Navigating Youth Media Landscapes

Challenges and Opportunities for Public Media

BY / WITH / FOR YOUTH
INSPIRING NEXT GEN PUBLIC MEDIA AUDIENCES

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/ FOREWORD /

We are pleased to share *Navigating Youth Media Landscapes: Challenges and Opportunities for Public Media*, a review of the current literature on youth media practices, with attention to the challenges of and opportunities for serving youth. This report was created specifically to build a knowledge base to inform and inspire public media in support of future strategies for reaching tweens and teens.

The report notes that we live in consequential times. Overlapping crises have altered our daily lives, our priorities, and our attention to long-neglected problems. Young people are navigating their developing identities in the midst of tremendous social and technological change. They are increasingly relying on digital media to connect, learn, and play.

Youth want to be informed, and they also want their voices to matter. They are diverse, engaged, and, especially now, conscious of the many crises blocking their growth. They are attuned to the truth and to trustworthy sources.

This is also a pivotal moment for public media. Historically, public media has played a critical role in defining quality content, increasing inclusion, and embracing innovation to achieve its service mission. From the early days of the pandemic, public media stations across the country have stepped up to deliver educational content and to provide a platform for youth to tell their stories.

We are focused on identifying real gaps in the media in which youth engage, and we are leaning into the service mission and values of public media to benefit youth in unique ways. We expect the answers for how to do this will come directly from our next generation audience: young people all across the country.

This report is the first publication of an initiative called **By/With/For Youth: Inspiring Next Gen Public Media Audiences**. Media production by youth, with youth, and for youth describes approaches to engaging public media's "missing audience" of tweens and teens who fall between content offerings for young children and adults. This literature review is a precursor to the full report, which will represent the ideas of a diverse group of youth ages 10-17 being interviewed at the time of this publication.

We are grateful to Patrick Davison and Joan Ganz Cooney Center Senior Fellows Monica Bulger and Mary Madden for their intensive work on this report, project advisors and public media stations for their thoughtful feedback, and the Cooney Center and CPB teams for making this work possible.

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The By/With/For Youth: Inspiring Next Gen Public Media Audiences project seeks to more deeply understand the current media habits of tweens and teens and to envision a future of public media that equips young people to participate and thrive in today's complex world.

The foundational work during 2020 involves establishing a knowledge base to inform the public media sector about current youth media practices, gaps in how youth are being served by media, and the potential for public media to address those needs. The project will highlight some of the most promising practices that public media currently employ for this audience that might be built upon through future funding and piloting efforts.

This document introduces the key literature that informs the research approach for this initial phase of inquiry. Central to this discussion of youth research is the acknowledgement that: (a) trends in youth media consumption and creation are constantly evolving, (b) studies that engage teen and tween participants directly (rather than through parent reporting) are generally considered to be more rigorous, and (c) large-scale, nationally representative studies of teens and tweens have become prohibitively expensive for many public interest and non-profit organizations, resulting in less frequent reporting of high-quality, accessible findings.

This project seeks to curate and distill some of the most critically important quantitative and qualitative work from highly respected organizations and individuals in this space. In the sections that follow, we assess the following questions: How does adolescent development intersect with current youth media practices? How do different youth relate to media in varying socioeconomic and cultural contexts? What motivates young people to engage with the media they choose, and how do those behaviors change as they age? At a broader level, what messages about youth are being transmitted (or omitted) by the media in general?

What are the boundaries of youth media?

At the end of 2019, a Corporation for Public Broadcasting (CPB)-funded Professional Learning Community on Youth Media (PLC) delivered its summary report of more than a year's worth of collaboration with eight public media stations. The bulk of its research was organized by the premise that, for public media, youth are a "missing audience." Among the challenges to changing this reality was a clear, foundational

ambiguity: for public media stations, there was not a shared understanding of what “youth media” really *is*. Developing a clearer sense of the definitional boundaries for “youth” and “media” is therefore critical if public media is going to expand its reach with young audiences.

Within public media, the defined age range of youth-directed initiatives is variable, with those as young as 8 or as old as 24 being encompassed by that label, despite the wide spectrum of developmental differences during that period. In academic research, there is also significant variation among the age groups interviewed for “youth” studies due to an array of methodological and practical constraints. Quantitative and qualitative studies alike will often describe their young participants as “children,” “young people,” “tweens,” “teens,” “adolescents,” or “youth.” However, recent influential studies offer a helpful threshold, emphasizing the importance of identifying a period of transition from considering media use by “children” to media use by “youth” that is increasingly marked by mobile device possession (Information Commissioner’s Office, 2020). This transition often occurs alongside decreasing engagement with public media offerings (PBS, 2019).

In addition to variations in age ranges, as the PLC describes, there are real differences between “media made *by*, *with*, or *for* youth,” and these differences have consequences for how public media imagines and accomplishes their mission. Public media made *for* youth as a target audience must address questions of how to best produce quality content that can compete with commercial offerings, while also remaining true to its mission in a fast-evolving media landscape. Media made *with* youth is complicated by the realities of collaborative work and requires distinct production skills, such as those identified by the rich literature in the Connected Learning community (Ito et al., 2013). Finally, media made *by* youth presents educational opportunities and shows particular promise for elevating the voices of youth from economically disadvantaged communities. However, these participatory initiatives are currently not widespread in the U.S. and local stations generally do not have the resources required to navigate the

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complex realities of digital content moderation and curation—a sphere quite distinct from public media’s broadcast history.

