

Preface to the Tenth Anniversary Edition

Mizuko Ito and Heather A. Horst

In 2008, when we released the results of the Digital Youth Study (Ito et al. 2008), Barack Obama won what was called the “Facebook election,” the iPhone was one year old, and *Minecraft* was in development. Rewind a bit more to 2006, when we were in the midst of our fieldwork, and MySpace was the dominant social media platform, niche groups congregated on LiveJournal, and YouTube was an upstart. Adults struggled to understand the appeal of social and mobile media. The new millennium was just beginning to usher in sweeping transformations in how people communicate, organize, and express themselves. The teens in our research, now known as millennials, continue to be the poster children for these changes.

The Digital Youth Study kicked off in 2005 with a \$3 million grant from the MacArthur Foundation. Historically, the foundation’s education investments centered on Chicago school reform, but they were struggling to make an impact. Guided by tech-savvy board member John Seely Brown, the foundation began making targeted investments in research and program innovation centered on the relationship between digital media and learning. The Digital Youth Study was among the first of a series of grants in what came to be called their Digital Media and Learning (DML) initiative, which grew to over \$240 million in investments over fourteen years. The study was motivated by the recognition that teens learn differently in tandem with their widescale adoption of digital games, social media, and text messaging. It represented an unconventional strategy of looking to young people’s social and recreational lives with new media as a force shaping the future of learning and education.

At the time, little research investigated what young people were doing with new media, and even fewer studies examined youth technology

adoption with an eye toward learning and education. The Digital Youth Study, which involved over 800 interviews and 5,000 hours of online observation over three years conducted by 28 researchers, still retains its status as the largest ethnographic study of youth online life. When the results were released in 2008, our hope was to describe the online world from a teen perspective, demystify what was attractive about new media, and calm adult fears. We emphasized the value that young people placed on online participation, and the informal learning flourishing in digital peer networks. Our report was also a teaser for ways that this informal learning and peer connection could be harnessed for education, but we were still in the very early stages of grasping these implications. A front-page headline from Silicon Valley's *Mercury News* captures what the media took from our study: "Chill Out, Parents: Time Online Teaches Kids Important Skills, Study Says" (figure 0.1).

Hanging Out, Messing Around, and Geeking Out (HOMAGO) was published two years after this headline, on the cusp of a decade of explosive growth in the tech industry. Now Facebook is the face of expansionist greed, and it seems ages ago that it had cachet with teens in the United States. Even apps popular with teens, such as Snapchat, YouTube, and Instagram, are overrun with celebrities, "influencers," and commercial media. *Minecraft*, which started as a scrappy indie game, was purchased by Microsoft in 2014 after becoming the most-played game of all time. Internet Relay Chat (IRC), once the social backbone of the geek internet, is now overshadowed by its enterprise doppelganger, Slack, valued in the billions. It now seems quaint to question the value of online networks or whether virtual conversations and relationships are "real" or consequential. Instead, we fret over how digital networks are shattering long-standing norms, industries, and institutions. Clearly, we no longer need to make the case that social and digital media can support significant forms of communication, learning, and mobilization.

Even as the past decade has seen these tectonic shifts, many of the underlying dynamics that the Digital Youth Study identified have withstood the test of time. The world has woken up to the significance of digital and networked media, but adults still complain about kids these days. Young people continue to lead in adopting and testing new platforms and pushing new digital literacies and practices. Monikers such as "the dumbest generation" (Bauerlein 2008) have given way to apocalyptic suggestions



Figure 0.1
HOMAGO in the news

that “smartphones are destroying a generation” (Twenge 2017). Tablets in the hands of wee ones have fueled a new wave of panic over the negative effects of screen time (Kardaras 2016). The media swarms over any claim of gaming addiction or smartphones making teens narcissistic and depressed (Bowles 2018; Heid 2018; Hsu 2018), despite evidence that these afflictions are not widespread (Orben and Przybylski 2019). HOMAGO’s struggle to demystify youth digital practices continues.

