health, racial injustice, and democracy itself.

It is in this dynamic environment that the public media community must better understand the needs and interests of young people. The "By/With/For Youth" title for our work recognizes that young people are more than just a viewing audience. They are also eager partners in activities that develop their creative skills, further their learning, and offer real value to peers and adults alike. Fortunately, public media stations and partners are already practicing inclusive design, ready to collaborate and build new offerings for this audience.

Tweens and teens are not only public media's future audience; they are the future of our society. In many ways, their ability to shape the future depends on their ability to harness media. We hope this report offers ideas and inspiration that help us better serve this audience and attract a new generation to the public media family.

We are grateful to Joan Ganz Cooney Center Senior Fellows Monica Bulger and Mary Madden for putting young people's voices at the center of this report, and to the Cooney Center and CPB teams for making this work possible.

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/ EXECUTIVE SUMMARY /

In the 1960s, Joan Ganz Cooney published *The Potential Uses of Television in Preschool Education*, a report that would revolutionize television for children. Where others saw a "vast wasteland," Cooney saw possibility, and from it, educational programming for children, like *Sesame Street* and *Mister Rogers' Neighborhood*, was born.

Half a century later, the Joan Ganz Cooney Center and Corporation for Public Broadcasting seek to carry forward this vision of programming with the By/With/For Youth: Inspiring Next Gen Audiences project, which prioritizes youth wellbeing and supports learning and the development of life skills. The focus of this new initiative is tweens and teens, identified as a "missing middle" audience for public media. Young people enjoy an abundance of options for watching, playing, and listening, but are often underserved in terms of quality content appropriate to their developmental stages and needs.

Amidst a global pandemic, while adults and children alike were spending most of their waking hours online, we spoke with 50 tweens and teens across the United States. We talked about how they spend their time; what they find interesting; how they find new shows, apps, or videos; what issues are important to them; and what misconceptions adults have about them. We also talked to kids about their experiences with public media. We asked them what public media should do if it wants to engage with people their age, and we talked about how their lives have changed during the pandemic.

Tweens and teens view the current media landscape as one of abundance and seemingly endless personalization possibilities. They describe spending their free time moving across platforms and devices depending on their moods, their interests, and their access to certain kinds of connectivity.

Ten key takeaways emerged from our interviews:

- + Video dominates media experiences for youth and is the lifeblood for social media and gaming. In addition, informational how-to videos support self-driven learning for tweens and teens across a range of settings. We were surprised by the frequency with which tweens and teens rely on how-to videos to support their schoolwork, gaming, creativity, and development of life skills.
- + In terms of discovery, social media, search, and recommendations are paramount. In particular, TikTok's personalized "For You" page and YouTube's "Recommended" videos were mentioned by many as how they find what to watch, and often were the first places they would find out about new shows, apps, or other videos.

- + Tweens and teens fluently described deploying different apps for specific purposes and seamlessly moving across various media environments depending on their interests and needs. As they coped with varying degrees of pandemic-related lockdown, video and video-augmented activities provided a wide range of escapist entertainment and digital social glue to help maintain connections with friends and families.
- While tweens and teens were grateful for digital media to help maintain connections with friends and family, many expressed eventually reaching a state of boredom with technology.
- + Online learning has been especially difficult for a subset of youth who have found the stress of hours spent in front of a screen managing a flood of new communications and deadlines overwhelming.

 The lost routines and support structures that school provides have added to a sense of disconnectedness that some youth report.
- + Tweens and teens are accustomed to having a great deal of control in how and when and where they express themselves online. By contrast, when they encounter content that is developed by adults without youth input, it often strikes them as perpetuating stereotypes about teens or as being out of touch.
- + Youth largely want to see kids like them featured in and participating in the development of programming. Tweens and teens expressed how they turn to "real" youth their age for meaningful content, and how they contribute their voices to media in different ways, whether through the creation of their own content or by becoming part of online communities through comments and other forms of engagement.
- + When talking about fiction and escapist content, priorities for youth centered around whether it was free or fun or something their friends were into. While "public media" as a concept might be an afterthought to teens, the need for something trustworthy was frequently mentioned.

- Youth often had difficulty discerning fact from opinion. A few tweens and teens we spoke with sought more mature content, particularly documentaries, for deeper dives into topics of interest to them.
- + Accustomed to personalization of media content and delivery, the teens we spoke with had very clear ideas for types of content and how best to deliver it to their age group. The most frequent request for public media was to address the everyday challenges tweens and teens face. And regardless of format, tweens and teens felt they had matured past the often simple storylines directed at their age group.

Drawing on these findings, public media has several opportunities to connect with this "missing middle":

- + **How-to videos** are a fruitful area for public media to explore because youth are increasingly seeking out this short-form, sometimes ephemeral video content to help answer questions that they have to support interests they want to explore or simply just to solve a problem.
- + Public media has a real opportunity to **provide more trusted content** so that when kids are searching for information, they can turn to the public media brand to provide reliable answers in a space where they do not need to be on their guard. Public media is already a space known and trusted for a diversity of voices in its programming. In 2020 it provided resources across its networks for discussions of race, inequality, and prejudice. There is an opportunity here to amplify how public media goes beyond binaries and into the nuance of issues, since this seems to be missing, but much desired, in youth media experiences.
- + When we ask youth for advice on how public media could create more appealing content for kids their age, the issue of **representation** is especially important. They want to see kids like them, as well as others who reflect the diversity they see in their generation. In order for this content to be perceived as authentic, it will be important to integrate the input from youth and also take advantage of the fact that these kids love to create and share their unique perspectives.

+ Our method of talking to tweens and teens, asking for their opinions, and thinking about what is possible and what might help to fill some of these gaps in commercial media is a model moving forward for public media to consider. Kids are grateful for a chance to be heard, and they were surprised that we were taking their opinions seriously. One space where public media can differentiate from YouTube and other platforms is adults taking seriously what kids have to say.

Similar to the "vast wasteland" moment Joan Ganz Cooney faced in the 1960s, the abundance of content and personalization of the current moment can seem more noise than promise. Public media has an opportunity to evolve Cooney's blueprint of a kinder learning space for young children into one that also addresses the pressing needs of tweens and teens. This is a moment to be visionary, to use this trusted space for learning and growing as youth transition from childhood to adulthood and develop identities deeply intertwined with the media ecosystem.

Methods Overview

The findings in this report are based on interviews with a total of 50 youth participants, including tweens (aged 10–12) and teens (aged 13–17). Three researchers from the Joan Ganz Cooney Center conducted 16 online video-based and phone-based focus group interviews between September 18-December 8, 2020. In order to carry out this work, we partnered with nine different youth-focused organizations, recruiting participants from the Northeast, Midwest, South, and West Coast in rural, urban and suburban areas. Our interview sample is not nationally representative, but was designed to include a diverse mix of typically underrepresented voices, including those from low-income households, students of color, and youth with disabilities. For more details about our study design, please see the appendix at the end of this report. The By/With/For Youth: Inspiring Next Gen Public Media Audiences project aims to more deeply understand the current media habits of tweens and teens and envisions a future of public media that equips young people to participate and thrive in today's complex world.

Why tweens and teens? First and foremost, this age span between childhood and adulthood is complex and marked by dramatic physical, mental, and social changes. Once pre-tweens move from childhood into adolescence, they begin to make key transitions in identity, independence, interests, relationships, and more, which continue to develop as they enter adolescence and move closer to adulthood (Erikson, 1968; Moshman, 1999). Throughout this time period, youth also gain independence in their media use and choices (Ofcom, 2019), with this usage becoming "increasingly central" to their lives (Buckingham et al., 2015) and fulfilling their social needs (boyd, 2014; Ito et al., 2009). We also know that this media engagement not only affects the ways tweens and teens act in the world, but also shapes their well-being and the attitudes and beliefs they hold about themselves and others (e.g., Michikyan & Suárez-Orozco, 2016; Ward, 2004; Ward, 2020; Weinstein, 2018).

At the same time, the media landscape in which youth are growing and changing is also constantly expanding and evolving. Their ability to shape the future largely depends on their ability to harness media. And while tweens and teens tend to be overserved by the amount of media available, they are underserved by quality content. Drawing on the service mission of public media to provide trusted, high-quality news and educational programming freely, by and about people of all backgrounds (Corporation for Public Broadcasting, 2019), this project considers how media can more purposefully serve high-quality content to tweens and teens.

Our research began with a literature review of some of the most important quantitative and qualitative work in this space, which in turn, shaped the focus of our inquiry (Davison et al., 2020). In 16 approximately one-hour-long remote focus groups,² we spoke with a total of 50 tweens and teens, ages 10 to 17 living all around the U.S., who came from a diverse mix of backgrounds often not well represented in media

research, such as those from low-income households. tweens and teens living in rural areas, youth from first-generation immigrant families, and youth with disabilities.

During our discussions, we asked participants how they prefer to spend their free time; what they find interesting; how they find new shows, apps, and videos; what issues are important to them; and what misconceptions adults have about youth. We asked them about their past and current experiences with public media and what advice they had for people developing new programming and initiatives to engage with people their age. Our discussions were deeper and more candid than we initially expected, as we—mid-COVID-19 pandemic—connected with youth who had strong perspectives, opinions, and feelings to share about the role of digital media at this unique time in their lives.

This report highlights themes that emerged across these focus groups with tweens and teens, bringing to light important media-related experiences and viewpoints of youth. We begin by providing context about the setting of our focus groups during a global pandemic; afterward, each section focuses on a dominant theme that emerged through our discussions. We end with a set of implications for public media, mapping a set of priority actions to transform this missing middle into a foundation for the future.

How the pandemic informed this research

I haven't really liked it, ever since quarantine started, because I was always super busy-busy on the go, always doing something, always involved in something, and then it just all stopped, out of nowhere... So I definitely adjusted to it, but I like how it was before, and I know that it's never gonna go back to how it was...

-GIRL, 14, SAN ANTONIO, TEXAS

The moment "it all just stopped, out of nowhere" was, for many large cities in the U.S., somewhere around the second week of March 2020. Widespread concern about the scale and pace with which COVID-19 was spreading forced an abrupt transition to digital-only environments for many workplaces and educational institutions. And without plans in place to support them, millions of families who did not own laptops or tablets with broadband access could not partake in these essential activities. Their wealthier counterparts stood at a considerable advantage, with multipledevices and high-speed internet connections at home to support the continuation of their schooling and work. For families who attempted to use phones to stay connected, many encountered interfaces that were not functional on mobile devices, and soon ran into data limits with the expectation that students and employees would be present for video calls requiring high-speed connections.



In homes across the country, tens of millions of children, parents, and teachers were required to jump head-first into online learning and screen-based social interaction. This presented enormous challenges, especially for families with fewer resources, time, and oversight to help manage this transition. The global COVID-19 pandemic and its repercussions not only amplified many technological transformations in education that were already underway, but also **magnified existing gaps.** School systems that were

under-resourced struggled to deliver high-quality digital learning experiences at scale, and this was especially acute in classes where students did not all have reliable access to high-speed connections or advanced digital literacy skills. While in-person educational settings could obscure some of these inequities, students' struggles to remain fully engaged in online instruction through Zoom classroom instruction that requires consistent connectivity and digital fluency made these gaps in resources highly visible and compounded existing differences.

Many schools have been unable to fully accommodate these families, and parents without high-speed connectivity at home have had to resort to essentially creating classrooms in their cars, using parking lots next to libraries and schools for Wi-Fi access during the pandemic. Even in school districts that may have the funding to support the purchase of laptops for low-income students, the global surge in demand for

lower-cost machines has created shortages that have left as many as 15–16 million students (30% of all public K–12 students), without an adequate device or internet connection for online learning at home at a considerable disadvantage (Browning, 2020; Chandra et al., 2020). In addition, students in low income households who are able to connect to class have borne the added pressure of maintaining focus and presence on screen when conditions at home may be chaotic, crowded, and far less conducive to learning when compared with that of peers from more affluent homes.