There are several major trends in the research literature that help to illustrate the contours of the current youth media landscape. As digital media have become the de facto source of entertainment for most American youth, that audience has been watching far less traditional TV, particularly when compared with older generations (Editor & Lupis, 2019). In particular, social media use has remained a dominant force in young people’s lives and has become increasingly fragmented and distributed across a wide array of apps and platforms. Over the past 10 years, social media use has shifted away from a handful of big platforms to a constellation of new app-based services like WhatsApp, Snapchat, and TikTok (Ofcom, 2020), which offer more ephemeral and short-form content. These services are often *owned or acquired* by a small number of larger platforms, but the way youth engage with them remains largely compartmentalized and distinct (Anderson & Jiang, 2018).[1] These shifts in audience preference are also tied to organizational and economic changes behind the scenes: new business models for content creators (influencers, streamers, etc.) and new techniques for using big data-driven tools to capture and direct attention (Levin, 2017).

[1] As of 2018, Facebook, the previous leader in U.S. teen internet use, had fallen to only 51% use, behind YouTube (85%), Instagram (72%), and Snapchat (69%). These numbers look quite different for lower-income families, however. For families at or below $30,000 a year, Facebook use is closer to 70%.

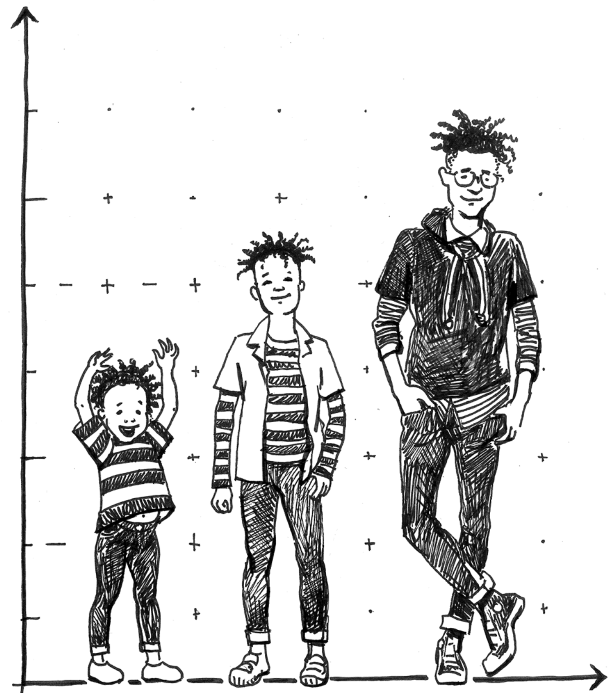
What makes this moment unique?

As we assemble this material in the summer of 2020, a number of seismic social and economic changes are unfolding: the spread of COVID-19, quarantining efforts, and the economic recession associated with the quarantine, as well as the national surge in protests, demonstrations, and direct action against police brutality and systemic racism triggered by the murder of George Floyd. All of these realities, which are still evolving, will undoubtedly inform any subsequent research to understand youth behaviors and attitudes.

More than 50 years ago, youth were central to the nationwide demonstrations of the civil rights movement. Young Americans were not only able to achieve legislative victories, but also to formally influence how media could better represent the voices of a changing country. During the 1960s, the presidentially appointed Kerner Commission made formal recommendations that news and other media representing African Americans needed to be overhauled, leading to important new programs, many on public media (WNET Staff, 2009). The current moment is inextricable from that history, but also deeply complicated by new realities; the commercial nature of social platforms, hyperpartisan news, and rampant disinformation all influence today's struggle for recognition and justice. Youth navigate these complex digital dynamics in their daily lives and are well positioned once again to contribute to a new era of media reform.

In the case of demonstrations for the Black Lives Matter movement, many youth are likely to be directly affected by or involved in protest actions and their outcomes (Alexander, 2020). We anticipate that youth will be hungry for reliable and locally relevant media information as 2020 unfolds (Tanksley, 2020), and as the political realities of America shift. How might public media be prepared to answer that call? What role can young people play in shaping that strategy? What issues will matter most to them?

In the case of the pandemic, more than 90% of U.S. adults said that the COVID-19 outbreak had impacted their lives at least a little, as of March (Pew Research Center, 2020). In particular, the school closures associated with the global pandemic have heavily impacted the need for at-home learning solutions, which public media stations across the country have already begun addressing (Strauss, 2020). A survey published at the beginning of April (K. Jones, 2020) found that large portions of 16–23 year-olds had increased their time watching online videos (51%) and online TV/streaming (38%) since the outbreak, with a smaller segment also increasing their consumption of online news (21%). In response to COVID-19 isolation measures, Nielsen recorded a huge spike in daytime television watching among 6–17 year-olds, registering an increase of as much as 300% during daytime hours, and complicating previous decreases in TV watching, in late April (The Nielsen Company, 2020).



The result is that right now, abrupt changes (e.g., the move to remote learning) and recent trends (e.g., the rise of a new sector for streaming media) are crashing into a history of resource constraints and tradeoffs. Out of necessity, public media has made more recent and sustained investments in reaching preschool and young elementary-aged children than they have reaching middle and high school-aged youth, who

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have a greater range of needs and a more expansive array of media habits. The remainder of this document will therefore lay out the current landscape of teen and tween media engagement, highlighting where old patterns and new developments are creating emerging opportunities for public media to realize its mission with a segment of an audience that has arguably been underserved in the past.