Our effort to showcase the diversity in young people’s digital lives and learning is now more important than ever, as the options for media and platforms continue to proliferate and amplify existing forms of stratification and cultural difference. The genres of participation that we identified—hanging out, messing around, and geeking out—as well as the distinction between friendship-driven and interest-driven participation still hold true in today’s digital world. These categories are inherently platform-agnostic, and connect familiar social and cultural patterns that structure young people’s lives to new digital practices. HOMAGO’s wide-ranging survey of youth digital practices is a critical reminder that youth experience the digital world in different ways depending on their interests, identities, and real-world circumstances. Indeed, HOMAGO failed to fully preview the inequities, wealth consolidation, and polarization fueled by digital networks when they went truly mainstream. The goal of HOMAGO was to capture as wide a swath as possible of different youth digital practices; what it represented in breadth meant that it lacked depth on any specific practice or population. One side effect of our approach was that we touched on many of the emergent practices that have become salient in the intervening years.

This tenth anniversary edition is an opportunity to recognize the continued relevance of HOMAGO while also reflecting on how the youth culture of that time foreshadowed today's digital transformations in unanticipated ways. Most of the youth practices we identified have spread and gone mainstream. Texting, friending, gaming, and digital content creation have now hopped generational lines and spread across the world. Schools teach digital literacy and citizenship and are beginning to embrace blogging, digital video, and creative games such as *Minecraft*; managing digital media has become one of the central concerns of contemporary parenting; and digital gaming has cemented its place as a dominant entertainment medium of our time, spawning an ecosystem of creative production, fandom, and competition that we could not have dreamed of a decade ago. The spread and mainstreaming of digital media practices also means that online spaces for youth experimentation have become constrained (Wargo 2017); Facebook is now surveilled by parents and educators, and the cut-and-paste scrapiness of MySpace has given way to locked-down smartphone apps like Instagram and Snapchat. In the remainder of this preface, we look at how the seeds we identified in HOMAGO blossomed into these world-changing developments.

Digital Media: It's Not Just for Kids Anymore

The focus of HOMAGO and the Digital Youth Study was about documenting as widely as possible the kinds of practices that we were seeing among young people, especially in diverse regions of California. At the time the book was published, "friendship-driven" genres of participation such as connecting with local friends on MySpace and online messaging resonated most with those interested in young people's digital media and technology engagement. The second half of the book's focus on "interest-driven" genres of participation such as mobilizing and geeking out in fandoms, gaming, and online creative communities was less resonant for most readers. Only those deeply immersed in internet communities and digital culture saw the significance of these dynamics at the time. Scholars (Buckingham 2007, Das and Becket 2009) were challenging the characterization of youth as "digital natives" and adults as "digital immigrants" (Prensky 2001, Palfrey and Gasser et al. 2010). Others wondered about the extent to which the skills required for the interest-driven practices we described were

exceptional, and reproduced existing structural differences (e.g., Hargittai and Hinnant 2008, Seiter 2008). Even in the case of less privileged youth in our studies who participated in library and after-school programs, questions remained as to how such examples could be applied to other contexts (Sefton-Green 2013, Sefton-Green and Erstad 2018).

Over the past decade, we have observed a shift in how the particular practices around socializing, gaming, making videos, or even contributing to online communities are now perceived. Engaging with digital social life is no longer solely the domain of young people. Facebook has, for example, become a space through which adults and parents stay in touch with high school classmates to catch up on who still lives in their hometown, find out who might have gone through a divorce or organize a reunion. Parents of teens and tweens now use digital media at rates comparable to those of their children (Common Sense Media 2016) and adults also use Facebook to find like-minded individuals who share their interests. These can range from following music groups and particular brands of clothing to dieting communities, sports groups, and other activities. Recent work has also highlighted young people using language such as “addiction” and “distracted” to describe their parents’ engagement with digital devices and their inability to multitask (Brown 2018, Kiss 2018). These kinds of claims and the widespread use of social media (what we used to think of as social networking sites) were almost unimaginable in 2009.