Everyday family life became more mediated by technologies. As parents struggled to work from home, children attempted to maintain social connections with friends and classmates. With the usual opportunities to hang out temporarily suspended, children turned to multi-player games, social media platforms, and video chats to stay entertained and connected with their peers.



This is the unprecedented moment when our research team entered into focus groups with 50 young people across the country. This report reflects both broad media use trends and specific observations about this highly unusual time, during which many families were thrust into impossibly challenging circumstances. However, what we heard from young people across the country was both sobering and inspiring. We saw digital inequities firsthand, but we also witnessed incredible examples of resilience and learning to adapt to extraordinary and ever-shifting circumstances. Some students noted they had been struggling with online learning, while others pointed to benefits of remote instruction that they had not anticipated. Some lamented the loss of friendships, while others felt certain relationships had been strengthened during this time.

Similarly, we saw the public media community demonstrating remarkable resilience, as it responded to many of the circumstances youth were facing with creativity, compassion, and a commitment to delivering high-quality content to underserved families. At the national level, PBS quickly pivoted its programming to "double down on public service." creating a wide range of education content to support at-home learning for K–12 students and featuring youth-produced stories about coping with the pandemic on programs like American Portrait and PBS NewsHour (Wyllie & Everhart, 2020). The News-Hour Student Reporting Labs (SRL) program, which works with over 150 schools in 46 states, shifted its summer Student Academy to a virtual format and invited student journalists to contribute to stories about school reopenings, racial justice and policing following the killing of George Floyd, and the way the pandemic has exacerbated the digital divide for low-income students (Clapman, 2020).

Even before the pandemic, many stations were innovating to create deeper engagement with tween and teen audiences. In New York, WNET's Youth Collective, which describes itself as an initiative that "aims to amplify youth voice and provide a platform for young people to engage in the important work of building a more ethical world." had been regularly soliciting youth input through an advisory board made up of high school students and hosting an annual youth summit to help make local programming more engaging for teens (WNET, 2021). In Kentucky, at KET. which has a statewide reach serving urban, rural, and suburban audiences, the popular News Quiz program has provided tweens and teens with relevant state. national, and international news stories and the opportunity to submit their own opinions in response to prompts about current events (Kentucky Educational Television, 2021).

However, while these examples of tween and teenfocused initiatives demonstrate what is possible, they are still the exception rather than the rule.

This study underscores what has been highlighted by other recent youth studies within the U.S. and beyond; young people want a seat at the table. They want their voices, their experiences, and their creativity to inform the way they are represented in both media and decision-making environments. Theirs is a generation that will be poised to engage, responding to the injustices they see, celebrating their triumphs in the face of adversity, and playing an active part in shaping the post-pandemic society that they will inherit.

Video Dominates a Fractured Youth Media Landscape

Usually, in my free time, I am on my phone on Instagram or I'm watching YouTube like the comedy shows or sometimes I go for a walk with my friend just to not burn myself out with all the [homework] and everything.

—GIRL, 15, BRONX, NEW YORK

Even before national quarantine measures, recent research on youth media habits indicated that young people watch less traditional TV than previous generations, often preferring to spend time with streaming video, social media, or digital games (Rideout & Robb, 2019). In addition, the move to remote learning through Zoom, Google Classroom, and other forms of video conferencing dovetails with the trend that had already been on the rise, of youth regularly using online resources (including short-form videos) to complete homework (Auxier & Anderson, 2020). Throughout the COVID-19 pandemic, the various limits on in-person

gatherings have amplified the importance of mediated social spaces for many youth, with video-centered social media spaces taking up a large role for those we spoke to.

With these accelerating trends, how do youth decide what to watch, when, and with whom? What drives them to seek out new sources of video content and whose recommendations do they consider trustworthy? What sorts of activities do they value, and why? What do they watch when they are bored? Or feeling creative? Or wanting to learn something new?

The current media landscape that youth described to us during our interviews was largely one of abundance and seemingly endless personalization possibilities. Reflecting the fractured and fluid nature of options available, youth described spending their free time moving across platforms and devices depending on their moods, their interests, and their access to certain kinds of connectivity. Notably, many referenced

various forms of entertainment and informal learning that were often scaffolded by support and interaction with friends:

- I like to go on my phone or the computer, and just watch YouTube or play Minecraft. One of my friends plays it and she taught me.
 —GIRL, 11, KNOX COUNTY, ILLINOIS
- I've been watching anime. That's been good. And I listen to music almost every day. I have my playlists and stuff. And I usually talk to my friends on Discord.

 —GIRL, 15, SAN ANTONIO, TEXAS
- In my free time, I just like to draw, play games, and also watch videos. I really like watching videos that have to do [with] programming and drawing.
 - -BOY, 11, BROOKLYN, NEW YORK

However, contrary to the stereotypical portrait of screen-addicted teens who prefer digital engagement over offline interaction, many youth we spoke with described routines that privileged hands-on and in-person activities. When asked about their favorite ways to spend their free time, participants mentioned a wide range of active and creative pursuits including sports, playing music, crafting, cooking, drawing, and hanging out with friends.

- I really like baking, and I guess you would call it, like, crafting. I like doing things like sewing, and different origamis and things like that.

 And I also like fitness, so I really like running and weightlifting.
 - -GIRL, 15, ARLINGTON, VIRGINIA
- Geo Usually in my free time I'll probably check social media and then once I'm done with that probably will watch a show and do my homework. A lot of times I'll go play volleyball in the park with some friends and I'm an ice skater, so I'll go ice skating sometimes.
 - -GIRL, 13, BROOKLYN, NEW YORK



If I had a choice—it's not really the season to play soccer right now—but if it was the season to play soccer, my mom would take me to soccer, and I would play soccer. It's fun and it's awesome...not boring.

-GIRL, 11, ARLINGTON, VIRGINIA

For some of these youth, turning to digital media—whether videos, games or social media—was seen as a secondary background activity or something they turned to during times of loneliness or boredom:

- 66 Sometimes I'll be watching videos while I'm doing homework. I try not to because it's definitely not my best work ethic when I'm doing that, but sometimes I just....Being home schooled, I just sit in here, not really having other people's voices around or just kinda wanting to watch something funny.

 —BOY, 15, KNOX COUNTY, ILLINOIS
- In my free time, I like to go outside and play basketball, and if I can't do that, then I come inside and I play NBA2K on my Xbox.

 —BOY, 13, VENTURA COUNTY, CALIFORNIA

I swap my video games with my friends a lot of the times and then I also am playing sports like basketball, football, and baseball. I enjoy doing it with my friends, and then hanging out would be another thing. And then also if I'm really bored, I sometimes scroll through Instagram.

—BOY, 14, KNOX COUNTY, ILLINOIS

The diversity of interests among the tweens and teens we interviewed was notable; at the same time, there were striking patterns. Watching broadcast and cable television were rarely mentioned as preferred pastimes, while the dominance of online video—whether YouTube, streaming services, or short-form video-based social media like TikTok—was a near universal part of teens' and tweens' media diet. In addition, youth differentiated digital video content with distinct naming associated with various platforms (Netflix has "shows," YouTube is for "videos," and "TikToks" are their own format). All of these were considered distinct from "TV," which might occasionally be playing in the background, but was often absent from the rhythms of their daily lives:

- I usually use Spotify if I'm gonna listen to music, or SoundCloud, and I don't really watch television or TV.
 —BOY, 13, VENTURA COUNTY, CALIFORNIA
- I don't really watch TV. I play a lot of video games like Rainbow Six Siege and a bunch of generic games, like Minecraft. But I do use Spotify and Apple Music a lot.
 —BOY, 14, BOSSIER CITY, LOUISIANA
- 66 I like to watch Netflix. I watch a lot of Netflix. And I guess I like to go swimming a lot and ride my bike....And also going on TikTok, and listening to music.
 - -GIRL, 15, SAN ANTONIO, TEXAS

In terms of discovery, social media, search, and recommendations are paramount. During our interviews, tween and teen participants consistently described the recursive system of discovery and

amplification that is common to major social media platforms. In particular, TikTok's personalized "For You" page and YouTube's "Recommended" videos were mentioned by many as how they find what to watch, and often were the first places they would find out about new shows, apps, or other videos.

- If you first get TikTok, they would be like different random videos about the new stuff that are trending, but when you get into it, it'll find things that you start liking; it will start popping up with more of those...
 - -GIRL, 15, ARLINGTON, VIRGINIA
- I find [new apps, games, and shows] either by my friends recommending them or YouTubers that I watch recommend them. I watch gaming YouTubers and comedians.
 - -BOY, 12, BOSSIER CITY, LOUISIANA
- find it on TikTok, and it's popular on TikTok.
 And usually I scroll through the popular stuff on TikTok, or anything recommended to me, and then I would watch it.
 - -GIRL, 15, SAN ANTONIO, TEXAS
- I find a lot of stuff through TikTok. I go on TikTok a lot, so....And any time I see something new, it's probably from TikTok, like a post that's top 10 shows or something, and I'll see a show I've never heard before, so I'll check that out, and yeah, that's probably where I get most of them from.
 - -BOY, 17, PASCO COUNTY, FLORIDA

Gaming remains especially popular with boys, though both girls and boys described playing a range of creative and social games like Minecraft, Roblox, and Among Us. For tweens and teens who play games, gaming also appeared to drive much of their video interest, motivating them to follow gaming channels and influencers on platforms like Twitch and You-Tube, and, in some cases, create their own videos about gaming.

- I go to this app called Twitch TV, where I could search up the game and then it'll pop up people that are playing it, and that are live streaming it. And I could watch them, and I could just see how they're doing and what they're doing

 —BOY, 12, VENTURA COUNTY, CALIFORNIA
- 66 Sometimes, on NBA 2K, there'll be a screen and it'll have influencers that play the game, and sometimes I get it off of that, or I'll go on YouTube and I'll just search up the game, and it'll show me videos of that, and I'll just start watching them.

 —BOY, 13, VENTURA COUNTRY, CALIFORNIA
- In my free time, I like to play games, video games such as Fortnite, Call of Duty, Apex Legends, all those kinds of stuff, 'cause I'm a YouTuber, so I make content for people.
 - -BOY, 12, VENTURA COUNTY, CALIFORNIA



Given that many of these games are now online with built-in social interaction (either through competitive online play, text, or audio communication), crossplatform compatibility has become a defining feature for what tweens and teens choose to play. And the uneven nature of device and console ownership can have a profound impact on one's inclusion or exclusion from social groups.

- We usually play Roblox, or Among Us, but that's usually with me and one of my friends because it doesn't work with my other friend's iPad. She can't play the Among Us game.
 - $-\mathsf{GIRL},$ 11, ARLINGTON, VIRGINIA
- I found out about [Among Us] through, like,
 YouTube I think, but I only saw people play it on
 a computer, so I didn't know you could play on
 mobile until I saw a meme about it. I was like,
 'Oh, I can do that?' So I got it on my phone.

 —BOY, 14, BROOKLYN, NEW YORK

Similarly, for a large segment of the tweens and teens we interviewed, video content augmented offline pursuits in a range of important ways. The use of how-to videos was common across all of the groups. In some cases, youth use videos to help them with homework, reinforce or review skills they have forgotten, or support their online learning in school.

- I usually watch YouTube videos, and I think I've been studying a lot of stuff for Japanese and Russian, 'cause I'm trying to learn those two languages right now.
 - -GIRL, 11, BOSSIER CITY, LOUISIANA
- I used to watch videos to help me do some homework, sometimes. That stuff that I don't know, that I forgot....I watch it from YouTube sometimes.
 - -BOY, 10, BRONX, NEW YORK
- Academy, I learn a lot from it when I get confused in class. So it helps [with] school. And other than that, like technical issues, I could search it up on YouTube. It could help me with, like, the computer and stuff like that, if I have any issues with it. And also how to jump-start a car, for example. I needed that one time. So, like everyday issues, I could search up and get help.