The language in the original 1967 Public Broadcasting Act makes this mission clear: in addition to furthering the "general welfare" of the nation, public media needs to be "responsive to the issues of people," to take "creative risks" and address "the needs of unserved and underserved audiences, particularly children and minorities." More than 50 years later, after decades of quality programming and sustained focus on children by the Corporation for Public Broadcasting, they are no longer underserved in the way they were in the 1960s. By contrast, however, there has been relatively little research examining teen and tween engagement with public media. For instance, PBS's latest *Audience Insight* report does not contain data for ages 9–17 (PBS, 2019). If one of the significant gaps in service has shifted upward in age, then to stay true to its original mission, public media's focus needs to shift, and *to expand*, as well.

This project therefore takes the current gap in youth engagement with public media to be both an *opportunity* and an *invitation* to better serve a segment of non-traditional users of public media. "The general welfare," "the public good," "national concerns"—the lives and activities of youth are a direct lever on raising and caring for all of these (Busso et al., 2018; Hobbs et al., 2013).

Still, if a focus on middle and high school-aged youth is a new opportunity, the realities of underserved groups that break along gender, race, and socioeconomic class lines remain a huge, and dire, challenge. Not just one, but many digital divides exist for youth today (Compaine, 2001; Park, 2017; Vartanova & Gladkova, 2019; Watkins & Cho, 2018). While a vast majority of youth have internet access, there remain significant differences based on frequency, privacy, and speed of access. Further, significant differences in media literacy can lead youth to have very different online experiences (Third et al., 2017). Therefore, the country's move from a broadcast media reality to a networked one risks amplifying the disparities in access to media (Auxier & Anderson, 2020) and complicating the commitment to universality that grounds public media. For media creators with a mission to provide for underserved populations, program design cannot proceed without a deliberate effort to identify and address those who have fewer technology resources at their disposal.

The remainder of this document attempts to weave these two large ideas together: the opportunities of finding the "missing" youth audience, and the importance of not overlooking the parts of that audience that may be hardest to engage.

How do we define youth and their media behaviors?

Current research on media use has no consistent definition of "youth," and young people are increasingly behaving in ways that avoid traditional measures.

The span of ages between "childhood" and "adulthood"—however defined—is a period of drastic and uneven transition for young people, marked by changing social responsibilities and physical developments. Even assessing the research on young people can be challenging, as different disciplines and researchers set different age ranges, different criteria, and use different words. "Teens" or "adolescents," "youth" or "young people"—all of these terms can signal the commitments of researchers, but also the identities of those being studied (Livingstone & Stoilova, 2020). Given the goals of this project, our "youth" category starts where young people begin to outgrow public media: as young as 7 or as old as 18.

There are some common elements to the current population between 7 and 18: less time watching traditional TV, more time playing games and using mobile apps, and significant time watching online videos. Indeed, the most recent Common Sense Census (Rideout & Robb, 2019) found that online video viewing by youth was "through the roof," that "more than twice as many young people watch videos every day than did in 2015, and the average time spent watching has roughly doubled." Earlier data (Edelstein & Castle, 2019) indicated that current youth typically watch 58 videos across five different platforms a day. And this isn't only entertainment or socialization; some Pew Research Center studies (Auxier & Anderson, 2020) have found that a majority (6 in 10) of eighth graders use the internet daily or almost daily to complete their homework. However, this rate does not hold for all socioeconomic groups. Youth with access to fewer resources use the internet for homework at lower levels.

Traditional measures of media consumption such as TV watching, then, may not capture short videos accessed via social media feeds, live streamed video games or other content, in-game experiences, or traditional media excerpted or re-purposed on hybrid communication/broadcast platforms like Instagram or TikTok. The categories presented to youth in surveys also may not capture the ways the youth recognize their own media consumption as such.

Youth media habits are significantly marked by access to personal network devices at a variety of ages.

As young children grow up, they experience a wide variety of changes: the onset of puberty, physical changes to the brain, transition to middle or high school, and even legal status (Katz et al., 2017). All of these influence youth media habits, but increasingly one of the most consequential changes is mobile device possession. In 2019, a majority (53%) of American children owned smartphones by age 11, up to 69% by age 12 (Rideout & Robb, 2019). A recent report from the UK's Information Commissioner's Office (2020) cites the period between 10–12 as a crucial transition period because of the increased likelihood of a smartphone and the resulting exploration of online environments for social activity.

All of these influence youth media habits, but increasingly one of the most consequential changes is mobile device possession.

The transition to personal device use gives youth greater choice about media consumption (Ofcom, 2019). Smartphones allow entirely new places and contexts of access, but tablets and internet-connected gaming devices as well can allow for new modes of private use within the home, engaging with different media than other family members.[2] And currently, when youth choose their media, they *don't* choose public media. This is one way to shift the thinking about youth as an age range, one tied to the onset of self-directed media choices, often in conjunction with new access to devices. However, this distinction should be embraced *cautiously*, as access to personal mobile devices or even consistent at-home internet access breaks clearly across socioeconomic lines (and, correspondingly, race and ethnicity).

Youth sharply increase their use of media to fulfill social needs, frequently because of introduction to school settings.

Past research has emphasized the structuring role of moving into middle and high school (alongside the typical window of the onset of puberty) as one of the largest and most consistent factors in youth cultures, and therefore media habits (Ito et al., 2009). In liminal adolescent spaces, between childhood and adulthood, the negotiation of status according to cultural markers can become more pronounced, leading to the use of media to accomplish social goals. In addition, youth are unlikely to see online media spaces as separate or virtual (Livingstone & Bulger, 2013), and rather as extensions of school and other shared public spaces where they can work out social relationships (boyd, 2014). Young people use social media for many of the same reasons as people use physical spaces: "a variety of purposes, including to negotiate identity,

[2] Ofcom's 2019 longitudinal study of child (8–18) media habits found that the participants were consuming more content in isolation, often on personal devices like phones. This allowed them to watch what they wanted when they wanted, as well as multitask, alternating between streaming, on-demand content, and social media.

gossip, support one another, jockey for status, collaborate, share information, flirt, joke, and goof off" (Ito et al., 2009).