Moreover, many of the practices we observed among US youth have also gone global. At the beginning of our study, the most robust research program examining how young people were using new media involved qualitative and quantitative comparisons of different EU countries (e.g., Livingstone and Bovill 2001, Livingstone and Haddon 2009). Although such studies included less wealthy countries such as Greece, Romania, or Slovenia, most of these contexts were governed by EU regulatory and policy frameworks. Over the past five years, these kinds of comparative projects have expanded through such initiatives as the Global Kids Online project, which has integrated the EU Kids Online work with studies of young people in Argentina, Chile, Brazil, and Uruguay in Latin America to Ghana, South Africa, and the Philippines, among others. These complement a range of studies of youth media use in individual countries (Kral 2017, Kral and Schwab 2012) as well as comparative studies of multiple contexts (e.g., Scolarì 2018, Livingstone and Byrne 2018).

One of the key insights that has emerged through studies of contexts outside of the Global North are the implications of smartphones and mobile-first internet use (Donner 2015, Ling and Horst 2011). In the Global Kids Online (2017) survey in Brazil, for example, they found that 93% of young people (or nearly 23 million) in the country use a mobile phone to access the internet, and this was especially prevalent in rural areas and among youth from lower socioeconomic backgrounds. Mobile phones and smartphones certainly have lowered the barriers to entry for internet use. Photo apps and filters are now one of the most pervasive forms of creative production practiced by young people and easy access to video recording has enabled the sharing of live music and other performances. Yet, those in more economically, geographically, or technologically disenfranchised areas tend to use older devices that do not enable their full participation online. The pervasiveness of prepaid mobile data has resulted in what Donner (2015) and others (Foster and Horst 2018) have described as the “metered mindset,” where limitations on data and other forms of connectivity limit the capacity to fully engage in practices such as networked gaming, digital music and video production, and even coding (de Bruijn et al. 2013). And although there is certainly evidence of workarounds and the sharing of applications or other software via non-data-reliant transfer systems (e.g., Bluetooth, C-share), in many parts of the world “going online” remains largely limited to the default capabilities and settings built into Facebook, Facebook Messenger, and on mobile handsets, making it difficult to leverage some of the opportunities more extensive, intensive, and diverse access might offer.

Despite the reproduction of structural inequalities in access to and use of digital media and technology, important evidence is starting to emerge that the interest-driven learning dynamics identified in HOMAGO are present outside of the United States, even in countries considered “developing” or less industrialized. For example, in Sheba Mohammid’s (2017) 18-month ethnographic study of the “knowledge society” in urban Trinidad, she identified adults of different ages using digital media—especially YouTube—to expand their interests in activities ranging from cooking, knitting, and fashion design to car repair and musicianship (e.g., Mohammid and Horst 2016). Notably, the vast majority of interest-driven activities were not undertaken by Trinidad’s elite, as one might surmise, but by many of the country’s working-class residents. And despite the similarities in interest-driven genres of participation, Mohammid argues that the

particular motivations for the use of digital media to expand one's interests remains intricately tied to the history of education in the country. In particular, quite a number of her participants did not achieve great levels or marks in their education and found the culture of performing knowledge and subsequent shame associated with the failure to perform a detriment to their educational success. Mohammad's participants thus found that using YouTube and other digital resources played a profound role in their lifelong learning inasmuch as the ability to review and practice content, in private, allowed them to gain what she terms "social confidence" which in turn led some individuals to gain enough proficiency to earn a certificate ("papers") which might enhance their salaries or to start catering businesses. In other instances, it meant their families saved money on clothing or other more mundane outcomes.

More situated studies that take into account diverse cultural and historical contexts in which digital media practices are taking place continue to be needed. Their value is precisely connected to our understanding of the ways in which social and institutional structures shape how HOMAGO is interpreted as well as the potential refinement or even challenges to HOMAGO as a framework.