 —BOY, 17, BRONX, NEW YORK

Whether younger or older, living in rural or urban areas, and regardless of interests, tweens and teens told us of the many ways they turn to how-to videos to learn new skills, support creative interests, and solve problems. Videos for supporting artistic pursuits appeared to provide an especially important outlet in the absence of afterschool activities and in-person lessons.

- I like to go on my phone, and I also just started learning how to embroider, so I've been looking up stuff on YouTube and Pinterest and learning.

 —GIRL, 13, KNOX COUNTY, ILLINOIS
- I use YouTube a lot 'cause I play guitar. And so I'll use YouTube a lot to learn songs.

 —BOY, 17, PASCO COUNTY, FLORIDA

- 66 I watch how-tos on journaling. I'm really into journaling. And I also like to learn how to make stationery.
 - -GIRL, 13, KNOX COUNTY, ILLINOIS
- I learn a lot of art tricks and techniques off of TikTok and Instagram and YouTube....If I'm really trying to learn how to blend in charcoal or something a specific way, I'll type it into YouTube and then find a short video, usually. 'Cause when they're long videos, I usually don't wanna just sit there and listen to them talk about charcoal for 20 minutes before they actually start getting to the real information.
 - -GIRL, 13, PASCO COUNTY, FLORIDA



Beyond informal learning, play, and hanging out with friends, tweens and teens often described looking for videos that would simply make them laugh. During what has been an unprecedented time of upheaval and stress, the internet's role to provide humorous content on demand has been a hugely important release valve for youth. And while many of these videos and memes may be inaccessible to adults, our interview participants told us of the ways humorous content would help them feel less isolated, decompress from school, and relate to others their age going through similar experiences.

- What I usually watch is [The Amazing World of] Gumball, or just rewatch old things I used to watch. [I like it because] I think he's also in the same grade as me, and it's also a pretty funny show.
 - -BOY, 11, VENTURA COUNTY, CALIFORNIA

- I also like funny stuff, my favorite funny YouTuber is probably CaptainSauce. He does, like, gaming videos, but he makes, like, a bunch of jokes, so that makes it really funny.

 —BOY, 14, BROOKLYN, NEW YORK
- In TikTok, I get laughs out of those, because there'll be some random funny stuff on there, like some animals doing something weird.

 —GIRL, 15, ARLINGTON, VIRGINIA
- For the most part, it's just like funny things that we can relate to. It's not, like, informational. It's just, like, stuff that we all go through, like, day-to-day basis but we don't really talk about, like, out loud, because we might think it's weird or, "who else goes through this?"

 —GIRL, 17, BRONX, NEW YORK

The tweens and teens we spoke with navigate a remarkably diverse information ecosystem using an array of technology to find content that interests them, support their relationships, and enable their learning. When speaking about their daily use, they fluently described deploying different apps for specific purposes and seamlessly moving across various media environments depending on their motives. In addition, they demonstrated a strong understanding of which apps to use for different relationships. For example, YouTube and TikTok are for broader audiences, and Facetime and Discord are for connecting with individual or small groups of friends. As they coped with varying degrees of pandemic-related lockdown, video and video-augmented activities provided a wide range of escapist entertainment and digital social glue to help maintain connections with friends and families. Critically, during this time when their physical and social worlds were constrained, informational and how-to videos seemed to help them make sense of the world, make productive use of the time indoors. and also fill gaps created by the current lack of in-person instruction.



Youth Reflections on Pandemic Changes

Now I'm on it [the computer] like six, seven, eight hours a day doing schoolwork, and then when I get off...
I feel like I can't go outside or I can't do all these things, 'cause it's completely different, the world...

-GIRL, 13, BROOKLYN, NEW YORK

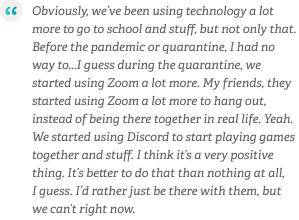
Starting in the spring of 2020, quarantine measures rolled out in uneven ways across the country. For the kids we spoke to during the fall, it was clear that at-home learning was among the most consequential changes to their lives since the beginning of the pandemic. There are obvious issues of equity with at-home learning; limited broadband and device access, media literacy, and parental supervision can all exacerbate existing inequalities. In addition, at-home learning (which may continue through the year in some places) has introduced changes to the youth

media diet, with participants mentioning various forms of educational media such as Khan Academy or Kahoot! taking the place of in-class assignments or discussions.

The pandemic has also had wide-ranging impacts on youth leisure time. Among the various adjustments families have made: many have loosened normal screen time rules. In contrast to prior calls from policymakers to reduce youth reliance on digital devices, public health agencies, including the Center for Disease Control and the World Health Organization, have explicitly encouraged the use of digital technologies such as video chat and gaming to counter social isolation during the pandemic (Fowler & Kelly, 2020). Across our interviews, as tweens and teens reported increases in time spent with various screen-based media, we found them to be thoughtful about how those behaviors stood in contrast to the rhythms of their lives before the pandemic.

How are these youth making sense of the pandemic's new normal? How do they articulate the value of digital media in keeping them connected to friends, family, and school? What do they identify as their key frustrations? What new challenges do they need the most support for?

Echoing other recent efforts (New York Times Coming of Age Project, 2021) to solicit teens' descriptions of the pandemic's impact on their lives, our participants relayed the various challenges they have faced, but also described new opportunities and unexpected bright spots during this difficult time. When noting positive effects, youth often pointed to the crucial role that online platforms and digital devices have played in their social lives, keeping them connected to friends when no other options were available.



-BOY, 17, BRONX, NEW YORK

I think I am probably on my iPad—that's what I use mainly—a lot more because that's the only way I can communicate with my friends. So, I'm probably on it a lot more. And I don't really think the effect has been negative because it is bringing a light to a lot more things that I may have not noticed if the pandemic didn't hit...I probably wouldn't be thinking the way I do. I probably wouldn't wanna be an activist if I wasn't...if the pandemic didn't really hit and people started talking about more....this kind of stuff, like Black Lives Matter and all that kind of stuff.

-GIRL, 13, VENTURA COUNTY, CALIFORNIA



I would probably say since we got shut down in March, it was weird at first for me not being able to go anywhere. I've adapted, I mean, I eventually got over it, but it was...it got really boring at times. So then for me, to cure my boredom and not do anything, I just got on Xbox or something so it probably went up a little bit more than usual because I had nothing going on and I wanted to talk with my friends or see them more...but I don't really think there's anything wrong with that because I was trying to talk to my friends and it was the only way.

—BOY, 14, KNOX COUNTY, ILLINOIS

Others offered that it has been a mixed bag, pointing to the long hours required for online learning and the feeling that they need to cut back on their time spent with screens and social media.

I feel like it's changed since we've been able to be on it for a lot longer than usual. Kinda like a mix [of good and bad] because when we're on it for a long time, it's for school, but when we're off it and we're just playing games, we can talk to our friends.

-BOY, 12, KNOX COUNTY, ILLINOIS

friends. I would text my friends a lot before the pandemic, but now I think I spend most of my time on Instagram; either I'm direct-messaging them or I'm sifting through my For You page. I don't know if it's the greatest effect that it's had on me. I definitely have tried to cut back recently on how much I use it.

—GIRL, 13, PASCO COUNTY, FLORIDA

One teen shared a reflection about how much her technology use has increased because of school and the feeling that she "can't go outside." In particular, she noted increased concern after watching The Social Dilemma (a documentary about persuasive technology design) that was assigned in one of her classes.

I definitely think that my technology use has gone up in quarantine, I was never on my computer that much. I have Google Classroom, my school uses Google Classroom, and that's usually all I would use my computer for....

And sometimes I'd take it to school and we barely ever use it there; maybe we'd use it for Kahoot!....I usually have my phone and I think my screen time has definitely gone up by a couple of hours. Even one of my assignments recently was to watch The Social Dilemma, and that made me think about how many hours I was spending on my phone and all this technology, 'cause I thought it was way too much.

—GIRL, 13, BROOKLYN, NEW YORK

A number of our participants ultimately described becoming bored with mediated interaction after spending so much time online. Many told us that they were missing in-person time with friends and found ways to stave off boredom with various offline hobbies, including learning to play new instruments, developing artistic skills, playing sports when possible, and taking long walks to pass the time.

(Referring to friends] We used to love playing Xbox all day. That used to be great. But now that it's all we really do or have to do, they're always like, 'Oh, I'm so bored of Xbox. I just wanna do

- something else.' So, yeah, I think that's definitely a big change or a big result.

 —BOY, 17, PASCO COUNTY, FLORIDA
- The only thing I worry about is not talking to my friends that live at my neighborhood, 'cause I can't go see them or they can't come see me, so I'm just kinda worried about that. It's just, like, everyone's just gotten quiet.
 - -BOY, 12, BOSSIER CITY, LOUISIANA
- I have to be on screen a lot more than before the pandemic. I miss doing things in person.

 —GIRL, 12, BROOKLYN, NEW YORK
- 66 In the beginning, I was [online] a lot more, but then I started to get bored. So then I decided to learn embroidery.
 - -GIRL, 13, KNOX COUNTY, ILLINOIS

Experiences with online learning varied considerably across our groups, with some students pointing to increased stress, workload, and frustration and others noting benefits of screen-based interaction and a greater ability to manage their time and follow their interests. Those who pointed to mostly negative impacts on their learning tended to cite various difficulties associated with getting their work done online and on time, as compared with the way they previously experienced education in the classroom.

- I don't really like to stay at home now. At first, it was kind of like, "Okay," but I kind of wanna go back to school because I actually want to do work, I don't know why....Online work, I don't know why, for me, it feels difficult to do, but when I'm actually doing it right there in the classroom, it feels so easy.
 - -BOY, 12, VENTURA COUNTY, CALIFORNIA
- It's also affected me with academics as well. It's kinda getting stressing to hop from one class to another digitally...and on top of that, it's a truckload of work that you have to complete by midnight. Sometimes I do finish on time; sometimes I finish late, like around seven or eight, one hour before my bedtime.
 - -BOY, 14, BROOKLYN, NEW YORK

As one of many signs of resiliency that we observed, many participants described an array of unexpected silver linings in their struggles to adjust to changes during the pandemic. This allowed them to reframe their experiences—particularly in relation to impacts on their learning and their social relationships—as a combination of positive and negative effects.

- It's both positive and negative....I've noticed that I have to use a lot more technology to talk to my friends or my family. I've gotten distant from some friends; I've gotten closer to some people. I've actually been more active now. I've been drawing a lot more than I usually do, because I'm always stuck in here; I've actually been reading more. I study a bit more. I'm not the study type, but...I like math a lot. Math is cool.

 —GIRL, 14, BROOKLYN, NEW YORK
- Well, it's been a little bit of both. I mean, it's a bit positive because I [changed schools]....and also because I was never really the best at handwriting.

 —NON-BINARY, 12, VENTURA COUNTY, CALIFORNIA
- With my friend inside their house. And they used to come to my house. Now we only play outside and stuff. And the pandemic made me stay home close to my family and stuff, get to know about my family more. I'm staying with them, home, the whole day. Now I know more about them than before.

-BOY, 10, BRONX, NEW YORK

Many participants expressed a desire to return to a more structured routine that provided more balance between screen time and offline activities once the pandemic is over. Others noted that the time in quarantine had inspired them to want to travel and see more places in person.

I think I'm using it [technology] more because
I'm only like...I have nothing to do, so I'm usually
just on my iPad or phone or just going on the TV.
Yeah, so my mom already told me...it's gonna go
back to normal, how it was usually. And that
was: school days I am not allowed to play on my

iPad, only on the weekends. And it was always like that when I got my iPad and I really liked that routine, but then my mom said, like, "Okay, yeah, you're at home, you're bored." She was like, "I'm gonna give you this iPad. I'm gonna let you play after school and all." And so, yeah....I do look forward to it [going back to normal]. It'll be more organized.