For contemporary youth, media are "increasingly central to [their] cultural practices" (Buckingham et al., 2015). As a young person ages, these cultural practices are also increasingly shaped by what anthropologist Ilana Gershon (2010) calls "media ideologies," or the idea that different media have different appropriate social uses. Gershon's own research focuses on romantic relationships and breakups (Gershon, 2012), likely to be of increased interest as young people transition out of childhood, but researchers have examined how media choice can reflect political identity/leanings (McCracken, 2017), subculture membership (Simões & Campos, 2017), race (Stevens et al., 2019), gender identity (Selkie et al., 2020), along with other aspects of identity or cultural membership. Therefore, any research into teen and tween media habits needs to examine how choice of media to consume or platform to use is a means to accomplish their social, cultural, and political goals in a way that is not equally true for children.

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According to traditional measures, youth heavily prioritize entertainment and communication over other forms of media use.

Much scholarship of the web media environment emphasizes networked media's role in creating a "participatory culture" (Jenkins, 1992; Jenkins et al., 2009), some of which has highlighted the educational opportunities of such a culture (Jocson, 2018)—both in allowing forms of self-expression and providing new ways for educators to engage. Some of the most recent quantitative studies of youth media habits, however, don't sit comfortably with this work. According to the 2019 Common Sense Census, teens do not report high levels of media creation, despite the affordances of digital media. However, the meaning of "media creation" is far from clear-cut. Certainly, when youth are watching or otherwise consuming media—choosing it, commenting on it, sharing it with friends—that is a different moment from when they work with adults on media initiatives or formal productions. However, many "social" forms of media use now involve media creation activities (Jenkins et al., 2015) (like texting, commenting, reviewing, etc.) that have traditionally been analyzed as modes of speech rather than media creation (G. M. Jones & Schieffelin, 2009). Moreover, the repurposing or distribution of existing media is distinct from passive watching but is unlikely to be considered "media production" by researchers or youth themselves (Milner, 2016).

Traditional categories of media use and engagement have tended to shape the research in this area. For instance, Sonia Livingstone (2019) has argued that current youth media practices conform to what she calls the "ladder of opportunities"—a relatively stable hierarchy demonstrating how often youth take advantage of "the civic, informational and creative activities online that are heralded as the opportunities of the digital age." In short, statistics on youth media activities reveal that media use for entertainment and socialization is ubiquitous, for school or work less common, and for art production or civic engagement rarest of all. Other frameworks for categorizing media use exist, such as a three-part division between "information seeking, interaction, and creative production" (Zhu et al., 2019).

Still, it's important to realize the boundaries between categories are blurry and further blurring. The current generation of youth are growing up with greater access to mobile and other networked devices, ever more common broadband internet access, and within a complicated landscape of media *systems* that include social media platforms, gaming services,[3] livestreams, private chat apps, and more. For many youth, making media does not resemble the rhetoric of prosumer filmmakers or citizen journalists that accompanied the earlier surge in digital technologies—that is, working to produce "amateur" versions of long-standing media genres and formats. Instead, youth today make media in other ways, often as more ambient facets of socialization and communication. Youth produce media when they text, when they take photographs for Instagram or Snapchat, or when they record video on WhatsApp or TikTok. And recent findings (Zhu et al., 2019) have suggested that youth who perform "creative social media use" are more likely to be politically active, complicating a traditional division between socialization and civic activity. In new research from UNICEF (Cho et al., 2020), contemporary youth are shown to have many forms of digital civic engagement, including activities like joking and remixing that naturally blend with social activity.

In addition, even when "simply" consuming media, youth are increasingly doing so in ways that dissolve traditional boundaries between communication, entertainment, and other modes. Another study (Boczkowski, Mitchelstein, & Matassi, 2017) finds that most young people now consume "incidental news," that is, small chunks of news items, culled from

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various sources, and re-presented through social media according to various algorithms. They may therefore encounter civic information while actively pursuing other information or interests. Researchers supporting a "phenomenological" interpretation of youth media habits (Cortesi & Gasser, 2015) have observed that youth now have very flexible perceptions of news—much social media is organized by "newsfeeds"—and youth may think of non-journalism as news and journalism as not news, depending on context. This uneven relationship to news can have consequences for trust and interpretation; in a 2017 study, researchers found that youth consume news in non-traditional online venues, and are often confronted with doubts about a news source's accuracy or bias. For this and other reasons, they often turn to social media and other sources of more "independent" information (Madden et al., 2017).

Finally, one of the hardest modes of media use to measure is *non-use*, but Rebecca Eynon and Anne Geniets (2012) find that some youth choose to be "lapsed internet users." For many youth, social media provide the excitement of friends and fans, but *also* the risks of visibility to critics and harassers. These risks can be particularly acute for those in lower socioeconomic situations (Madden et al., 2017). As youth become conscious enough of potential harms to avoid engaging with larger systems, they can engage in what sociologist Sarah Brayne (2014) calls "system avoidance." Media, and the increasingly data-collecting platforms that deliver it online, are certainly the types of systems that some portion

[3] Digital gaming is increasingly made accessible through network- or platform-style systems, whether this is through traditional consoles (Nintendo Switch, Microsoft Xbox, Sony PlayStation) and their corresponding online marketplaces, PC-based marketplaces (Steam, Epic, Riot), or mobile device-targeted app stores (Apple, Google). These gaming systems, alongside supplementary social platforms like Discord (voice chat) or Twitch (livestreaming) entwine play with other forms of communication and media interaction.

of youth might actively avoid. And when youth *do* use media, they may often take elaborate steps at obfuscation, in order to maintain their privacy in the context of friends, peers, parents, or the platforms themselves (boyd, 2014).

