



Youth and the Digital Economy: Exploring Youth Practices, Motivations, Skills, Pathways, and Value Creation

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SPOTLIGHT
SERIES

Youth and the Digital Economy:

EXPLORING YOUTH PRACTICES, MOTIVATIONS,
SKILLS, PATHWAYS, AND VALUE CREATION

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Youth and the Digital Economy: Exploring Youth Practices, Motivations, Skills, Pathways, and Value Creation

By Andres Lombana-Bermudez, Sandra Cortesi, Christian Fieseler, Urs Gasser, Alexa Hasse, Gemma Newlands, & Sarah Wu.

Young people's lives are increasingly shaped by digital technologies. While significant digital divides and participation gaps remain, an increasing number of young people around the globe participate in and contribute to the digitally networked environment in many forms, ranging from creative expression on social media to interactive gaming and collaboration. This spotlight explores young people's digital engagement through the lens of the digital economy and seeks to gain an initial understanding of youth's practices, motivations, skills, pathways, and modes of value creation as they interact with a digital environment in which the boundaries between the commercial and personal spheres, between work and play, are often blurring. The spotlight summarizes key insights from a trans-Atlantic exploratory research collaboration between Youth and Media at the Berkman Klein Center for Internet & Society at Harvard University and the Nordic Centre for Internet and Society at BI Norwegian Business School. In addition to sketching building blocks toward a framework, the paper brings together three essays that explore in different application contexts both the opportunities and challenges that surface when young people engage with and participate in the digital economy.



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0. BACKGROUND AND PURPOSE



Young people’s lives are increasingly shaped by digital technologies. While significant digital divides and participation gaps remain, an increasing number of young people around the globe participate in and contribute to the digitally networked environment in many forms, ranging from creative expression on social media to interactive gaming and collaboration. This spotlight explores young people’s digital engagement through the lens of the digital economy and seeks to gain an initial understanding of youth’s practices, motivations, skills, pathways, and modes of value creation as they interact with a digital environment in which the boundaries between the commercial and personal spheres, between work and play, are often blurring.

The spotlight is divided into two segments. Segment one provides an introduction to the evolving discourse around youth and the digital economy. It starts with a brief overview of different types of youth-engagement opportunities associated with the proliferation of the Internet, widespread adoption of mobile devices, and emergence of interactive platforms that are at the core of today’s digital economy. Moving from opportunities to challenges, segment one then addresses the problem of existing digital divides, as well as the risk of new structural inequalities and participation gaps and also points toward new power asymmetries between youth as users/producers/consumers and powerful commercial platforms. It concludes with 12 areas of interest emerging from this project that deserve further investigation and might inform a future research agenda.

Segment two of the spotlight includes three in-depth essays that further explore in specific application contexts and from different perspectives the opportunities and challenges that emerge when young people engage with and participate in the digital economy. One essay examines youth-driven capital-enhancing activities such as creating and sharing content on social media platforms. A second essay examines how young people leverage their online activities and skills with an eye to future employment opportunities – a phenomenon termed “aspirational labor.” A third essay uses a case study to zoom in on so-called “soft” skills – such as virtual collaboration skills – and examines how such skills might prepare young people to thrive in the digital economy as a highly networked ecosystem.

The spotlight summarizes key insights from a trans-Atlantic exploratory research collaboration between Youth and Media at the Berkman Klein Center for Internet & Society at Harvard University and the Nordic Centre for Internet and Society at BI Norwegian Business School. It seeks to provide initial conceptual building blocks and phenomenological insights toward a more comprehensive analysis and assessment of youth’s engagement in the digital economy and the opportunities and challenges that are associated with it.