-GIRL, 11, ARLINGTON, VIRGINIA

I think [after the pandemic] it'll [technology use] probably go down because after living in such interesting circumstances that I haven't really experienced before, I'll probably wanna see the world a little bit more and probably not stay on my phone as much and see more places and do a lot of more things that I probably wouldn't have done before.

-GIRL, 13, BROOKLYN, NEW YORK

Hearing that young people look forward to their return to the classroom and want to spend less time online stands in contrast to typical notions of tweens and teens having boundless appetites for screen time. As has been the case with adults, many tweens and teens feel they have exhausted their ability to address their boredom with digital media. They have largely found ways to make the constraints of this time bearable, but online learning has been especially difficult for a subset of youth who have found the stress of remote learning and managing a flood of new communications and deadlines overwhelming. And in terms of social connectivity, the loss of routines and support structures that school usually provides have added to a sense of disconnectedness that some youth report. Educators, parents, and child psychologists have pointed to a range of more serious concerns about the mental health impacts of the pandemic on school-aged children (St. George & Strauss, 2021) that were outside the scope of our interviews, but it is important to note that this is likely to continue to be a major area of concern as the full impact of the pandemic becomes known.

Conversations on Media Representation, Content Creation, and Comment Culture

I feel like I can't really think of a show that's just really gotten what being a teenager is like.

-BOY, 17, PASCO COUNTY, FLORIDA

According to the Pew Research Center, members of Gen Z are more diverse, more likely to reach higher levels of education, and more likely to support progressive causes when compared with older generations (Parker & Igielnik, 2020). They believe the country's growing racial and ethnic diversity is a positive trend, and they are less likely than prior generations to view the U.S. as superior to other countries. As was reflected in the voices of youth who contributed to a recent PBS Newshour Student Reporting Labs report, when youth do not see people like themselves reflected on screen, or when they see people perpetuating negative stereotypes about various racial and ethnic groups, it bothers them (Elbaba, 2019). And as a generation raised with digital

technologies and access to a wide range of media choices, they seek out shows, platforms, and modes of engagement that give them a sense of belonging and authentic connection.

So it makes sense that across our conversations with youth, issues of media representation and participation came up time and time again. Tweens and teens expressed how they want to be authentically portrayed within the media they consume and engage with; how they turn to "real" youth their age for meaningful content; and how they contribute to media in different ways, whether through creating their own content or becoming part of online communities through commenting.

Media representation and teens is not a new topic for researchers and producers. In fact, even 20 years ago, the William T. Grant Foundation (2005, p. 53) funded a project led by Mediascope called *Prime Time Teens: Perspectives on the New Youth-Media Environment,*

in which researchers analyzed scripted broadcast series popular among teens at the time and the role TV producers played in the portrayal of youth. They found that adolescents—who are developing their own identities—are looking to TV characters as a model for themselves, which sparked media industry discussions around the need to create stories and characters with which and with whom the audience can identify (Slate, 2004).



Researchers continue to investigate the impact of representations of youth in media on developmental outcomes, attitudes, and beliefs (e.g., Ward, 2020), as well as the desire of tweens and teens to see more diverse portravals of people their age in media. For instance, Ellithorpe and Bleakley (2016) investigated adolescent viewing data and racial and gender diversity in television targeted at youth, concluding that this age group seeks out media with characters that are members of their own identity groups, which serve as tools for both identity development and social identity gratification. More recently, as a project with the content platform and production company Netflix, Smith et al. (2021) analyzed the inclusion of diverse social identities (i.e., gender, race/ethnicity, LGBTO, disability) across Netflix U.S. original live action content from 2018–2019. This led to Netflix creating a \$100 million fund to improve diversity behind and in front of the camera (Sarandos, 2021).

Youth notice when they see a lack of diversity

Mirroring the shifting focus of the industry, many of our conversations with youth participants underscored the importance of representation. For instance, two teens pointed to a desire for more LGBTQ characters and people of color in media:

- I'd love to see more representation, like with the LGBTQ community, in children's media or overall, because I don't think there's enough. Also, I think people of color...should be represented more in cartoons.
 - -GIRL, 13, VENTURA COUNTY, CALIFORNIA
- include...a lot of like diverse communities. There's Black people, White people, Spanish people, like there's a lot of diversity in the show and not only within, like skin colors and, like races, but also they include LGBTQ people in the show.

 —GIRL, 17, BRONX, NEW YORK

Within the commercial media landscape, youth also criticized how teens and life in high school tend to be portrayed. While recently aired or currently airing live action fiction shows (e.g., Atypical, Euphoria, Never Have I Ever, and On My Block), animated shows (e.g., Big Mouth), and reality shows (e.g., 16 and Pregnant and Teen Mom 2) tell stories of challenging, complicated experiences for youth with diverse identities and backgrounds, we heard from tweens and teens that there is more to be done. As one 17-year-old boy who immigrated to the U.S. noted, the reality of his own high school experience is not often reflected in the shows he sees targeted to his age group on various platforms:

- I think the shows you see on Netflix nowadays, it kind of portrays high school as this glamorous thing where people always enjoy. The actors who play them aren't even real high schoolers or teenagers. They're older...they're in their 20s. So they show like high school is fun and stuff like that, but for some people, it's kind of hard....By hard, I didn't [mean] like education-wise. I also meant, like, socially. Some people have trouble mixing in.
 - -BOY, 17, BRONX, NEW YORK

Similarly, a lot of the criticism we heard about representation related to age. Not all teens watch "teen shows" per se, but those who do would like to see more people their age, rather than actors who are much older, portraying teens.

- I feel like TV shows that show teens, teenagers, never act like that. Let me try to think of a show. I feel like there's two extremes....Shows will either make teenagers act way younger than they do and way more immature, or shows where the actors are 30 and they're playing teenagers. I feel like I can't really think of a show that's just really gotten what being a teenager is like.
 - -BOY, 17, PASCO COUNTY, FLORIDA
- of watching people that are my age instead of watching, like, older people play roles that are supposed to be my age. A very common one is High School Musical, like watching 20-, 30-year-olds play high schoolers. It's just kind of weird.... They're, like, twice our age.

 —GIRL, 17, BRONX, NEW YORK

A few recent tween and teen-targeted television shows have teenage actors in starring roles (e.g., Rowan Blanchard in *Girl Meets World*; Amir Rathaur-Bageria in *Degrassi: Next Class*; Isaac Arellanes in Ghostwriter), and our participants would like to see this move from exception to norm.

Staying away from stereotypes

Tweens and teens expressed frustration about assumptions adults had about them, reflected in personal relationships as well as shows directed to their age group. Tweens and teens linked these misconceptions to the lack of programming that they found truly representative of their experience. They paired their insights with advice for public media stations, suggesting adults engage a range of youth voices to reflect a wider diversity of interests and to avoid appearing to be out of touch with how their generation thinks about various issues.

- When adults assume that we're all the same and hang out together, that's probably one of the bigger misconceptions. We're not all [outgoing], we're not all depressed....It's wrong to assume that we're one-sided.
 - -GIRL, 13, PASCO COUNTY, FLORIDA
- Compared to real life, there's a huge difference, you know.
 - -BOY, 17, BRONX, NEW YORK
- We don't always follow trends; we come up with new ideas.
 - -BOY, 14, BROOKLYN, NEW YORK
- changing. The funny videos and pictures we're looking at online are constantly changing and going out of date. The issue is, when somebody who doesn't understand this tries to create an account for a school, say, like the [school name] account used to do this. They used to have really outdated stuff on their Instagram account that we don't find funny anymore.
 - -BOY, 14, BOSSIER CITY, LOUISIANA
- change, and I feel like sometimes some adults don't really fully understand that. And I also feel like our generation is more open about having mental health issues, and that doesn't mean you're a terrible person if you have depression or something. It's pretty normal. So I feel like sometimes adults think that our generation is just really messed up because of that, but I feel like we're just more open about it.
 - -GIRL, 15, ARLINGTON, VIRGINIA





Beyond seeing authentic representation of the issues they care about, tweens and teens also spoke to us about the importance of the people on shows or social media being relatable, inspiring, and telling stories that mirror the paths they would like to pursue as they grow up:

- That's actually a really big topic 'cause a lot of people look for representation now, that's what I've noticed, and I personally think that I should be able to relate to the person, not through interest sometimes, but through what they think and their opinions on stuff.

 —GIRL, 14, BROOKLYN, NEW YORK
- Chay, so the whole climate change thing: Greta Thunberg, she's only 16 and she's already fighting for and protesting about all this stuff. I think that motivates and inspires me a lot because I love speaking up for things that are not right, and I also joined debate, which also inspired me to make my voice heard, and I think that is so important. I think she's doing what a lot of politicians who are, like, way older than us can't even do. So I think that is a great thing.

 —GIRL, 15, BRONX, NEW YORK

One of the accounts I follow [on TikTok], she's in real estate and she has her own business as well and I found that really, really interesting because I also want to be a businesswoman. I want to have my own company someday and just seeing that she could balance both things, it's like I don't have to settle down for just one. I know I could handle it if I was able to have that opportunity.

—GIRL, 17, BRONX, NEW YORK

Among the more surprising trends for us across the groups when we asked about representation was the prevalence of anime as a genre that many youth identify with. Anime appears to be filling an important gap for many tweens and teens, serving as a form of bridge content that is reflecting more mature themes and issues that matter to them:

- I mean, you could watch anime about gaming, you could watch anime like slice of life, you could watch anime about romance, and I just think it also helps inspire me with my art sometimes. But I think that anime has a wide audience, and I think that they're adding more representation as they go. So I really like to see the representation recently with anime, and I think that's really nice to see, and like I said, there's a lot of genres that you could cover in anime.
 - -GIRL, 13, VENTURA COUNTY, CALIFORNIA

- And for some animes, my friends will recommend it or I'll get it from TikTok or something...and they'll just be like, "Oh these are pretty good animes" or "These are gory, scary animes" and stuff like that.
 - -GIRL, 15, ARLINGTON, VIRGINIA

Creating media content can help address gaps

In some cases, youth also respond to media gaps or a perceived lack of representation by creating their own content. Several of our participants described having their own YouTube channels, while others put a lot of time into crafting videos and stories for social media posts.

- Yeah, I also have my own channel on YouTube. It's like a family channel, so everybody in my family [posts].
 - -GIRL, 12, ARLINGTON, VIRGINIA
- Mostly I do videos of my dog and cooking [for creating on TikTok].
 - -GIRL, 15, ARLINGTON, VIRGINIA

Several boys we interviewed described creating their own gaming videos on YouTube, Twitch, and TikTok. These channels, which often include a combination of gameplay and commentary, can act as a sort of "gateway" platform to other forms of content creation. The ability to record or stream gameplay and audio without necessarily appearing in front of the camera allows a range of options for youth who are just beginning to learn about video and social platforms.

- Yeah, I actually have a YouTube channel....It's gaming, and at first, I didn't really know what I wanna do with it, so I was doing, like, spicy noodle challenges and my spicy noodle challenges have gotten more popularity than my gaming.

 —BOY, 14, BROOKLYN, NEW YORK
- Gaming content, like videos...I stream while I'm playing, for the people, and they'll watch.

 —BOY, 12, VENTURA COUNTY, CALIFORNIA

Other youth participants described a desire to create videos, but felt they lacked the right equipment, editing software, or ability to carry out their vision for the kind of content they would want to share.

- I have thought about making videos, but some things...kinda hold me back from doing so, such as having the proper equipment to executing any ideas I have in my mind perfectly in a way where it can entertain people.
 - -BOY, 14, BROOKLYN, NEW YORK
- I'm having trouble learning programs to make videos. For example, my school, they're giving us Adobe and Photoshop for free, but I have no idea how to use them. It's so confusing. I think I would make videos, but I just gotta learn them, I just gotta learn the programs.
 - -GIRL, 14, BROOKLYN, NEW YORK

Some youth who may not create videos themselves are immersed in videos created by their peers, which has normalized content produced by people they know or those who share their interests.