Youth use media to accomplish goals in the world, beyond socialization and entertainment.

Along with an increased focus on social status and negotiations, older youth differ from children in the range of responsibilities they hold and goals they pursue. Youth might work a first job, might become newly responsible for aspects of family child care, may become members of community or interest groups independent of parents, or may need to simply navigate unfamiliar public spaces. And in all of these, media can and does play a role. For instance, youth of immigrant families use media in the process of "brokering" (Katz, 2014; Roldan et al., 2019) for their parents, which in the U.S. can mean translating languages, news, and cultural practices.

Youth also approach media in different ways for seeking out information. Past research (R. K. Jones & Biddlecom, 2011) has shown that while a majority of youth use the internet "every day," most do not see online media as a reliable source for information on sexual health and are more likely to pursue information from parents or schools. Other research has found the use of online health resources to be significantly higher among LGBTQ+ youth (Fox, 2018). Further recent research (Stevens et al., 2017) has shown that among certain groups of U.S. youth, social media messages about safe sex practices have far more impact on behavior than messages from parents or "traditional" media. This might simply be a consequence of the popularity of social media among youth but could also reflect the effect of messages delivered via social media algorithms, rather than as a result of active searching.

Young people are also increasingly turning to online media for information about and support for mental health issues (Rideout, Fox, & Well Being Trust, 2018), even though there can be significant risks with seeking such support online, and various forms of self-harm can be exacerbated by online media use (Biernesser et al., 2020; Slavtcheva-Petkova et al., 2014). In general, young people's exposure to problematic content online and their ability to deal with it productively *both* increase with increased activity, leading some researchers (Global Kids Online, 2019) to support an "enabling approach"—encouraging online activity with accompanying guidance on safety.

Youth prioritize "educational" content in a variety of genres: how-tos, tutorials, documentaries.

One of the most important categories of using media to accomplish goals is the broad category of information seeking. Youth are now exposed to a variety of educational media in school settings, but they also regularly search for media of different types outside of school to teach them new skills, answer important questions, or otherwise expand their horizons. In particular, social media can be "an alternative means of education and broader public interaction" (McCracken, 2017), and many youth now seek out information on social media or even YouTube (Lee & Lehto, 2013) in order to learn new skills. In addition to seeking out and consuming educational material, youth can also learn by creating media, both alongside peers (Sloan, 2009) and adults (Gee et al., 2017). And researchers have argued that many forms of informal media production, from how-tos to memes, actually represent a new promising form of interest-driven learning (Ito et al., 2020; Kafai & Peppler, 2011).

The popularity of youth use of how-to videos seems largely overlooked by public media offerings. Educational content offered by public media stations follows more traditional formats of either awareness campaigns (e.g., "American Graduate" providing pathways for college and career readiness) or working with schools to provide supplemental classroom content. Yet teens report (Bulger & Burton, 2020) seeking how-to videos (cooking, gardening, gaming, language learning) across a variety of platforms (e.g., YouTube, Instagram, Twitch, games). Youth report seeking how-to videos for a variety of crafts (model building, sewing, scrapbooking, jewelry making, and woodworking) (Peppler et al., 2020). Some youth find new hobbies through videos, with one teen in Chicago who started a bike repair business sharing that "everything started when" we "were just sitting around not doing nothing" and "saw people fixing bikes" on YouTube (Peppler et al., 2020).

Therefore, in addition to considering how media reaches youth through "incidental" channels while they are pursuing goals other than education, public media should also consider what information-seeking behaviors from youth could be predicted, supported, or otherwise responded to. The ability to provide high-quality material in the format and genre that youth recognize could be a key to extend educational opportunities outside of traditional awareness campaigns or classroom-targeted media.

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What does youth media look like in the era of streaming video?

YouTube is a dominant structure in youth media consumption, with its own aesthetics, economics, and celebrities.

In the last decade, the broadcast capabilities of YouTube, combined with new monetization methods and shifting media tastes, have created a new sphere of media production (Burgess & Green, 2009). YouTube was started in 2005 as an independent video hosting service and acquired by Google in 2006. By 2018, it was the second most visited site on the web, with more than four billion individual videos (Arthurs et al., 2018). Much of the research on YouTube's early years emphasized it as an exemplar of "user generated content," one that invited everyday users to "Broadcast Yourself," as its original slogan proclaimed. But with its rapid growth, YouTube has become what media and communications scholar Stuart Cunningham and colleagues (2016) have called a "new screen ecology"—one where the top 3% of most watched videos receive 85% of all views (Bärtl, 2018). Therefore, while there are avenues for public media to reach new audiences on YouTube, attempting to reach broadcast-level viewership means entering a competitive space with numerous established players.

Among the YouTube content targeted at youth, one of the most significant subsets is that produced by so-called influencers, or "micro-celebrities" (Marwick, 2013) whose popularity comes primarily through content on various social media platforms. In short, there are a range of influencer-style media producers, from amateur individuals up to small production companies or "multi-channel networks" (Arthurs et al., 2018), which produce huge amounts of short-form video content. These content creators navigate YouTube as a "hybrid cultural-commercial space," (Lobato, 2016) with a variety of methods for monetization. These include: (a) running algorithmically selected ads through YouTube's embedded advertisement system,

(b) contracting independently to create sponsored content (i.e., promotional videos or native advertising), itself the subject of some controversy and research (Boerman & van Reijmersdal, 2020; De Veirman et al., 2019), (c) tying content to monetization-management platforms like Patreon or GoFundMe, or (d) using audience metrics to secure non-YouTube related gig work, like event hosting, book publishing, or conference appearances.