I. FRAMING AND CONTEXT



1. YOUTH ENGAGEMENT OPPORTUNITIES

The Internet and digital technologies that run on top of it have unleashed an explosion of creative opportunities for youth to be active in a “participatory” and “networked” culture, with low barriers to entry and multiple possibilities for widespread content circulation (we will address some of the roadblocks in the following sections). Youth can share information and communicate their knowledge, connect with interest-driven communities (e.g., video game modding forums), and cooperate on peer-based production projects (e.g., by contributing to multiple animator projects

on Scratch or engaging in collaborative fan-fiction projects), among other productive activities (Benkler, 2006; Jenkins, 2006; Jenkins et al., 2006; Ito et al., 2011). A rich body of theoretical work and empirical research suggests that youth engagement with online content, platforms, and services can take many forms (Palfrey & Gasser, 2016). Some of these newer forms of engagement build upon and complement more traditional forms of content creation. For further illustration, consider the following modes of engagement and anecdotes.



Video Blogging:

Particularly powerful examples of youth participation in the digital economy are influencers on YouTube, where tech- and business-savvy young people have built popular personal brands by creating beauty and lifestyle videos that emphasize their cultural and racial specificity, aesthetics, values, and norms. With thousands, sometimes millions, of viewers and subscribers, some YouTubers have become influencers who earn money by displaying third-party advertising on their content (e.g., the Google AdSense program) or by partnering with companies to create videos about specific products and services (“advertorials”).

Written Blogging:

Written blogs continue to be a site of production and consumption for youth, both on personal websites and social media platforms such as Tumblr. Given the evolution of social media ecosystems, blogs are usually maintained in coordination with YouTube and Instagram channels, as well as Facebook pages. Common examples of youth blogging are fashion blogs, where young creators cultivate niche audiences based on particular styles. Besides maintaining and expanding connections with readers, they sometimes generate revenue through affiliations with established fashion brands that sponsor posts about particular products.

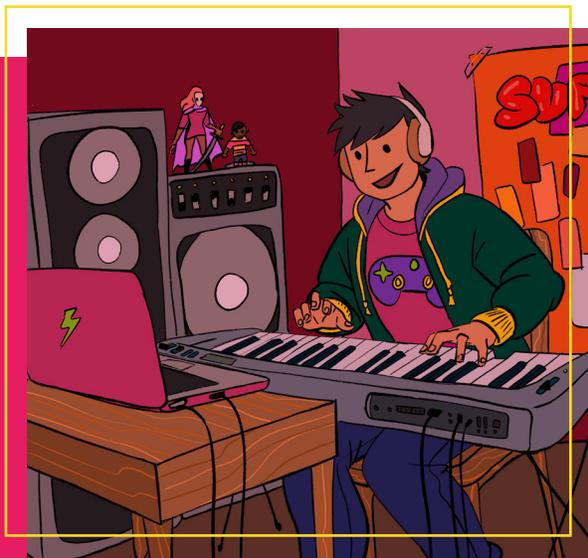


Photography / Art / Design:

Youth, who are passionate about food, nature, fashion, art, and/or design, have also become avid contributors on social media (e.g., Instagram and Snapchat) by posting pictures and photographs of their passions online, building audiences of followers. For example, 17-year-old Jose from Peru, publicly known by the name *@naturally.jo* on Instagram, started his path in the digital economy by posting vegan art and food. Following a common trajectory, he then later expanded his content production and circulation to other platforms, such as YouTube and Facebook, where he continues to build relationships with his audience.

Music / Podcasting:

In the music sector, some young people have been able to build global audiences of listeners, sometimes counting into the thousands, for their original music on SoundCloud. In doing so, these young people often find opportunities to distribute their music, perform in public venues, and crowdfund the production of their albums. Music genres such as “SoundCloud hip hop” in the U.S., baile funk in Brazil, and rap urbano in Colombia have grown in recent years due to the creative exchanges, exposure, and community relationships developed by minority youth online. For instance, a group of low-income Afro-descended male youth from Colombia and Brazil or African-American youth from the U.S., have been gaining popularity on SoundCloud by uploading their music tracks, networking with other artists, and connecting to producers and promoters online.