The Rise of Digital Parenting: Screen Time, Digital Detoxes, and Other Techniques

During the Digital Youth Project, many of the interviews with families involved formal and informal discussions with parents. The vast majority of conversations revolved around what their children were doing and how this differed from their own experiences with media, the ways in which their children's engagement had changed over time and the challenges of managing—or "balancing" in middle-class parlance—their children's use of digital media with schoolwork, extracurricular activities, and relationships with friends and family. Other parents took the opportunity to talk with us about their own philosophies of technology access and use and the "rules" they had developed for their kids; notably, most kids in these households described them as "flexible" or "guidelines" rather than hard-and-fast rules followed at all times. Still others solicited our advice about what we had discovered across our study that might shed insight on their own parenting dilemmas. Because our core research focus at the time was around young

people's practices and perspectives, however, we were both uncomfortable with and unclear about the recommendations we might make with regard to what kinds of approaches to parenting digital kids worked, and what kind of practices might work for the different range of families our broader team interviewed.

Fast forward ten years and it becomes clear that in 2008 we were on the cusp of a much broader conversation about parenting in the digital age. According to a recent survey, digital parenting is now the number one concern among American families (Brigham Young Center for the Study of Elections and Democracy and Deseret News 2018). It's worth remembering that when we completed our research in 2008, organizations such as the Joan Ganz Cooney Center and the Family Online Safety Institute (FOSI) were only one year old. In April 2008, we presented our initial findings from the Digital Youth Study at a public forum, "From MySpace to Hip Hop" at Stanford University. We shared the forum with Common Sense Media, which was well known for their family-friendly reviews of television and movies, and just beginning to extend their reviews into the digital realm. Today, by contrast, a robust ecosystem of organizations, books, magazines, YouTube videos, websites full of recommendations and "tips," tech mums, digital health gurus, parenting coaches, and others have emerged to offer advice on the "right" way for families to use digital media. Hosted by stakeholders such as developmental psychologists, corporate social responsibility arms, government and civil service organizations, and interested parents, a plethora of websites have emerged to help parents tackle cyberbullying, sexting, online safety, narcissism, and screen time. Facebook-style quizzes are now available to help parents determine if they are a "digital enabler," "digital mentor," or "digital limiter." Other articles and advice beacons are making recommendations as to how to put your family through a "digital detox," go "off the grid," or "KonMari your way to a happier digital life."

The rise of digital parenting in public discourse and family life has been matched by a growing interest in the practices of digital parenting by researchers within and outside of academia. The Pew Research Center and Common Sense Media now routinely monitor parents' perceptions and attitudes toward parenting and technology in their surveys. While work on parenting has historically been the domain of developmental psychologists or sociologists, research on digital parenting has become more interdisciplinary with scholars from fields such as human-computer interaction,

computer science, information studies and media and communication finding it necessary to understand the broader contexts of use for their applications, software and games (e.g., Lupton, Pedersen, and Thomas 2016; Wartella 2013; Willett 2015; Yardi and Bruckman 2011). This expansion of interest in digital parenting—and the interdisciplinary stakeholders who are now at the table around this issue—has meant that researchers are motivated to move beyond disciplinary or even academic research outlets to consider the practical use, impact or translation of their research.

The focus on outreach and engagement is especially clear for researchers who, based on their findings, are keen to provide nuanced alternatives to popular media effects discourse that suggests straightforward causal relationships between, for example, video games and violence. Indeed, there have been a number of robust and thoughtful qualitative studies about digital parenting directed at academic and broader publics that address the different ways that digital technologies are used by families. One of the first studies of this kind was Lynn Schofield Clark's (2012) *The Parent App*, which focuses on parental anxiety and different attitudes and practices of parenting. Bringing together media studies and sociological approaches, Clark highlights some of the ways attitudes and practices are influenced, but not wholly defined, by categories such as ethnicity and class in the U.S. and the broader anxieties and strategies around these practices. More recently Anya Kamenetz's (2018) *The Art of Screen Time* and Jordan Shapiro's (2018) *The New Childhood: Raising Kids to Thrive in a Connected World* situate digital parenting within broader notions of storytelling and family life. They offer strategies for parents interested in creating an environment where children can become civic and community minded through engagement with games and social media throughout their childhood.