This type of content can range from lifestyle vlogging to hair and beauty tutorials to gameplay videos to personality-driven news, entertainment, or education. There is a specific culture of celebrity around those producing this media—often "young YouTubers who are melding influence and intimacy into a new source of money and fame" (Berryman & Kevka, 2017). YouTube stars frequently leverage a particular form of intimacy in their videos, and deliberately cultivate parasocial relationships with their audience in comments, blogs, and other forms of supplemental material (Raun, 2018). In fact, the hybrid commercial models described above are often heavily entwined with the construction of parasocial relationships (Rihl & Wegener, 2019), as influencers might thank specific donors by name, or choose to review products or promote content based on viewer input.

Youth may be particularly responsive to the aesthetics of YouTube-style, influencer-led videos.

In some cases, young viewers have demonstrated strong preferences for videos that fit the independent-influencer model, even in other contexts.[4] Research on science communication, for instance, found that science videos that were fast-paced with a "consistent communicator" (i.e., recognizable host) were the best performers, but also that user-generated videos consistently outperformed those by obvious professional channels, such as the BBC or The Discovery Channel (Welbourne & Grant, 2016). However, much of the formal research done on youth media preferences in the context of online video is tied to more niche, often educational or civic goals: there is some research showing positive results in youth learning from celebrity-led music videos (Macnab & Mukisa, 2019), which suggests positive responses to recognizable figures and short, platform-ready video formats. Other research has examined the relationships between YouTube "influencers" and media literacy in children (Boerman & van Reijmersdal, 2020), though this work has an outsized focus on advertising and a sharp drop-off around age 13.

Youth media engagement requires skills and labor outside traditional media production.

For so many venues of online media (YouTube certainly included) user-generated paratextual elements like viewer metrics or comments play a significant role in audience experience. Often, consuming an entertainment experience becomes blurred with participation in promotional events or messages (Wee, 2017). These surrounding elements interact with the identity of those in media and consuming it. For TED videos, for instance, the identity of the presenter has a clear and measurable effect on the overall positive and negative content of comments, with women receiving far more critical comments than men (Veletsianos et al., 2018). In addition to how such comments can affect the subject of a video, studies have shown (Waddell & Sundar, 2020) view counts and comments have significant effects on viewer enjoyment and interpretation of the main content (though this is not specific to youth viewers).

[4] Public media has also already developed successful partnerships with existing YouTube content creators. PBS Digital Studios, for instance, has developed numerous series (Knapp, 2013) with previous YouTube personalities: Hank and John Green and *Crash Course*, Lindsay Ellis and *It's Lit!*, Mike Rugnetta and *Idea Channel*, etc.

YOUTUBE, INFLUENCERS, AND PARASOCIAL RELATIONSHIPS.

In recent years, the concept of the "parasocial" has become increasingly important in the study of fan engagement and media consumption. In short, parasocial relationships involve media creators sending signals of intimacy to their audiences, creating a sense of everyday familiarity that is often lacking in traditional broadcast media. The rise of contemporary parasocial techniques coincided with the rise of online streaming video, with so-called "vloggers" often uploading new content on a daily (or hourly) basis, frequently in rough confessionals from their homes or other private spaces. The results of this style, coupled with the interaction made possible by comment sections and other online forums, has resulted in a style of fandom, media creation, and reception that is truly distinct from earlier moments.

Based on experience working and consulting with professional media creators in the youth YouTube space, we have seen firsthand how forms of content moderation and algorithmic literacy have become components of media creation. Those who write and appear in YouTube videos must also deploy a set of new skills to shape and improve audience engagement with content. This can include everything from the now ubiquitous requests to "like and subscribe" that come from established and independent creators alike, to homegrown metrics evaluating comment fields for length or thoughtfulness of response. For the most part, these skills circulate as ad hoc best practices, often in response to the informational architecture of YouTube and other platforms, and the changing behaviors of audiences online. These sets of skills are under-documented and point to the value of gauging young people's experience with paratextual elements like comment fields as well as tapping existing media creators for their expertise.

The network platforms that increasingly serve youth the bulk of their media are using data to drive audience behaviors.

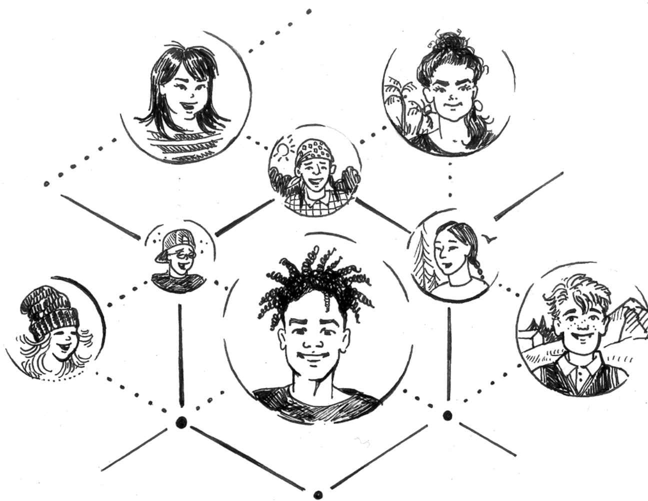
As a recent Oxford Internet Institute manuscript (Martin, 2019) makes clear: "Audiences are increasingly reached via online intermediary platforms managed by a relatively small number of U.S.-based online platform companies, a dynamic which has restructured much of the media landscape just in the past two decades." There is a real desire, therefore, to be able to provide youth with public media in the online formats they are now consuming, or as Debra Sanchez, SVP of Education and Children's Content at CPB, puts it, to "be wherever kids and families are, to be available to them in whatever format works for them." Sanchez also warned that making content available on major online platforms represents a real loss of control. For instance, what content will a YouTube algorithm recommend to a viewer after watching PBS content (Martin, 2019)?