Coding / “Modding:”

Other young people – often teenagers from more privileged backgrounds – participate in the digital economy through their engagement in gaming culture. Massive Multiplayer Online Games (MMOGs), such as Roblox, provide not only a virtual world where players engage in a variety of adventures, but also virtual studios and markets where youth can create, test, and commercialize their own games.



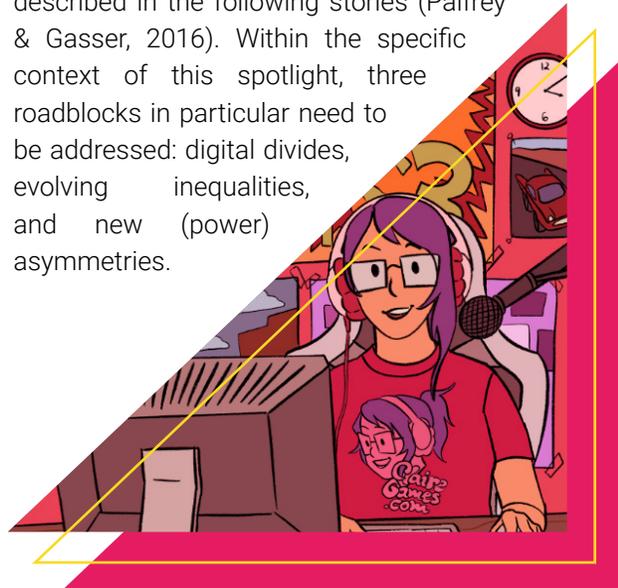
Moreover, skilled teens engage in “modding,” which is the practice of transforming existing commercial video games and developing additional content for public consumption. These modders can thus build their reputations as skilled game designers, hoping to eventually be hired in the professional gaming industry.

These forms of engagement describe a spectrum of what is possible. Granted, while social media platforms may enable youth to express themselves in many different ways, the majority of young users tend to engage in relatively modest ways (i.e., sharing a few pictures on Instagram or some snaps on Snapchat). Surveys confirm it is a relatively small number of young people who extensively post content and heavily invest in creating ambitious projects online. It is important to recognize these facts, as further discussed in the next section on digital divides and evolving inequalities. That being said, it is equally important to appreciate the extent to which all modes of engagement, including modest engagement, represent opportunities for learning, identity formation, belonging, and individual autonomy. Furthermore, what may seem mundane in isolation, such as a selfie on Instagram, may affect societal changes in sum and over time. For all these reasons, the adult-normative perspective should arguably be less focused on a given level of engagement and creativity of an individual expression but shift toward the question of how to best encourage youth to engage in different ways – whether with pen and paper or through the latest digital technologies.

Whether their individual contributions are small or big, youth engagement online has helped to create a digital environment that is more diverse in terms of voices, perspectives, and information. Diversity, in turn, enables people to access a wider range of viewpoints. It allows people (young and old) to have conversations based on different ideas and creative expressions. It also helps drive participation in public discussions and matters from a broader cultural perspective. A diverse body of art and literature, varying lifestyles and ways of living together, and different cultures, languages, value systems, traditions, and beliefs make our lives more interesting compared to a world full of constraints on creativity and expression.

Another important consequence of an emerging digital economy is the profound effect it has had on youth and their ability to be more entrepreneurial and part of different business ventures. Having a creative idea, the relevant skills, and some social, cultural, and financial capital can, in many cases, lay the groundwork for more entrepreneurial endeavors. This cultural shift also becomes more apparent in the

growing popularity of “makerspaces,” or community spaces centered around creativity, innovation, and group collaboration among youth. While this existing entrepreneurial mindset among youth is promising, significant participation gaps and barriers remain that hinder and sometimes even prevent youth from engaging in digital activities of the sort described in the following stories (Palfrey & Gasser, 2016). Within the specific context of this spotlight, three roadblocks in particular need to be addressed: digital divides, evolving inequalities, and new (power) asymmetries.