Another example is Sonia Livingstone and Alicia Blum-Ross's research exploring the ways in which digital media and technology use and management reflect parents' anxieties and aspirations for their children. Drawing from research on UK residents of diverse backgrounds, they introduce three genres of participation—*embracing*, *balancing*, and *resisting*—that parents use to evaluate their approach to managing digital media and technology use in their household. *Embracing* involves a more open approach to using digital media and technologies, often with an eye to the educational and professional benefits. *Balancing*, by contrast, is centered on determining which digital technologies and practices to encourage and which ones to

limit or restrict. It typically involves “balancing” of the risks and opportunities associated with their use; these risks may vary from concerns about screen time, exposure to specific types of content, or other factors. Finally, *resisting* is an attempt by some parents to stop what they see as the inexorable march of technology into their family’s life. Parents with this approach often restrict the use of particular technologies and platforms some or all of the time. Livingstone and Blum-Ross’s forthcoming book chronicles the relationship between these genres of participation and the structures and experiences that guide how, why, and for whom such parenting practices take place. From the perspective of the broader research field, Livingstone and Blum-Ross’s attention to the genres of participation associated with digital parenting is an important extension of the legacy of HOMAGO and the connected learning approach to understanding young people’s everyday practices.

In summary, the outlets for digital parenting advice have proliferated over the last decade. Nevertheless, few digital gurus, coaches, or other popular outlets for parents engage with the complexities of digital parenting that emerge from qualitative research; however, researchers in this sphere have responded by engaging with nonacademic publics through blogs (e.g., Parenting for a Digital Future: <http://blogs.lse.ac.uk/parenting4digitalfuture/>), accessible reports, public commentary in newspapers, and books written with broader audiences in mind. Researchers in a range of established and new fields studying digital parenting are also sitting on advisory boards and writing working papers for policymakers and other organizations. It will be interesting to see the extent to which such efforts can productively quell the anxieties produced in dominant discourse around digital parenting in the next ten years.

Gaming Pwnage: The Triumph of the Metagame

One of the more profound transformations in the years since we conducted our fieldwork for the Digital Youth Study is the expansion of gaming into more spheres of entertainment and creative production. In HOMAGO, we divided gaming into three genres of engagement: killing time as largely solitary engagement with casual games, hanging out as social play with friends and family, and recreational gaming as more geeked-out and competitive forms of play. We noted that recreational gaming was also tied to

social organizing and what we called “augmented gaming,” which included machinima (video animation created through game platforms), and production of walkthroughs, cheats, and other resources beyond the direct play experience. Although casual and social gaming has quietly infiltrated more and more spheres of our everyday life through smartphones and social media, the growth of augmented gaming has been more explosive and dramatic—geeking out on steroids.

Minecraft is a case in point. Players spend countless hours in the gamelike “survival mode,” which involves battling monsters and surviving in a hostile world, but they collectively spend more hours creating and spectating. In “creative mode,” players can build everything from a simple home for survival purposes to full recreations of cities and architectural and engineering marvels. *Minecraft* content dominates the YouTube universe as players create “Let’s Play” videos, theater productions, and music videos in *Minecraft*. *Minecraft* YouTubers have amassed subscribers in the millions, rivaling some of the top YouTube celebrities. The hours that young people spend observing *Minecraft* on YouTube often exceed the time they spend playing themselves. Even as many parents fret about gaming addiction, many others celebrate *Minecraft* as a (relatively) nonviolent, (comparatively) gender-neutral, and often social game that develops creative and problem-solving skills (Thompson 2016). Many educators have embraced the platform for these reasons, and the *Minecraft* education edition is now a central part of Microsoft’s strategy in the educational technology market.

Minecraft is an exceptional game, but also a microcosm of how geeking out with games has outgrown its origins in teen boy culture, charting a path toward gaming being embraced by more mainstream and established sectors of society. It is also a shining exemplar of the “metagame”—the knowledge economy and secondary media production around a game—overtaking the game itself (Kow, Young, and Salen 2014). In HOMAGO, we noted the rise of machinima and player resources like walkthroughs and cheats as an important part of the player experience. We did not imagine these types of player-generated content blossoming into something as expansive as the *Minecraft* YouTube subculture and creative universe. The massive popularity of *Minecraft* among today’s youth is a testament to the mainstreaming of what were once marginal geeking-out practices. Other popular social gaming platforms such as *Roblox* and *Fortnite* have also expanded options for geeked out gaming for kids. The spread of the metagame into content

geared toward elementary and middle schoolers also means that kids are being immersed in more geeked-out forms of gaming and online engagement at an earlier age. In the time period that HOMAGO covered, multiplayer online games such as *World of Warcraft* were largely the domain of young adults. Although the lower-end *RuneScape* was making some inroads into tween life, its scope and functionality was barely a glimmer of what we see in the kids' creative gaming universe today.