The specter of a rogue YouTube algorithm—a phenomenon covered in both news (Fisher & Taub, 2019) and research (Lewis, 2018)—points to the increasing necessity of thinking about *data*. The platforms that are the largest distributors of content online use huge amounts of quantitative user behavior data to dynamically control how media get displayed, recommended, and even produced. This new mode of media control provides several challenges to public media. In the competition for youth attention, public media must now contend with media being delivered by a sophisticated set of "nudges" (Yeung, 2016) and other techniques like disguised ads, friend spam, and trick questions,

In the competition for youth attention, public media must now contend with media being delivered by a sophisticated set of "nudges."

(Brignull, 2013) which can all toy with emotion, false hierarchy, and so on (Gray et al., 2018), often targeting viewers based on a swath of personal data.

Given the challenges of these invasive data techniques, public media must figure out a way to reckon with the new media landscape. However, the road forward is unclear. There are some who are eager to suggest that public media should essentially fight fire with fire by creating "public service algorithms," applying data practices to the question of universality (Van den Bulck & Moe, 2018). These public service algorithms, if developed, would be starting at a disadvantage: the data intermediaries like YouTube and Facebook that coordinate so much media consumption do not share their user data with public media (Martin, 2019). Brookings Institution fellow Blair Levin has suggested (2017) that public media capitalize on its own platforms (intermediaries aside) that currently collect data from nearly 28 million viewers. However, the prospect of using algorithms to curate and serve public media content is fraught. Critics (Kleeman, 2019; Martin, 2019) have highlighted the fact that such practices have been developed by companies looking to drive sales and maximize views and clicks, and that finding a balance between algorithms and human curation is non-trivial. Others (Lowe & Martin, 2014) worry that over-tailoring public media to data might risk projecting a "fake air of precision" by hiding decisions behind data and measurement.



Given the risks associated with algorithmic techniques, a different approach could come from shifting the type of data considered—from the quantitative behavioral data collected by online platforms to qualitative ethnographic data. A prime example of this type of technique has been documented in the production of Norwegian public media program *SKAM*, produced by NRK (the Norwegian Broadcasting Corporation). Launched online in September of 2015, *SKAM*'s first "season" was 11 episodes ranging between 15–35 minutes following the lives of a group of teens in a Norwegian high school. The first season broke viewership records for NRK and, as researchers Andersen and Sundet (2019) document, the series became "a global cult phenomenon with viewers and fans in all age groups and on all continents," with "the format...later sold in several European countries as well as in the U.S."

Andersen and Sundet do more than laud *SKAM*'s success, arguing that its production showed a novel and powerful use of qualitative ethnographic data. Before production, the team at NRK conducted more than 200 interviews of various types with teens from across the country. This initial research helped craft the goals and focus of the resulting program to great success, and led to recognition for NRK's handling of sensitive cultural and social topics. The researchers wonder whether this success, coupled with the embedded nature of online access, might presage "an *ethnographic shift*" for public media, with new programming derived from in-depth audience research before production, rather than simply behavioral data capture at the moment of consumption.

Gaming and game-related streaming are now a large component of youth media consumption and participation.

While the rise of streaming video and social media has complicated the traditional broadcast model of media production and distribution, digital gaming (console, mobile, or computer) is often discussed as a more distinctly separate mode of media consumption. Still, any consideration of youth media practices must consider the huge cultural footprint of gaming.

Gaming is extremely popular among young people and has increased in recent years (Rideout & Robb, 2019). Most U.S. teens have access to console games—75% of girls and 92% of boys (Anderson & Jiang, 2018)—and these numbers seem to reflect a common disparity in gender, with boys reporting playing games longer and more frequently (Rideout & Robb, 2019). However, many of the survey methodologies for these findings have inconsistent divisions between console, mobile, and computer games and rely on self-reporting on levels of enjoyment. As such, traditional ideas about the gendered nature of gaming is likely to mask some forms of gaming by girls (King & Potenza, 2020).

In addition to the rise and diversification of mobile gaming, youth gaming culture has been immensely influenced in the last decade by the rise of video game streaming, e-sports, and game-based micro-celebrities. Huge international blockbuster games like Minecraft and Fortnite have been accompanied by increasing viewership on YouTube and Twitch—a gaming-specific live streaming platform that began in 2011 (NPD, 2019). For instance, the most popular YouTube channel for many years has been that of Felix Kjellberg (who broadcasts as PewDiePie), who primarily uploads footage of himself playing and reacting to popular computer and console games. Based on his own reporting of his viewer demographics, he is popular among both tweens and teens (Genova, 2018).

In late 2018 Netflix's annual report caused a brief media stir in declaring that the digital game Fortnite (which can be played cross-platform on console, computer, or mobile device) was a bigger competitor than rivals HBO or Hulu (Patches, 2019). Indeed, Epic Games, the makers of Fortnite, have pushed the explicit media convergence of the game-turned-social platform, coordinating live concerts and movie screenings in-game (Hatmaker, 2020).