2. DIGITAL DIVIDES AND EVOLVING INEQUALITIES

Over the past two decades, scholars have acknowledged the risk that the digital transformation of societies could exacerbate and reproduce existing inequalities, creating a “digital divide” of multiple dimensions (DiMaggio et al., 2004; Norris, 2001; Warschauer, 2002), which could, in turn, also affect the degree to which young people can participate in the digital economy.

The digital divide is multifaceted – inequities can come in the form of unequal access to technologies (first-level digital divide); unequal development of the relevant skills needed to flourish online (second-level digital divide); and the disparate benefits of technology usage according to socioeconomic status (third-level digital divide) (Lombana-Bermudez, 2017; Pearce & Rice, 2017).

1. The “first-level digital divide” describes the baseline divide – the gap in access to the

Internet (Lombana-Bermudez, 2017; Pearce & Rice, 2017). The Broadband Commission for Sustainable Development reported that in 2017, 52% of the world’s population still does not have access to the Internet or their access is intermittent or of inferior quality (UNICEF, 2017). Internet-user penetration is vastly different depending on geography. For example, close to 90% of the young people (aged 15–24) currently not using the Internet live in Africa or Asia and the Pacific (International Telecommunication Union [ITU], 2017). The participation gap is also evident between those living in rural and urban areas across the globe, even in highly connected countries, as demonstrated by the OECD (2018).

2. The “second-level digital divide” describes gaps in terms of online skills and practices (Hargittai, 2002; Jenkins et al., 2006). For example, successful social media influencers have developed sophisticated skills to game the algorithms and maximize exposure of their content. Meanwhile, other youth may be participating in the digital economy in a less “advantageous way” – that is, with little impact on their social status – such as through passive consumption of media or entertainment, without an eye toward future benefit. The difference in the online activity of those in the Global North compared with those living in the Global South is pronounced. This “participation gap” is primarily driven by barriers to access to infrastructure, affordability issues, and lack of relevant local content (Broadband Commission for Sustainable Development, 2017).

3. The “third-level digital divide” describes how individuals with higher socioeconomic status benefit more from online engagement than those with lower socioeconomic status (van Deursen & Helsper, 2015; van Deursen & van Dijk 2013; van Dijk, 2005). Although there is a lack of empirical evidence that focuses specifically on content produced by young people, scholars have long recognized there is a digital content-production gap amongst adults that is driven by socioeconomic status (Schradie, 2011) and other factors, like race (Mack, 2001) and gender (Liff et al., 2004). For example, youth from the lowest-income countries use the Internet the least (UNICEF, 2017). Also, particularly in some low-income countries, men use the Internet more than women, with this gap widening over time (ITU, 2016; UNICEF, 2017).

Taken together, it becomes apparent that even though young people as a demographic have a high level of connectivity, they are not all participating under the same conditions. Instead, the playing field is unequal across multiple dimensions, such as geographic location, the education level of parents, social class, race, and gender. The expected result is that the benefits of connectivity will accumulate in the hands of those youth who are already well-positioned to



reap the rewards. Conversely, the rising inequality is limiting access to opportunities and social mobility (Hargittai 2010; Margolis, 2008; Putnam, 2015; Watkins et al., 2018), both within the U.S. and beyond. For example, worldwide, girls aged 5–9 and 10–14 spend 30% and 50% more of their time, respectively, on household chores than boys of the same age (UNICEF, 2018). This adds up to valuable time that is not spent on other capital-enhancing skills, including the development of digital skills.

3. NEW ASYMMETRIES

Even for youth who are in a position to bridge the digital divide and have access to technology and the skills to engage in the digital economy, new power asymmetries emerge that, knowingly and unknowingly, shape young people’s online experiences.