Another indicator of the triumph of the metagame is the growth of varied forms of gaming spectatorship. In HOMAGO we begin to note the ways in which young people observe each other's gameplay for fun. With the advent of Twitch and the professionalization of esports, this arena of gaming has exploded (Taylor 2015). The esports industry is seeing 40% year-over-year growth in recent years (Pennekeet 2018). Esports viewership now rivals many traditional sports. In 2018, the *League of Legends* World Championship viewership was larger than that of the NCAA Final Four and the Super Bowl combined (Heilweil 2019). Universities are offering esports scholarships (Smith 2017), and high school esports leagues are beginning to take off (Steinkuehler 2018). The popularity of esports is the shiniest manifestation of a broad-based groundswell in streaming, video creation, and viewership becoming an integral part of gaming culture. Even young kids are posting "Let's Play" videos on YouTube or streaming on Twitch to share their gameplay with friends and potentially broader audiences. It's not uncommon for kids to experience certain games almost entirely as spectators and not players themselves.

In the past decade, gaming has cemented its place as a dominant entertainment medium of our time. This spread has led not to a common culture of gaming but rather diversification, fragmentation, and new forms of strife. Gender gaps we noted in HOMAGO persist. By some counts, almost half of gamers in the United States are female (Entertainment Software Association 2018), but the genres that girls and women play skew much more heavily toward casual and social games (Yee 2017). Gaming through tablets and iPhones has added more fuel to the fire of parental concerns about gaming addiction, as the accessibility of gaming around the clock has expanded. As children and teens engage with networked games like *Fortnite* and *Minecraft*, parental concerns have reached a crescendo (Haller 2018). The diversification of gaming in many ways escalates and expands divisions between different types of gaming because players can specialize in and dive deeper

into the genres they most enjoy playing. The tendency for digital networks to fuel specialization and niche affinity networks is perhaps most evident in digital gaming cultures, but it has wide-ranging implications that we did not see coming a decade ago, and which we explore next.

Online Affinity Networks: Promises and Perils of Grown-Ups' Networked Affiliation

When we were writing the first edition of *HOMAGO*, scholars such as Yochai Benkler (2006) and Clay Shirky (2008) had just put their thumbs on the unique power of organizing and affiliation afforded by online networks. Henry Jenkins (2008) was connecting his long history of work with participatory fan cultures to convergent and digital media and showcasing the expanded palette of fan organization and production through digital networks. Even before the dawn of the Arab Spring, we marveled at the power of online networks to coordinate action and support new forms of collective production such as Wikipedia. Many of the case studies for *HOMAGO* highlighted niche affinity networks and collective action emerging through teen peer networks, including the video blogging scene, anime fandom, massively multiplayer online games, fanfiction writers, and Neopets aficionados. Some youth looked back on past affiliations as childish and obsessive. We were troubled by proanorexia and probulimia groups organizing online (Boero and Pascoe 2012), and certain displays of exclusionary masculinity in online communities (Kendall 2002). Mostly, however, youth who did participate in niche affinity networks described them as empowering avenues to connect with like-minded peers, a welcome escape from the status negotiations in their “real-life” school-based networks.