- I know and they make videos, they make tiny projects and animations. They also make a lot of drawings, which I find just by scrolling through my feed. And in YouTube, I search up stuff. In Instagram, you can search up hashtags, and you can find a whole entire list of stuff related to what you're searching.
 - $-\mathsf{GIRL}, \mathsf{14}, \mathsf{BROOKLYN}, \mathsf{NEW}\,\mathsf{YORK}$
- I've watched some of my friends; some of them have YouTube videos. So I'll watch their YouTube channel sometimes. They make public interviews. Like, they'll go to the mall and ask couples questions....They're creative with their videos, but mostly it's public interviews.
 - -GIRL, 14, SAN ANTONIO, TEXAS



In addition to YouTube videos, creating TikToks is a video genre of its own, with specific norms and subcategories. TikTok was especially popular with the girls we interviewed, who noted that TikTok content and compilations are common across many social platforms. TikToks as a genre tend to be shorter—often set to music—and are designed to be shared and reacted to. Dance challenges are a popular genre within TikTok, as are comedy and educational videos. The lighthearted, fun, and social nature of these videos was evident in our discussions, as teens described the kind of content they create or seek out from friends.

- On TikTok, I always watch my friends' videos and stuff like that. I love seeing them either get a lot of likes or just the fun cool things they're doing. I like to watch everything they're doing.

 —GIRL, 17, KNOX COUNTY, ILLINOIS
- I watch much more often than I post, but I've posted probably about eight dance videos just for fun. My friends, some of my friends, like, post every day, some post once a month, some post never, some post super often [so] that all their videos overwhelm your feed.

 —GIRL, 13, BROOKLYN, NEW YORK
- My friend actually went viral on it....She has her own business line and she makes lip gloss and products like that that she makes by herself. So, from those—it's kind of easy to go viral on TikTok and she just went viral off of, like, sharing her business on there.
 - -GIRL, 17, BRONX, NEW YORK

Commenting culture

In addition to posting and watching videos, commenting and reacting to content that is shared was also described as something that was important to contribute to. In particular, the practice of defending, complimenting, and "hyping up" friends and other peers was described as a form of engagement that even those who do not normally post felt compelled to do:

- I'll comment and like some of their [friends'] videos, and I may watch, like, random peoples' videos, 'cause they're on my For You page. And I comment sometimes if the artwork's good, I'll give them a compliment or something.
 —GIRL, 15, ARLINGTON, VIRGINIA
- Gay it's a TikTok, I guess, sometimes they ask questions, or....I don't really ask personal questions, 'cause it's just like a random person. If it's my friend, usually if it's Instagram...you hype them up to make them feel better about [themselves], and you tell them how pretty they are.

 —GIRL, 15, SAN ANTONIO, TEXAS
- Yeah, I post comments to TikTok....You can duet other people's videos on TikTok, and it'll be like, let's say it was a girl who they don't particularly think is pretty, and they'll just be bringing her down, sometimes I'll comment on those, not often, I normally keep to myself, like, "that was unnecessary," but sometimes I'll comment and be like, "there is no point for you to bring her down.

 —GIRL, 14, SAN ANTONIO, TEXAS

Another popular space for commenting and reacting to—everything from games to photos, videos, memes, and streams—is the Discord platform. Rather than being centered on profiles and algorithmically curated news feeds, Discord allows users to create interest-driven channels or "servers," where members can comment on posts or discuss any number of topics through text, audio, or video chat. As a tool that was originally built for gamers to be able to talk while playing across platforms, part of the appeal of Discord for youth is the more ephemeral and synchronous nature of the audio connection. Discord allows them

to hang out in curated, semi-private spaces where they can be themselves without the pressure of one-on-one conversation or the scrutiny that comes with public engagement online.

66 Before I got Discord, I was talking to my friends on FaceTime, which is still a good thing to communicate on, and then we got this Discord... and I guess that's a positive because I get to do things like communicate with more friends and stuff, and we're just hanging out and playing games.

—GIRL, 15, SAN ANTONIO, TEXAS



66 We do use Discord [chuckle]. I have a friend that, him and I argue a lot about certain things. We definitely have different opinions. But yeah, I typically argue more. I don't think I've ever really put a comment out there online voicing my opinion, because...on Discord, I'll argue, because there's not a lot of people other than the people I message that are gonna see it.

—BOY, 15, KNOX COUNTY, ILLINOIS

Communication platforms that offer a space in between being fully private and fully public tend to mirror the developmental stage that tweens and teens are in as they transition from more protected online spaces to negotiating what it means to manage their own identity online. The different platforms

that they choose to engage with inform their sense of representation, agency, and perceived ability to contribute their voices and opinions on the issues that matter to them. Ultimately, tweens and teens are accustomed to having a great deal of control in how and when and where they express themselves online. By contrast, when they encounter content that is developed by adults without youth input, it often strikes them as perpetuating stereotypes or as being out of touch. Not all kids want to create content themselves, but they largely want to see kids like them featured in and participating in the development of programming. As will be discussed in the following sections, this signals a number of opportunities for public media.



How Youth Make Sense of the Media Ecosystem and Where Public Media Fits

Get back into watching TV, but I do know a lot of people aren't gonna watch PBS anymore, 'cause it's mostly Curious George and stuff like that. It's little kid shows. Compared to us, 'cause we're maybe eight, nine years older than [the intended audience]... they explain things, like simple things, they go in-depth explaining it on an episode where we already understand this and there's not really anything you can learn from watching it.

—BOY, 14, BOSSIER CITY, LOUISIANA

At the heart of this project is the question: how can public media meaningfully communicate its value to tweens and teens today? So whenever possible, we asked our participants directly: what did they think of when they heard the term public media? Many shrugged in response or asked for clarification about what we meant. Others launched into descriptions of favorite shows or channels from childhood, much of which was not public media. And while we were impressed by participants' fluency with using platforms and genres to meet specific needs, we saw that issues of production, ownership, and business models for media were distant concerns. Public media was at best a set of associations, rather than an understanding of local and national stations, or the funding and infrastructure that supports that system.

The youth we spoke with talked about a broad spectrum of issues that they feel are important; the racial justice movement, the environment, the COVID-19 pandemic, and the 2020 presidential election were all mentioned repeatedly. And when speaking about the ways they find information and engage with the topics they care about, this process of sense-making for complex issues and the difficulty of navigating the current media ecosystem emerged as core challenges.

Making sense of a messy media ecosystem

On issues relating to news and politics in particular, tween and teen participants often reported going to different sources and seeking multiple perspectives. This is consistent with earlier research, which showed vouth are especially likely to encounter news through non-news channels and incidental social media usage. but often consult additional sources on issues that matter to them (Cortesi & Gasser, 2015; Madden. Lenhart, & Fontaine, 2017; Boczkowski, Mitchelstein, & Matassi, 2017). Many of the youth participants we interviewed first encountered news stories on YouTube and TikTok, but often sought out supplementary information from established news organizations and family members, which were seen as more reliable sources to confirm stories and understand different points of view.

- I watch YouTube a lot. I watch a lot of YouTube videos about [political issues], mainly by leftist creators, and I follow CNN and Fox to see two different points of view

 —BOY, 17, BRONX, NEW YORK
- I try to not use [TikTok] as a source, though, but yeah, if I see something, I could get info...an idea from there like, "Oh, this is something I might wanna look into."
 - -BOY, 17, PASCO COUNTY, FLORIDA



then I'll see if it's true, and I'll look it up, or I'll ask my parents about it or something. So I'll see a video about something that's going on in China or something that's happening over here in the world and I'll be like, "Huh, that's weird," and I'll look it up and see if it's true. And if it is true, I'll look at something like an article about it or something, or I'll ask my parents about it and they'll, normally they know what's actually going on, and so they'll tell me,..."Oh yeah, that's happening. That's true" or, "That's fake." I guess that's sorta how I get my information."

-GIRL, 13, ARLINGTON, VIRGINIA

Wishing to go deeper into an issue, many of our participants explained the challenges of trying to understand the nuances of an argument. One teen described trying to get a handle on the Black Lives Matter protests, while another talked about trying to reconcile history on TikTok versus history lessons in class:

- 66 Honestly, I don't know what'd be a reliable source because sometimes, in our system, things are learned or supposed to be this kind of way in someone else's favor. So what I would do is I'd probably talk to a source that you can trust. I have my dad. He's Black, so I could talk to him on his experiences, and I think people should be more open to sharing their experiences.

 —GIRL, 13, VENTURA COUNTY, CALIFORNIA
- Will talk about history. And I think the most recent one I saw was about Christopher Columbus, and just talking about how bad of a man he was...I looked at the comments; everybody was like, "I had no idea about this, school didn't teach me this." So I think it'd be great if somebody could create content about the actual things that are going on behind people. That's what I'm talking about, how we don't know so many things that we should know, and then maybe school doesn't teach us. And so that'd be a great thing to watch and learn about.

-GIRL, 14, SAN ANTONIO, TEXAS

Others noted that the rigor they apply to their searching and assessment depends on the nature of the information they are seeking. For instance, youth reported being more careful about political and social justice-related information or researching prospective colleges than they might be about seeking less consequential information.

- I get the facts from [the] Washington Post, USA Today, New York Times if it's like a big political issue. But if it's just little stuff like, "Oh Skywalker Saga's coming out," then I'll just go to whatever gaming website I can find and be like, "Oh it is, cool." It kind of depends on the degree of information that I want to find out because if it's not important then I can just go to a few websites and be like, "Oh, okay," but if it's important, I care about where I'm getting information from.
 - -BOY, 16, KNOX COUNTY, ILLINOIS
- I am an aspiring activist. I really do care about the world. I believe that the media does help me....It has helped me notice what is wrong with the world or...not wrong, but something we should work on. I care about my family and I also care about the rights for other people and minorities, and I do think social media can lead you to realize that, but it can also sometimes give you false information. So I think that you should also independently work on educating yourself, and it's good to be educated by others.

 —GIRL, 13, VENTURA COUNTY, CALIFORNIA
- Google...basically, what I've been doing is, like, looking at the websites and if they're, like, reliable or not, then I would look into them, but I wouldn't only just rely on that one website. I would look through a couple more and if I see there's, like, a pattern there. Then I would like be like, "Okay, this is kind of, like,—this is looking pretty accurate."
 - -GIRL, 17, BRONX, NEW YORK

Still, there was some confusion around what constitutes opinion versus reporting, and around partisan perspectives when seeking out information. One teenager noted that she expects news stories to be less biased than Youtube:

And like, for my information I go to more, like, newspapers, like New York Times, Fox News, stuff that aren't opinion-based, because I would watch YouTube videos on it, but they're mostly like people are making the videos to support their opinion.

-GIRL, 14, SAN ANTONIO, TEXAS

Many of our youth participants also expressed fatigue with navigating information sources, noting that opinion seemed to eclipse facts on YouTube. Awareness that they need to be on their guard for potential misinformation seemed draining, and quite a few wished for a safe space. Often turning to parents or peers to help find reliable information, a space for this in their media ecosystem seemed lacking. Because of its conversational nature, Discord was mentioned as a place for more fruitful discussions and debates, usually among a more selective group of peers than the broader audiences of TikTok or YouTube.

The tweens and teens we spoke with were often very sophisticated in their understanding of different purposes and audiences of the apps they used, but less so about the business models. One constant was the confusing notion of what the tradeoffs are with "free" content (which is confusing to adults as well). With the exception of services like Netflix and Amazon Prime and, to a lesser extent, cable channels, tweens and teens reported mostly not paying for the apps they use.