Consider, for instance, social media platforms (e.g., Facebook, Instagram, and Snapchat), online video services (e.g., YouTube, Netflix, and Amazon Prime Video), instant messaging systems (e.g., WhatsApp, Facebook Messenger, and Skype), and games that are tremendously popular among youth. Most of these platforms and services are commercial spaces with advertising-based revenue models. This means that they provide “free” services on which youth can socialize, communicate, learn, and play. In return, however, youth indirectly pay for these services by being the recipients of targeted ads. In order to be able to better target these ads, the platforms and services collect, aggregate, and analyze the massive amounts of data youth generate about themselves (and in many cases, their friends and connections) as they navigate through these online environments. This process transforms young people and their data into something that can be sold to advertisers and analyzed for marketing purposes (Cohen, 2017; Couldry & Mejias, 2018; Posner & Weyl, 2018; Wu, 2016; Zuboff, 2015).

Given these existing disparities in access to technology, skill levels, and the reasons behind its use, the evolution of the digital economy is likely to deepen structural socioeconomic, racial, and gender inequalities in the absence of policy and design interventions that cover a broad range of digital transformation issues, including infrastructure investments, educational interventions, and equal opportunity programs, to name a few examples.

The concerns associated with the current approach of the digital economy and its powerful platforms are manifold. In the context of this spotlight,¹ three power asymmetries are particularly noteworthy.

1. Young people are not often fully aware of the extent to which their data — whether given (e.g., pictures, videos, and other content shared), left behind (e.g., collected via cookies), or inferred (Livingstone, Stoilova, & Nandagiri, 2018) — is being collected, aggregated, and analyzed by platforms and services. For instance, focus group interviews have shown that young users care about privacy vis-a-vis other users such as peers, parents, or teachers (i.e., interpersonal contexts) and have developed nuanced strategies to manage their reputation. However, these interviews have also shown that young users are less aware of, and in some cases and/or contexts, less concerned about (Common Sense Media, 2018), the commercial data practices (and underlying business models) that are deployed by social media platform providers (Palfrey & Gasser, 2016). For instance, focus groups indicate there is little awareness among youth what a “like” on a product page on Facebook means in terms of collection of personal information (Palfrey & Gasser, 2016).

¹ The three power asymmetries are not youth specific. Adults are not invulnerable to the exact same issues.

2. Platforms and services profit from young people's data, attention, culture, labor, and creativity. Yet, the benefits are not equitably shared. Some Internet scholars have argued these online activities are a form of unpaid labor that is exploited by commercial platforms and services (Andrejevic, 2009, 2013; Cohen 2017; Fuchs, 2010, 2013; Fuchs & Sevignani, 2013; Scholz, 2008; Terranova, 2000). As Posner and Weyl (2018) explain, this "data work" is the source of the record profits of the most valuable companies in the world. Most "people do not realize the extent to which their labor — as data producers — powers the digital economy" (Posner & Weyl, 2018, p. 208).
3. Research findings suggest that young people have started to use different platforms and services based not only on technical affordances, but also as a way to segment audiences, calibrate the reach of their communication, and ultimately manage their reputations (Cortesi & Gasser, 2015; Kanchinadam et al., 2018; Palfrey & Gasser, 2016). However, many of the most popular platforms belong to the same parent companies, with extensive data collection and sharing across these services, as well as with data brokers and

large advertising networks. As a result, youth who do not want to share their data with these platforms and services lack alternate options. Deciding not to share would in most cases mean not using digital platforms and services at all, which is often not a viable option given the important role they play in young people's lives (Anderson & Jiang, 2018a; Anderson & Jiang, 2018b; Palfrey & Gasser, 2016).

Taking these elements together, youth are growing up immersed in a digital platform ecosystem where they participate in a variety of paid and unpaid economic transactions, consuming and producing content, while exposing themselves to an intense flow of advertising. In other words, online platforms have a paradoxical and contradictory relationship with youth that is shaped by the logic of a data-driven business model. On the one hand, youth are empowered by the digital ecosystem because they are provided with the tools and spaces to exercise their agency as active and creative consumers and producers of culture. At the same time, corporate platforms commodify their data, attention, culture, labor, and creativity for profits that are not equitably shared.