In the past decade, we've come to see both the expanded potential as well as the dark side of online affinity networks as they have grown beyond their origins in marginalized teen culture and among nerds, taken up by movements across the cultural spectrum, and weaponized by the powerful. Today's online networks are just as likely to spawn One Direction fanfiction (Korobkova 2014, Ito et al. 2018) and progressive groups such as the Harry Potter Alliance (Jenkins et al. 2016) as Anonymous trolls (Coleman 2014), #GamerGate, and conspiracy theorists (Chess and Shaw 2015, Masanari 2015, Mortensen 2018). As the range of online affinity networks has expanded, we have documented new opportunities to connect with

diverse youth interests that can power learning and civic engagement. Ito's research post-HOMAGO, published in *Affinity Online: How Connection and Shared Interest Fuel Learning*, focused selectively on case studies of youth-centered online affinity networks that showcase this positive potential (Ito et al. 2018). At the same time, internet observers have done active soul searching on how we failed to fully anticipate how the internet can sow division and fuel polarization as much as support connection and bonding (Jenkins, Ito, and boyd 2016; Pariser 2011; Tufekci 2017; Zuckerman 2013).

The very teens who once saw the online world as a safe haven for affiliating around stigmatized identities are now prime targets for hate and harassment online. Even in HOMAGO, we noted that young people often segmented their online identities. Teens might have online accounts centered on a fandom or stigmatized identity that is not connected to their online peer networks from school. Platforms such as Tumblr and Twitter offer opportunities for kids to construct personas and social networks tailored to particular facets of their identities. For example, Alexander Cho (2018) has investigated how queer youth of color prefer Tumblr for more intimate forms of self-expression to the "default publicness" of platforms like Facebook. Now teens have to contend with parents and teachers being on Facebook and other social media sites, and they have developed complex strategies for maintaining privacy from certain audiences while staying connected with others. For example, they might use coded language in a Facebook status update that only peers will understand the significance of (Marwick and boyd 2014b). Cyberbullying has become a topic of concern for parents and educators, and young people find grown-ups regularly monitoring their social media presence (Bazelon 2013), even as young people struggle to differentiate drama, bullying, and harassment (Marwick and boyd 2014a). Snapchat's rise in popularity was tied at least in part to the comparative lack of digital traces that could be later searched or trolled by peers and adults.

The geeky teens we profiled in HOMAGO were the early adopters of the logic of online affinity networks, but the unfolding impact of these forms of affiliation spreading were barely visible at the time. Even tech-privileged teens are not a fully empowered segment of society. It took powerful adults adopting these types of affiliations and actions to unleash the power of online affinity networks, for better and for worse. In the years since the Digital Youth Study, a great deal of research has centered on interrogating how

power and stratification are reproduced online, including investigations of toxic masculinity (e.g., Consalvo 2012), political polarization (e.g., Faris et al. 2017, Jamieson and Cappella 2008), privacy concerns (e.g., Andrejevic 2007, boyd 2014), and fairness in algorithms (e.g., Eslami et al. 2015, Noble 2018, Sandvig et al. 2014). It is imperative that this kind of critical work continues in tandem with work that recognizes and amplifies the positive dimensions of online affinity networks for young people. We are heartened to see the growth of fields such as internet research, digital ethnography, and digital literacy studies, as well as how those new disciplines are leading to robust dialog that both diagnoses problems in our digital ecosystem and points toward solutions. We conclude this introduction with a reflection on some of the ways in which HOMAGO has touched ongoing efforts in education to improve the lives of young people from diverse backgrounds.

From Geeking Out to Connected Learning

During the writing and publication of HOMAGO, the MacArthur Foundation was expanding its investments in the DML initiative to include more research as well as support for new educational programs and innovation. Over the course of twelve years, DML supported two interdisciplinary research networks in Youth and Participatory Politics and the Connected Learning Research Network (CLRN). These networks included scholars taking a broad and often critical look at the relation between youth and a changing digital media ecosystem as well as researchers, designers and practitioners developing and testing solutions that leveraged new media for expanded access to learning and civic action. HOMAGO, together with research led by Henry Jenkins (Jenkins et al. 2009) and Joseph Kahne (Kahne, Middaugh, and Evans 2009), were cornerstone DML research investments that led to the launch of these networks as well as other DML programs. The efforts launched by these networks and the broader DML community is wide ranging and beyond what we can do justice to in this introduction. We can, however, offer some examples of those connected to or inspired by HOMAGO in some way as one window into how ethnographic research of this kind can be connected to varied forms of innovations and social impact efforts.