- I don't really like buying apps 'cause I feel like I download apps and then I'll delete apps so quickly that if I download one and pay for it, I'll probably be like...a month later,..."Why did I do that?"
 - -GIRL, 13, PASCO COUNTY, FLORIDA
- I try to find alternatives to paying for it.
 I'm a teenager! I'll try to find something else.
 —GIRL, 15, BRONX, NEW YORK

Yeah. It's usually free stuff. But I only spend money when I want something in the game.

-BOY, 12, KNOX COUNTY, ILLINOIS

When asked how "free" apps make money, some tweens and teens were surprisingly savvy, noting the role of personal data collection and advertising. Youth who played games, and particularly those who used Discord, seemed to have a better understanding of the app ecosystem and their underlying business models. When asked whether they ever pay for apps, most affirmative responses related to in-game purchases. Others had not thought through the implications of services that seem "free." A conversation between a group of 14- and 15-year-old Girl Scouts reflected the general understanding most teens expressed:

- Okay. So I know TikTok is free, but they have ads, so that's how they make money. And Netflix, it costs money, but my parents pay, obviously [chuckle].
- Yeah, I think YouTube and TikTok are free, but they have ads, so they're still making money. But everything else, like Netflix and Amazon and all that stuff, we have to pay for it.
- Yeah, mobile apps are pretty much free but with ads, and just the streaming services, people have to pay for them.
- I've heard things about TikTok, I don't know if it's true, but...creators that have millions of followers, they go live and you can give them coins, but you have to buy them...So if you give coins, you get your popular creator's attention, they'll notice you.

In their discussions of TikTok, none of our participants mentioned its unique use of influencers for their ads, likely because the ads appear in feeds as regular videos so users "don't even recognize" they are watching them (Epstein, 2020). While TikTok users heavily relied on



the "For You" recommendations, few questioned how recommendations happened. In contrast, many teens we spoke with understood the relationship between ads and supporting their favorite YouTube influencers.

- I feel like they [ads] are annoying, but they're important to the YouTubers 'cause they get money from them.
 - -BOY, 12, KNOX COUNTY, ILLINOIS
- They make money because they put ads in the—just anything. If you're on Snapchat, there's ads after you watch people's stories; on Instagram when you're scrolling, there'll be an ad in between the posts and so forth.

 —BOY, 14, KNOX COUNTY, ILLINOIS

YouTube influencers have effectively communicated to their fans that ads served on their videos are how they get paid. Aside from supporting their favorite personalities, however, clarity around business models for the apps teens use and the media they engage with was rare in our interviews. Some teens demonstrated a piecemeal understanding of particular apps, rather than the media ecosystem more generally. A collateral effect of this general confusion around business models for apps might be a lack of appreciation for non-commercial offerings of tax-supported and donor-funded public programming.

Public media generally doesn't play a role

When asked what the phrase public media meant to them, the majority of participants hesitated or expressed confusion. Others used deductive skills to determine what the phrase might mean, while some grabbed their phones and searched for show names, reading each title aloud and reflecting on whether they'd watched it or not. Even some who were confident in their responses assumed that any kid-focused program was public media.

- I'd say public media...[I] just think of where people can just voice their opinions either on a show or...like I don't really think I would say any Disney Channel, or Cartoon Network. They don't really talk about opinions since it's more of a show network and they'd probably get canceled if they...said anything, but I'd say it's more where people can voice their opinions and just really start an argument about anything.

 —BOY. 15. KNOX COUNTY, ILLINOIS
- Yeah, I'd say ESPN is a sports one and that's public....Everybody can watch that. I mean, the news, that we have multiple news channels... so that's what I would say and then there's Disney channels.

-BOY, 14, KNOX COUNTY, ILLINOIS

Similarly, a brother and sister's conversation in Pasco Country, Florida, reflected how several teens responded:

- When I heard [public media], I just thought social media, I guess, but a bit wider....I'm not sure exactly what it means, but...just a broad thing, like people share with each other, I guess. That's what I would think.
 - −BOY, 17
- 66 I guess I would say the same thing as [my brother], just like a broader spectrum of information, from different—from all around the world.

-GIRL, 13

The specific ways that youth mistook public media, however, were instructive. Repeatedly, we heard youth fondly describe experiences of enjoyment and heard them focus on education and trust. These warm associations do seem to carry into the commercial media they have aged into.

Once prompted with examples, such as PBS, NPR, popular national shows, and their local networks, many tweens and teens then expressed a positive association with the PBS brand. They also described who introduced them to particular media, remembering media watching when they were younger with family or educators rather than simply with peers. Why were these shows so compelling and why do teens continue to remember them so fondly? Many tweens and teens associate the programs with early learning experiences. For instance, one 12-year-old boy in a STEM program in Louisiana said that he appreciated that each *Curious George* episode had a problem and a solution. Similarly, our discussion with a scout troop in Texas revealed that watching *Dinosaur Train* served as one girl's first childhood exposure to dinosaurs. Others associate watching PBS with family time and childhood, blending experiences with parents, grandparents, and siblings with their memories of specific shows.

- I still watch Cyberchase sometimes, I'm not gonna lie [chuckle]. It's a really good show. I honestly really like that show. It was funny. It had really relatable topics to math and it actually helped me once, so I was really happy with that, and I guess everything about that show was just nice, in my opinion.
 - -GIRL, 14, BRONX, NEW YORK
- I'm like a really big baby, so I still watch my old kid shows like Wow! Wow! Wubbzy! And stuff like that.
 - -GIRL, 15, ARLINGTON, VIRGINIA
- It's really weird to me that something just as simple as a talking train or an anteater on public broadcasting can make me so nostalgic... it's very warm and cradling, I guess you can call it.

 —BOY, 16, KNOX COUNTY, ILLINOIS

Hovering between childhood and adulthood, a few of our participants shared that they still find comfort in watching shows from their recent past. Others noted that they used to rely on the PBS Kids app, and a few teens we spoke with continue to engage with more adult programming on PBS. Talking about their viewing and listening experiences, these teens tied television and radio shows to family time and cherished routines.

- One of my favorite shows on PBS was always Arthur; now I like to watch cooking shows on PBS, too. We have the PBS Kids app and we would use it sometimes.
 - -GIRL, 13, KNOX COUNTY, ILLINOIS
- 66 I like cooking shows; me and my mom watch cooking shows every week. I like the competition aspect. I like that a lot.
 - -GIRL, 17, KNOX COUNTY, ILLINOIS
- I have a little Google in my room that I like. You say good morning and you can have it set up different news stations. I just have NPR on it.

 And when I'm in the car, on a road trip, I listen to shows like, Wait Wait... Don't Tell Me! And stuff like that.
 - -BOY, 14, BOSSIER CITY, LOUISIANA

Yet, despite these positive associations, the majority of our participants did not mention public media stations when describing their preferred information sources or what they like to watch or listen to. Among those who had some prior experience with public media, most thought of it as nostalgic rather than relevant to their current information and entertainment needs.





Why public media might not resonate for some

Most of the tweens and teens we spoke with said they stopped watching PBS around the age of 10, unless they watched with younger siblings. They primarily stopped watching because they could no longer relate to the shows. Growing out of kid shows means being caught in the middle of public media programming that is either aimed toward younger children or adults.

- I've grown out of the side that caters to kids and moved on to stuff that suits older audiences like documentaries and reality shows. I do occasionally happen to stumble by kid shows from PBS, but that's basically it.

 —BOY, 14, BRONX, NEW YORK
- I used to watch Sid the Science Kid and Lab Rats...maybe. When I was younger, I used to love those shows. I don't know, if there were shows like that for my age now, I think I'd probably watch them. I don't know if there are.

 —GIRL, 13, BRONX, NEW YORK

Youth generally expect more interactivity from their media, including creating their own content, commenting, and sharing. Many teens said they simply do not watch TV any more, including public media and cable TV, finding it irrelevant. And those who do mention watching TV are typically referring to streaming services like YouTube, Netflix, and Disney+.

66 Right now, or recently, I don't really watch TV, so... I don't know what's on there anymore. I used to watch it, as a kid; then I started growing up and I just stopped watching television.

—BOY, 13, VENTURA COUNTY, CALIFORNIA



At a time when developmentally, tweens and teens are seeking diverse perspectives for information and deeper social connections, current public media offerings fall short. Our participants had grown out of children's programming, and while interested in more mature content, they sought documentaries that were more accessible for their age group (a few participants mentioned The Social Dilemma as an example).



66 I feel like a lot of documentaries are for people who are older than me, and a lot of the words are confusing, and I feel like I would like documentaries, but I feel like they're too advanced for me.

-GIRL, 13, BROOKLYN, NEW YORK

The tweens and teens we interviewed also sought greater representation in their media, as stated earlier. While other aspects of their media ecosystem offer interaction and an opportunity to create and participate, for many, public media was a flat space, something fondly remembered from their childhood, but not necessarily in tune with the rhythm of their daily lives.

Opportunities for public media to better communicate its value

While the youth we spoke with were unable to articulate the differences between "public" media and the commercial apps and services they use, by frequently confusing PBS programming with children's programming on Nickelodeon, Disney+, or Cartoon Network, they demonstrated a tendency to associate public media with programming they value. Tweens and teens described programs they enjoyed as children or shows their family watched together. They also described the idea of public media as an ideal information space where people could share views and multiple voices were heard. Youth descriptions reflected certain values they associated with public media, even if the shows they named were from commercial channels.

Public media could build on its reputation by creating a trusted space for youth seeking reliable information and a place where they do not need to be on their guard. Public media is already a space known and trusted for a diversity of voices in its programming. In 2020, it provided resources across its networks for discussions of race, inequality, and prejudice. There is an opportunity here to amplify how public media moves beyond binaries into the nuance of issues, since this seems to be missing, but much desired, in youth media experiences.



Advice for Public Media from the Missing Middle

Make it more up-to-date...I would say, things that you all think and you all want our generation to be educated on and to know about....Not super adult, but not something super childish.

—GIRL, 14, SAN ANTONIO, TEXAS

The early pillars of public media programming for children—shows like Sesame Street and Mister Rogers' Neighborhood—incorporated studies of early childhood in their development and writing to best reach their young audiences. In 1966, Joan Ganz Cooney's landmark report, The Potential Uses of Television in Preschool Education, provided a rationale, research base, and blueprint that would inspire radical change across the public media ecosystem (Cooney, 1966). At the heart of this inspiration was a desire to use television to "stimulate the intellectual

and cultural growth in children of preschool age."

Continuing this strong tradition, the tweens and teens in our focus groups were treated as experts of their own experiences. We invited them to reflect on not only what they liked to watch, play, and listen to, but also why they chose certain kinds of content and platforms over others. This led to discussion about perceived gaps in the current media ecosystem and where public media could leverage its unique strengths to respond to some of these needs.

Across our many conversations, one of the most frequent requests was for public media to create programming that addresses the everyday challenges tweens and teens face. Youth told us that making these shows feel relevant would require a sense of authenticity in the topics covered as well as who is presented on screen.

- Shows on PBS that are, like, advice on how to go through something that most people my age would go through. Stuff kinda like how to survive middle school.
 - -GIRL, 11, BOSSIER CITY, LOUISIANA
- I had an idea, too, about, like, maybe YouTube or something, like being a kid our age trying to make a success out of YouTube, or maybe a kid our age just trying to survive middle school or something, 'cause I just got into middle school.

 —GIRL, 12, BROOKLYN, NEW YORK

As mentioned earlier, the youth we interviewed said they "prefer watching people that are my age" to watching "older people play roles that are supposed to be my age." And as one 17-year-old girl from the Bronx noted, the language that adult creators use when creating youth-focused content also matters. She felt that even when adults who create shows for her age group have an understanding of what it means to be a young person today, they still "don't know how to word it correctly for us to relate to."

Several teens described wanting a show that would reflect what a regular day is like for kids their age and the various challenges they encounter. Across our focus groups, girls spoke about wanting to see more discussion of building confidence and navigating changing gender norms, saying that this is an area where public media could make a unique and impactful contribution.