4. INTRODUCING THE ESSAYS

In this spotlight, we present three in-depth essays to explore — in specific application contexts and from a phenomenological, analytical, and normative perspective — the various opportunities and challenges that emerge when young people engage with and participate in the digital economy.

The first essay, "Youth and Capital-Enhancing Activities," examines capital-enhancing activities such as creating and sharing content on social media platforms. By expanding on the traditional notion of "capital" as purely economic capital, the essay demonstrates that online activities can also lead to valuable increases in social and cultural capital. Story #1² introduces some of these key themes.



² In each of the three stories in this section (Story #1, Story #2, and Story #3), please note that the users and social media accounts referenced are based on real-world individuals, but have been given pseudonyms.

STORY #1

MIRAY AND HER LOVE FOR VEGANISM

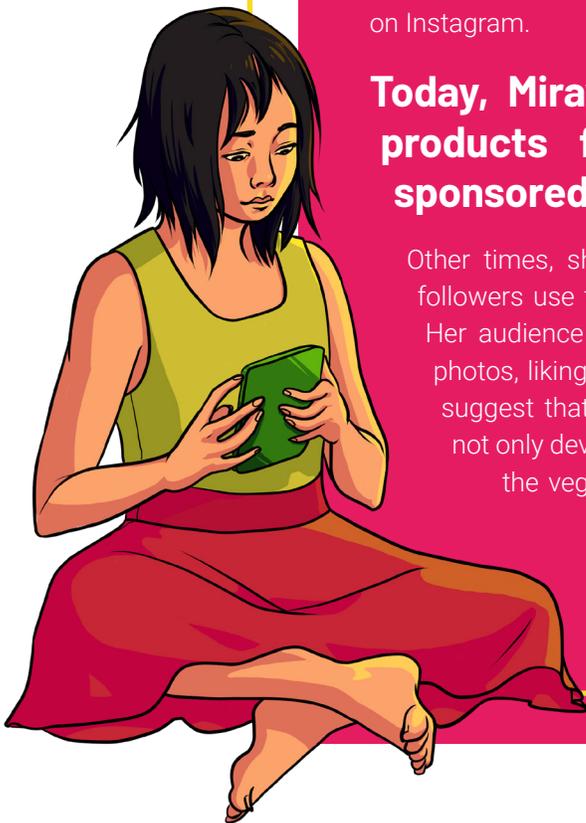
Featured in Essay 1 – “Youth and Capital-Enhancing Activities”

Miray, a young vegan (18) from Chicago, discovered veganism on the Internet three years ago while attending high school. She identified with the movement’s core values of animal protection, environmental sustainability, and health improvement and decided to take up a vegan lifestyle. Although her family ate meat, she was able to pursue her choices thanks to the financial support of her parents and a network of vegans she was able to connect with online. She researched vegan websites, joined Facebook groups, and followed vegan YouTubers and Instagrammers, all in order to learn about foods, recipes, and the many aspects of being vegan.

During her first year in college, Miray started to publish high-quality photos of the meals she cooked on an Instagram account she created for this purpose (@VeganMiray), using the camera of a new smartphone (iPhone) her parents bought her. When posting the photographs, she added a caption describing the recipe and the foods she used, including various hashtags (#recipe #vegan #recipes #cooking #plantpowered #vegansofig #veganfoodshare #whatvegans eat #veganfood #crueltyfree #eatclean #healthyfood #dairyfree #veganfoodporn #veganism). Using the @VeganMiray account, Miray followed her favorite vegan Instagrammers as well as some of her high school and college friends. Soon, @VeganMiray captured the attention of other vegans on Instagram that liked, commented, and re-circulated her photographs. In a few months, @VeganMiray had an audience of almost 50,000 followers and the status of an influencer among the vegan community on Instagram.

Today, Miray sometimes makes recipes using products from food companies that have sponsored her @VeganMiray Instagram posts.