When considering the relationship between HOMAGO and educational practice and design, we find less affinity with terms like “application” and “transfer” in favor of contemporary movements within educational

research for “research practice partnerships” (Penuel and Gallagher 2017) and “networked improvement” (Bryk et al. 2015). Rather than consider research and application as a linear and sequential process, researchers, practitioners, and designers work side-by-side to identify problems and iteratively develop solutions and insights. DML offered us the opportunity, through CLRN and other forms of collaboration, to work alongside educational practitioners and designers who were starting up new schools, engaged in varied after-school programs, and developing games and other platforms for learning.

In 2009, the Chicago Public Library unveiled YOUMedia, a new teen digital creation space on the first floor of the flagship Harold Washington Library in downtown Chicago. YOUMedia was collaboratively developed and operated by the Chicago Public Library and the Digital Youth Network (DYN) youth mentorship program (Larson et al. 2013). DYN leader Nichole Pinkard was a member of the CLRN and was in regular communication with Ito, the CLRN’s chair, as well as other CLRN researchers. With Pinkard’s input, and in collaboration with a design team led by Drew Davidson, YOUMedia was designed to mirror HOMAGO’s genres of participation. The “hanging out” space had comfortable couches and game consoles, and for the first time ever, teens were permitted to bring food into the library. In the adjacent “messaging around” space, teens could access computers and other creative digital technologies to engage in self-directed exploration and creation. The “geeking-out” space was dedicated to more structured learning opportunities such as workshops for digital skill development. With the support of the MacArthur Foundation and the Institute of Museum and Library Sciences, the YOUMedia effort was expanded into a network of learning labs in libraries and museums across the country. HOMAGO continued to inform design as educators devised and tested new ways to connect youth digital media practices with varied forms of learning, creative production, and community building (Yolocalli Arts Reach 2013). By 2014, the *New York Times* was using the term “homago space” as shorthand to describe the design of the new teen space in the Boston Public Library’s renovated main branch (Seelye 2014). Rap world luminaries like Vic Mensa and Chance the Rapper credit YOUMedia Chicago for kickstarting their creative careers (Stephens 2015).

YOUMedia and CLRN developed alongside one another over the past decade, with Insights from DYN and YOUMedia leading to new

investigations of how adult mentors could productively connect with young people's digital interests and learning. Practitioners in turn took up and extended the insights of HOMAGO through experimentation in practice, creating HOMAGO toolkits and designs that help inform communities of practice for a growing YOUmedia network and other networks of informal educators (see <http://community.youmedia.org>). In 2013, CLRN published a report (Ito et al. 2013) that spelled out a new framework for connected learning that grew out of this network of researchers, designers, and practitioners. In addition to informing the ongoing research of the CLRN, the framework ties together the Connected Learning Alliance, a network of researchers, educators, designers and developers seeking to realize connected learning in practice. An annual Connected Learning Summit brings together this community of researchers, educators, technology makers, and funders. Although the movement for connected learning is dwarfed by the massive changes to young people's lives wrought by the likes of Facebook and Apple, we are proud that HOMAGO has had even a small role to play in not only describing but also enhancing the digital lives of some youth.

Our hope in writing HOMAGO was that it might help bring youth voices and interests to the table in defining the future of our technology-saturated world. We did not expect that our work would directly inform educational practice or be part of a new educational reform movement. Its uptake by educators and technology makers was just as unexpected as the many twists and turns that youth digital culture would take in the decade since the book's publication. Ethnography can shine a light on both problematic and delightful dimensions of youth culture, but the ways that our work is taken up by those who touch the lives of young people is well out of the ethnographer's reach and control. This project, however, was blessed with the unique opportunity to be part of a broader interdisciplinary network of researchers, as well as individuals and organizations at the front lines of technology and youth development. This has given us a bit more say in how our ideas were taken up in practice, but more importantly, it has been an opportunity to learn and be inspired by new insights informed by diverse professional perspectives. The next decade promises to be just as tumultuous as the last regarding changes in young people's digital lives, and we hope to both observe and actively participate in shaping this digital future.

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