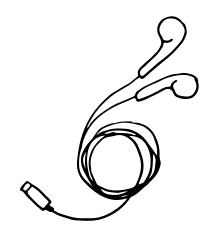
Talking about confidence...I feel like a lot of people our age, their confidence has gone way up. I feel like everybody's getting so much better at girls supporting girls, and boys are more... they're more aware of situations. They know being a girl is different, but then girls also know... [that] boys, they feel like they have to keep their feelings inside. So, I feel like everybody recently has been supporting each other. Girls will be like, 'guys, it's okay if guys cry, guys can cry too,' and then boys are like, 'we understand why girls don't feel safe at parties or won't give a boy their cup to hold at a party.' Everybody is just

so much more aware, and I feel like a [focus on that] would...it would just be more inspiring for people.

-GIRL, 14, SAN ANTONIO, TEXAS

However, as noted in the previous section, the tweens and teens we interviewed were also careful to note that there is not one experience of what it means to be a kid today, and that diversity is something they would like to see reflected in the shows they watch.

- I feel like there's a lot of different kinds of teenagers and it's hard to say....An adult might have an assumption that's right for one kid and not another.
 - -BOY, 17, PASCO COUNTY, FLORIDA
- Maybe something that would, like, make kids feel comfortable enough to want to join in on conversations, like LGBTQ, because we don't really have many resources on those either, like besides school counselors. But sometimes even then you don't feel comfortable enough....[They should include] people from all religions, skin colors, regions like worldwide, also, like, having trans people on there, gay people, queer people, like stuff like that.
 - -GIRL, 17, BRONX, NEW YORK
- I think in a lot of shows, they don't really have a lot of people that [have] the same interests as me....They're all usually the same.
 - -GIRL, 11, BOSSIER CITY, LOUISIANA



Several tweens and teens also recommended that public media focus on content that addresses current events, politics, and other issues of interest, whether through youth-focused news reporting or in the representation of different ideologies and cultural experiences.

- What I also think they should do is bring in real-world issues to spread awareness, and then basically give [youth] lessons on how they can solve these real-world issues, like more efficiently. One thing I have in mind is trust issues and the other is basically [the] environment. How the environment's changing.
 - -BOY, 14, BROOKLYN, NEW YORK
- That's why I like watching YouTube most of the time, because you'll find a lot of references to politics or what people are doing.

 —BOY, 15, KNOX COUNTY, ILLINOIS
- I don't see a lot of culture now in shows, that would be really nice, just seeing different cultures and...how they dress, how they look, how they act.
 - -GIRL, 14, BROOKLYN, NEW YORK

Youth are growing up in vastly different media environments than those who are producing content for them. Accustomed to the pervasive personalization of media content and delivery, the teens we spoke with had clear ideas about the genres they would like to see and how best to deliver content to their age group. In addition, they were often careful to distinguish their personal tastes and recommendations from what they saw as lacking in commercial media options.

- things. They always have informational shows.

 I feel like you could keep doing informational shows for older kids...but just kind of more teenager-based.
 - -BOY, 14, BOSSIER CITY, LOUISIANA
- When I think of public media, I think of international news stories...so when you have a story...you could tie it to a music thing or an art thing....You could... bring in a young person who could paint with [an] expert.

 —GIRL, 13, PASCO COUNTY, FLORIDA



I feel like [for animation] there's just a kid section and then there's an adult section....At my age right now, I'm really into anime. So I feel like that can be for anyone....And I think most of the stuff people [my age] are watching [is] what I see on Nickelodeon, it's mostly comedy, and I think it's really bad comedy. I wouldn't watch it.

—GIRL, 13, VENTURA COUNTY, CALIFORNIA

Compared with the shows they loved in early child-hood, tweens and teens seek more developed "mature" scripts, with sophisticated storylines that do not reset at each episode. Enthusiasm for rom-coms, comedy, horror, and fantasy was consistent in our conversations. Regardless of the content, the message was the same: tweens and teens felt they had matured past the often simple story lines directed at their age group.

- One thing that I've noticed a lot now with TV shows was how simple they're making them now. I'm not sure, is it because people, sometimes they're [limited by] budgets? But if you make it visually pleasing, people will love it, too....If you give it a unique purpose and a unique theme, then yeah, it would do actually really good.

 —GIRL, 14, BROOKLYN, NEW YORK
- I still like watching Disney, Disney XD,
 Cartoon Network, but I'm moving onto
 harder scripted shows.

 —BOY, 15, KNOX COUNTY, ILLINOIS
- I like the shows [like All American, DramaAlert, and Who's Better?] that have a whole prompt or story through the whole thing. It's leading up to some story. Some shows reset and then the story is gone.
 - -BOY, 14, KNOX COUNTY, ILLINOIS
- 66 For younger audiences, make it more interesting, so it would get older people more interested; make a twist; make it have a story, so every episode builds on the last one, like The Mandalorian builds on the last episode.
 - -BOY, 12, BOSSIER CITY, LOUISIANA



Another frequent suggestion was for public media to develop new educational content that would help young people strengthen various technical and practical skills. Requests for life skills training ranged from weatherproofing boots and fixing cars to career and college information. Notably, many of the skills youth mentioned were quite specialized or something that would not usually be found in schools. A focus on these topics was suggested as one way for public media to find a niche within the world of informational how-to videos, essentially helping kids "learn how to learn" while supporting a variety of needs and interests.

- I thought it would be cool if they added more craft and more cooking shows for kids....I think they should make more videos about learning how to use technology.
 - -GIRL, 11, KNOX COUNTY, ILLINOIS
- I was thinking about stuff like skills, shows that could teach other teens useful skills like how to do taxes or what's the stock market, or how to do plumbing, things they don't teach at school anymore. So, useful everyday skills that could help other teens get ready for the adult life on their own.
 - -BOY, 17, BRONX, NEW YORK
- [I would like] something related to health care because that fascinates me a lot. I watched Grey's Anatomy and loved the show. Would love to watch shows about doctors because I want to be a doctor someday.
 - -GIRL, 15, BRONX, NEW YORK

Beyond sharing advice for how public media can respond to existing gaps, our youth participants were enthusiastic when asked about being directly engaged in that work themselves.

- I really like animals and I would like to make a show about some animals that are really rare....

 People that don't know these animals, then they will know after they watch the show.

 —BOY, 10, BRONX, NEW YORK
- Maybe an app for teaching children basic programming set. I would want it to be in a cartoony style with a robotic world or maybe sci-fi.
 - -BOY, 11, BROOKLYN, NEW YORK
- I think they just need more music-related things.

 And if I could make something, I would make a guitar-teaching TV show.
 - -BOY, 11, KNOX COUNTY, ILLINOIS
- own show, it'd probably be something like an animation... I don't know what kind of genre, but I'd probably use the characters I've made because I like to draw."
 - -GIRL, 13, VENTURA COUNTY, CALIFORNIA
- Stuff I would want to make
 TV shows about are acceptance
 [of different] races, nationalities.
 In today's world, there's a lot
 of discrimination. People get
 hated on because they're a
 certain race....We're all the
 same; we shouldn't be divided.

 —BOY, 13, BROOKLYN, NEW YORK
- I would like to be a part of the voice of public media.
 - -BOY, 11, KNOX COUNTY, ILLINOIS

Youth wish to be taken more seriously by adults around them, including those producing media for them. As one teen in Illinois pointed out, they are exposed to mature content on a daily basis, and it would be helpful if they were better supported by their information and entertainment sources. Teens already use media to connect with and make sense of the world, and they are increasingly accustomed to seeing their peers on screen. Teens referenced TikTok, YouTube, and conversations with peers, teachers, and family members as part of how they processed new information about issues they care about. How can a more participatory public media model become an essential component of this learning and sensemaking process for youth? Just as Sesame Street and Mister Rogers' Neighborhood forever changed children's media by creating a novel space for them to learn, how might we support an evolution in how public media approaches teen and tween programming? And how can we create the conditions for lifelong engagement with public media?





Implications and Opportunities for Public Media

Through the generosity of our youth participants, we were given a window into what life with media looks like for those who are growing up during a global pandemic. This perspective represents a moment of exceptional media immersion when tweens and teens were largely unmoored from prior screen time limits during their free time while also being required to spend many hours each day tethered to online learning platforms. Given these new obligations and freedoms, we found our young participants to be fluent in describing the positives and negatives of this new reality. They were eager to share how they spend their time, what they find interesting, and what they had learned how to do or create through their access to media during this unique period in their lives.

At the same time, the quality of connectivity youth relied on to support their online engagement was far from universal. Most participants joined our Zoom calls from what appeared to be the home spaces they used for school—dining room tables or desks in their bedrooms—some participants spoke to us from the community centers that provided their sole source of high-speed internet connectivity. Other participants in rural areas did not have reliable broadband, and in some cases, we had to continue our conversations over the phone when connections were not stable enough.

Findings from our literature review and focus group interviews suggest that public media programming, in keeping with its mission to provide universal service, continues to be a critical source of information and entertainment in homes lacking fast broadband connections or cable. Yet, one thing the pandemic has made glaringly clear is how essential robust online connectivity is to an array of critical educational, economic, and social opportunities for youth. As the public media community considers various pathways to engage and uplift young audiences, there is an opportunity to align with the larger movement for

universal broadband, as this infrastructure will be essential to ensuring equitable access to programming and opportunities for youth participation.

Through all of the varied media activity we heard youth describe in our interviews, the centrality of online video in their lives was one constant. YouTube. streaming services, and short-form video-based social media like TikTok reign in tweens and teens' lives. These platforms' sophisticated personalization and recommendation algorithms, combined with the increased dominance of video in search results, has elevated the role of video in information-seeking and learning online. We were struck by the role that how-to videos play in supporting self-driven learning and demystifying complex tasks such as completing college applications or learning how to code. As young people increasingly turn to video to augment their offline learning, public media could identify priority areas where trusted, short-form video content could be made readily accessible to those seeking resources through mainstream video and **social media platforms.** Indeed, when youth were asked for their advice regarding the kind of content they would like to see public media provide, many mentioned the desire for short-form videos that could help them address everyday challenges such as help with homework, explore career interests, and learn new technical or creative skills.

Another area that is ripe for public media innovation is the support of critical media literacy and fluency skills. Youth appear to be finding ways to cope with the current chaos of the information landscape. They have figured out how to tune in to the media they like—scanning broadly based on recommendations and then homing in on what appeals or meets a need—and then deploying a secondary set of strategies and sources for pursuing topics or questions they care about. However, they are not always confident in those choices. Moving forward, there is a clear role for public media to simultaneously expand the availability of trusted and reliable information on the issues youth care about and help equip them to navigate complex information ecologies.



Overall, our interviews suggest that there is a significant gap in youth understanding of the value of public media as something distinct from commercial media. Public media as a concept does not resonate with most youth, even among those who enjoyed public media programming when they were younger. Those with prior public media exposure generally have positive associations with shows and characters from their early childhood, but most dropped off as viewers in elementary school and do not currently see their interests reflected in the offerings of their local stations. These gaps should be taken into account when designing messaging for tween and teen audiences. In order to engage youth audiences, public media may first need to make the case for why public media matters and why contributions from youth voices are important.

A key piece of communicating authenticity and also responding to the gaps youth currently observe in their media landscape will be responding to the problem of representation. One disconnect we observed is that youth feel heard in their own online spaces, but not necessarily in their offline world, where they do not feel they can be their true authentic selves. The pandemic has super-charged this bifurcation as youth have invested more time in creating and curating their social worlds online. In addition, our



participants felt that they are often portrayed in stereotypical ways by adults creating TV shows and movies, using well-trodden narratives and tropes that they found unsatisfying. Along with more diverse characters, they would like to see programs that tackle relevant teen issues (building self-confidence, navigating friendships and romantic relationships. advocating for social and political issues they care about, etc.). And they want to see these topics presented by or characters portrayed by appropriately aged teens, rather than young adults. New programs and initiatives that invest in authentic engagement with vouth without tokenizing them or perpetuating stereotypes are likely to help differentiate the public media brand and build lasting trust with this audience as it ages.