Even when games are not remediating popular music and film, young people tend to use the affordances of games to facilitate social interactions on top of play or to engage in networked learning among peers (Fields & Kafai, 2010; Ito, 2010). However, much of the research on this skews young, often stopping at age 12. The border between children and older youth is also difficult to demarcate in online games, as many of the large and popular titles have removed age restrictions in recent years, specifically cultivating a broad, all-ages appeal (Grimes, 2018).

Forms of socialization not only take place during gameplay, but also in the spaces meant to facilitate game *watching*. On streaming platform Twitch, for instance, many young people report that the interactions with other viewers in the chat while a streamer plays a game are significant parts of their experience (Wulf et al., 2020)—with the transition between playing, watching, discussing, and spending money combining into what human-computer interaction researchers Wohn and Freeman (2020) call a "holistic media ecosystem."

Often, contemporary games use mechanics to structure specific social interactions. On Facebook, the social media experience is often intertwined with features of socially embedded games (Burroughs, 2014). An extreme outlier of social integration in gaming is the success of Pokémon GO, a mobile-only game which involves geolocated mechanics that require players to occupy and explore physical spaces. The game enjoyed a tremendous spike of popularity on initial release in July 2016, including among families with teens, tweens, and children (Sobel et al., 2017), but the mode of the play has not been subsequently reproduced (Vella et al., 2019).

Examining the current state of youth media practices suggests several complementary directions for future research.

On the one hand, it is crucial to identify what young people are already doing, how they are already meeting their needs with existing media, and whether new forms of public media are poised to meet them where they are.

On the other hand, identifying the persistent gaps in how youth are underserved by the commercial media landscape could be another key to extending the underlying service mission of public media and break from the status quo. This is why the descriptive work that informs research design must be based on advancing core values, and efforts to increase audience numbers is always coupled with a firm commitment to improving communities and advancing universal service. As the national (and global) media ecosystem continues to converge, empirical research that centers the voices of youth in this way will help to ensure that the next generation of public media programming is responsive to their unique needs and experiences.

Future research should consider how to address:

1 ▶

Age Range/Participant Selection

Given public media's existing success with young children (as well as the reported success of "aging up" the audience in the case of *SKAM*), one approach to selecting participants would be to focus on the transition from childhood to youth rather than seeking a representative sample of those between 7–18. Given the emphasis on how school transitions can catalyze new approaches to social action, choosing participants based on their entrance to middle school (as defined in their home community) could be preferable to setting strict age criteria. In addition, asking young people what they think they should be called could help untangle the tricky overlap of terms and age ranges.

2 ▶

Device/Access Profiles

With public media's mandate to universality, it will be important to discover the various means of media access that exist for participants. Who has access to what devices and media outlets, at what ages, and with what limitations or freedoms? It will be critical to identify participants who do not have access to a personal network device or smartphone, and who rely on traditional broadcast TV or shared family PCs for media access at home.

3 ▶

Social Goals

Since youth are likely to use media to accomplish social (and other) goals, it will be important to find common motivators between different groups. What drives youth to seek out media in a particular form at a particular moment?

4 ▶

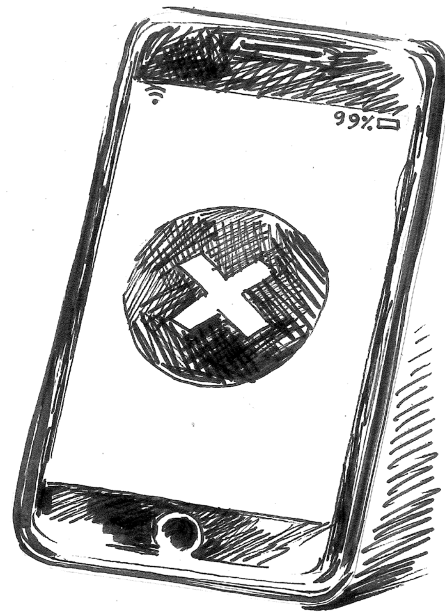
Media Avoidance/Obfuscation

It will be important, yet challenging, to capture youth practices of media avoidance, or when and how they choose to obfuscate their media behaviors. These are distinct activities but share the empirical challenge of measurement—how can a lack of activity or behaviors meant to be kept private be documented? Key to this will be discovering how youth conceptualize questions of data collection and privacy, which likely manifest in ways distinct from both children and adults.

5 ▶

"Incidental" Media Access

Following the theory of "incidental" news consumption, it will be valuable to observe what types of media youth might be exposed to on algorithmically or socially curated platforms, media that might not be explicit parts of their intended activity. News is one example, but what other types of content (advertising, propaganda) are being woven into media experiences?



6 ▶

Influencers and the Parasocial

While influencers and parasocial relationships take up a large portion of the literature on YouTube-era streaming media, it will be important to identify how youth discuss and conceptualize these ideas among themselves. Their identification as "fans" or "community members" or "supporters" or any number of other identity categories in relationship to media creators is likely to indicate much about what they value from such content.

7 ▸

Information Seeking/ Education/How-To

There is a long history of studying information-seeking practices, especially online, but with the pace of new platforms and trends in media use, it is always valuable to reassess how youth have learned to proactively seek the answers to questions or the sources of new skills. What are the types of questions/skills that youth are seeking out? The default means by which they do so will provide insight into opportunities for future service.

8 ▸

Media Production

Given the potential value of public media amplifying media made *by* youth, it bears observing how youth might be creating content in modes that are not currently identified as such. What behaviors and engagements with contemporary media are allowing youth to create, shape, or alter media messages? And for what types of audiences?

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Participants in the summer 2020 design sprints included representatives from the following public media organizations:

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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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