Among the many questions for the public media community as it pursues greater engagement with tweens and teens is how to best scaffold and support youth voice. What we learned in our interviews was instructive. For all of the challenges associated with online learning during the pandemic, we found that many tweens and teens have acquired a new set of skills connected to self-presentation on camera and the ability to take turns in group conversation online, often while participating in chat or other platforms for sharing text-based feedback. By partnering with a range of youth-focused organizations, we were able

to include voices not typically represented in media research (including youth from first-generation immigrant families, those living in rural areas and youth with disabilities). Participants were grateful for a chance to be heard and often surprised that we were taking their opinions seriously. Newly honed fluency in self-expression through video can be leveraged by public media to both solicit youth perspectives on future initiatives and to amplify a wider range of self-produced content from youth participants who may not have access to school-supported production programs.

Looking ahead, the public media community can also draw upon the pioneering work of existing youthfocused initiatives within the public media ecosystem. Many public media professionals have been champions for youth-focused projects and programming. Their work, taken in concert with the findings of this report and other insights into contemporary youth media practice, can form a vision for future investments. These investments should work to translate what we now understand about youth and media into support for professional networks, technical infrastructure, and strategic leadership and collaboration. We can imagine an ecosystem where youth not only understand why public media matters, but also see themselves as an essential part of creating and sustaining that value for future generations.

/ REFERENCES /

- Auxier, B., & Anderson, M. (2020, March 16). As schools close due to the coronavirus, some U.S. students face a digital "homework gap." Pew Research Center: Fact Tank. https://www.pewresearch.org/fact-tank/2020/03/16/as-schools-close-due-to-the-coronavirus-some-u-s-students-face-a-digital-homework-gap/
- Browning, K. (2020, October 12). The digital divide starts with a laptop shortage. *The New York Times*. https://www.nytimes.com/2020/10/12/technology/laptops-schools-digital-divide.html
- boyd, danah. (2014). It's complicated: The social lives of networked teens. Yale University Press.
- Buckingham, D., Bragg, S., & Kehily, M. J. (2015). Rethinking youth cultures in the age of global media: A perspective from British youth studies. *Diskurs Kindheits- Und Jugendforschung*, 10(3), 265–277. https://doi.org/10.3224/diskurs.v10i3.20183
- Chandra, S., Chang, A., Day, L., Fazlullah, A., Liu, J., McBride, L., Mudalige, T., & Weiss, D., (2020). Closing the K–12 digital divide in the age of distance learning. Common Sense Media and Boston Consulting Group.
- Clapman, L., (2020, August 31). Seeing and hearing our diverse, compassionate Gen Z storytellers. The Joan Ganz Cooney Center at Sesame Workshop. https://joanganzcooneycenter.org/2020/08/31/seeing-and-hearing-our-diverse-compassionate-gen-z-storytellers/
- Cooney, Joan Ganz. (1966). The Potential Uses of Television in Preschool Education. The Joan Ganz Cooney Center at Sesame Workshop. https://joanganzcooneycenter.org/wp-content/uploads/2019/11/jgcc_1966report.pdf
- Corporation for Public Broadcasting, (2019). About public media. https://www.cpb.org/aboutpb/what-public-media
- Davison, P., Bulger, M., & Madden, M. (2020). Navigating youth landscapes: Challenges and opportunities for public media. The Joan Ganz Cooney Center at Sesame Workshop. https://joanganzcooneycenter.org/publication/navigating-youth-media-landscapes/
- Elbaba, R. (2019, November 14). Why on-screen representation matters, according to these teens. *PBS NewsHour*. https://www.pbs.org/newshour/arts/why-on-screen-representation-matters-according-to-these-teens
- Ellithorpe, M. E., & Bleakley, A. (2016). Wanting to see people like me? Racial and gender diversity in popular adolescent television. *Journal of Youth and Adolescence*, 45(7), 1426–1437.
- Epstein, A. (2020, October 23). TikTok is a sleeping e-commerce giant. Quartz. https://qz.com/1918570/how-businesses-are-leveraging-tiktoks-growth-to-drive-engagement/
- Erikson, E. (1968). *Identity: Youth and crisis*. Norton.
- Fowler, G. A. & Kelly, H. (2020, April 9). "Screen time" has gone from sin to survival tool. *The Washington Post*. https://www.washingtonpost.com/technology/2020/04/09/screen-time-rethink-coronavirus/
- Ito, M., Mahendran, D., Finn, M., Horst, H. A., Yardi, S., Baumer, S., Bittanti, M., Cody, R., Stephenson, B. H., & Lange, P. G. (2009). Hanging out, messing around, and geeking out: Kids living and learning with new media. MIT Press.
- Kentucky Educational Television. (2021). News Quiz. https://education.ket.org/newsquiz/
- $\label{lem:madden} Madden, M., Lenhart, A., \& Fontaine, C. (2017). \ How youth navigate the news landscape. Knight Foundation. \\ https://knightfoundation.org/wp-content/uploads/2020/03/Youth_News.pdf$
- Michikyan, M., & Suárez-Orozco, C. (2016). Adolescent media and social media use: implications for development. Journal of Adolescent Research, 31(4), 411–414. https://doi.org/10.1177/0743558416643801
- Moshman, D. (1999). Adolescent psychological development: Rationality, morality, and identity. Erlbaum.
- New York Times Coming of Age Project. (2021, March 7). Teens on a year that changed everything. New York Times. https://www.nytimes.com/2021/03/08/learning/teens-pandemic-art.html
- Ofcom. (2019). Children's media lives—Wave 5: A report for Ofcom. Office of Communication.
- Parker, K., & Igielnik, R. (2020, May 14). On the cusp of adulthood and facing an uncertain future: What we know about Gen Z so far. Pew Research Center. https://www.pewresearch.org/social-trends/2020/05/14/on-the-cusp-of-adulthood-and-facing-an-uncertain-future-what-we-know-about-gen-z-so-far-2/

- Rideout, V., & Robb, M. B. (2019). The Common Sense census: Media use by tweens and teens, 2019. Common Sense Media. https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens-2019
- Sarandos, T. (2021, February 26). Building a legacy of inclusion: Results from our first film and series diversity study. Netflix. https://about.netflix.com/en/news/building-a-legacy-of-inclusion
- Slate, L. (2004, July 24). Academy presents forum on teen viewing study. Television Academy. https://www.emmys.com/news/academy-presents-forum-teen-viewing-study
- Smith, S. L., Pieper, K., Choueiti, M., Yao. K. Case, A., Hernandez, K., & Moore, Z. (2021, February). Inclusion in Netflix original U.S. scripted series & films. USC Annenberg, Netflix.
- St. George, D. & Strauss, V. (2021, January 21). Partly hidden by isolation, many of the nation's schoolchildren struggle with mental health. *The Washington Post*. https://www.washingtonpost.com/local/education/student-mental-health-pandemic/2021/01/21/3d377bea-3f30-11eb-8db8-395dedaaa036_story.html
- Ward, L. M. (2004). Wading through the stereotypes: Positive and negative associations between media use and black adolescents' conceptions of self. *Developmental Psychology*, 40(2), 284.
- Ward, L. M., Tran-Dubongco, M., Moss, L., & Cox, V. (2020). Media use and the development of racial and ethnic attitudes and stereotypes. *The International Encyclopedia of Media Psychology*, 1–12.
- Weinstein, E. (2018). The social media see-saw: Positive and negative influences on adolescents' affective well-being. New Media & Society, 20(10), 3597–3623.
- $William\ T.\ Grant\ Foundation.\ (2005).\ Annual\ report\ and\ resource\ guide\ 2004-2005.\ https://wtgrantfoundation.\ org/library/uploads/2015/11/2004-Annual-Report-William-T.-Grant-Foundation.pdf$
- WNET Education. (2021). Youth collective. https://www.wnet.org/education/youth-collective/
- Wyllie, J., & Everhart, K. (2020, December 3). In PBS' 50th year, Paula Kerger sets course to "speak to the moment of what is happening now." Current. https://current.org/2020/12/in-pbs-50th-year-paula-kerger-sets-course-to-speak-to-the-moment-of-what-is-happening-now/
- Youth Media Professional Learning Community (PLC). (2019). Public media station youth media professional learning community: Findings report. Corporation for Public Broadcasting.

Study Design & Methods

Due to the health risks associated with meeting in person during the COVID-19 outbreak, we leveraged an online and telephone interviewing structure to cast a wide net of interview subjects recruited from varying regions across the United States. Three researchers from the Joan Ganz Cooney Center conducted online video-based and phone-based focus group interviews with a total of 50 youth participants, including tweens (aged 10–12) and teens (aged 13–17) between September 18 and December 8, 2020. All protocols were approved by an independent institutional review board for human subjects research (E&I 20136-01).

We partnered with nine different youth-focused organizations, recruiting participants from the Northeast, Midwest, South, and West Coast in rural, urban, and suburban areas. We initiated recruitment outreach using contacts in schools and afterschool programs, with a focus on those working with low-resource communities. Our interview sample is not nationally representative, but it was designed to include a diverse mix of voices from typically underrepresented and underserved communities, including youth from low-income households, youth of color, and youth with disabilities.

Our recruitment was supported by collaboration with professionals who work with youth across a range of settings (such as librarians, educators, and community coordinators). These professionals helped us inform parents (or adult caretakers) about focus group interview opportunities. We provided digital and physical copies of informational flyers that partners could use to inform potential participants about the interviews (either by talking to potential participants or displaying the flyer on the virtual or physical bulletin board). Interested families were then able to contact a member of the research team by means

of a project email address or phone number, and the consent and assent forms were subsequently shared via email.

Interview participants were provided a \$15 gift card as compensation for participation in this study. Gift cards were typically delivered via email to the parent or guardian of the participant. For parents who did not have reliable internet access, physical gift cards were distributed.

The semi-structured interviews were typically conducted in groups of 3–5 participants, bounded by age when possible (10–12, 13–15, and 16–17 years), guided by 1–2 interviewers, and lasted one hour on average. Online focus groups took place via password-protected Zoom video with the option of participating by audio for participants without stable high-speed internet connections, or for those who might prefer this format due to a disability or other constraints.

All parents received a permission form that outlined the nature of the project and their child's role in the study and were invited to an optional Zoom orientation where they could speak with the researchers. Parents and youth participants gave their written or verbal assent. Youth participants needed to be fluent in English. However, for parents with limited English fluency, we provided translated materials (e.g., consent forms) in their native language (Spanish). The description of the study for youth assent was written in simple language and read at the beginning of the interviews.

Participants were encouraged to find an interview space which was easy for them to access and where they felt safe, such as where they normally do their remote schoolwork. For video interviews, participants were reminded that anyone else in the frame of the

video should be made aware that they would be part of the recording. Youth participants were reminded that the information provided would be anonymized and that their participation was voluntary. Youth were allowed to decide whether they wanted to participate with their camera on. At the end of the interviews, participants were told that their insights would help to inform the design of future public media offerings and be published as part of a public report.

The focus group recordings were then transcribed for qualitative analysis. The authors thematically analyzed the transcripts, informed by the aims of the study, interview protocol, and foundational literature review, to unpack patterns across the responses of individual youth participants and of the focus groups. Throughout the analysis process, the authors met with the Cooney Center staff to discuss emergent themes and implications for the public media sector.

The Joan Ganz Cooney Center at Sesame Workshop is a nonprofit research and innovation lab that focuses on the challenges of fostering smarter, stronger, and kinder children in a rapidly changing media landscape. We conduct original research on emerging learning technologies and collaborate with educators and media producers to put this research into action. We also aim to inform the national conversation on media and education by working with policymakers and investors. For more information, visit www.joanganzcooneycenter.org.

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