Other times, she shares discount codes to online websites – if her followers use the code to buy vegan goods, she earns a commission. Her audience of followers engage frequently with the @VeganMiray photos, liking and commenting on photos and tagging other users to suggest that they try the recipes. Miray, therefore, has been able to not only develop a reputation and cultivate a growing network among the vegan community on Instagram, but has also been able to earn money through the sponsorship of companies. She has started to work on a book about vegan recipes



STORY #2

based on the ones she posts online and, motivated by the followers of @VeganMiray, hopes to publish it soon.

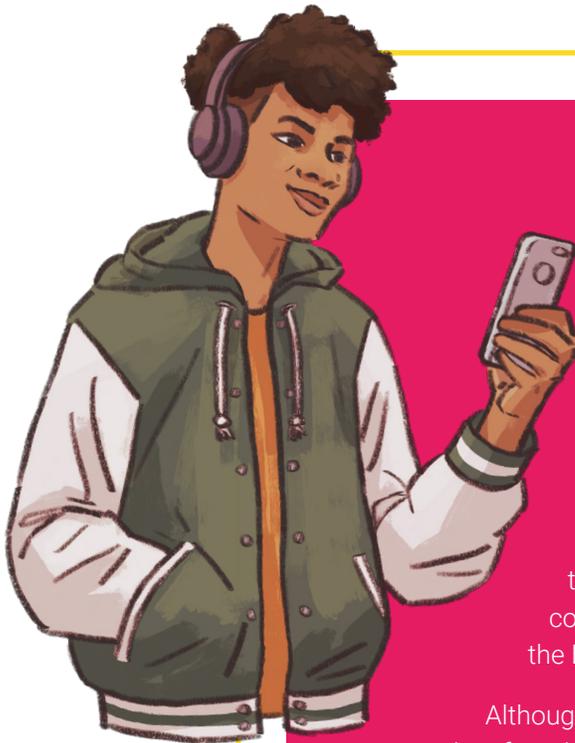
The second essay, “Aspirational Labor,” examines the phenomenon of young people leveraging their online activities and skills with an eye to future employment opportunities in desired industries (Duffy 2015, 2017). The example discussed in the essay is about bedroom music production and sharing on SoundCloud. It explores how young people negotiate long- and short-term gains as they engage in economically oriented online activities, and the risks and opportunities that youth confront as they engage in aspirational labor. Consider the following Story #2.

NICK AND HIS MUSIC PRODUCTION

Featured in Essay 2 – “Aspirational Labor”

Since he was 16 years old and a freshman in a public high school in Miami, Nick has published the video game music he produces at home on the Internet. Using a personal laptop computer, headphones, a MIDI keyboard, and the broadband connectivity his parents have provided for him, Nick has been able to pursue his passion for video game music production, and works hard to curate an online music portfolio where he can showcase his creations.

Initially, he uploaded his music to SoundCloud, a specialized online audio-sharing platform, where he followed several aspiring and professional video game musicians and sound designers. On SoundCloud, Nick actively listened, favorited, and commented on the music shared by others. Although for the first few years his tracks and profile had low listener and follower counts, he spent lots of time and energy on SoundCloud examining other musicians’ productions, asking questions, and learning about the different styles and subgenres of video game music. Three years after joining SoundCloud, Nick assembled a portfolio showcasing 10 video game soundtracks and three playlists, amassed almost 300 followers, and some of his tracks were listened to thousands of times.



With the support of his parents, Nick, now 20 years old, is attending a college of music in Boston. He continues to publish video game music he creates on SoundCloud and still spends time commenting on the work of other musicians. However, he dedicates most of his time to schoolwork and composing music for indie game projects he releases with Share-alike Creative Commons licenses. The indie game community — both online and offline — has provided him with a fertile space for collaboration on projects. Sometimes he gets contacted by indie game developers through his SoundCloud profile, and other times he meets collaborators at the monthly meetings and game jams in the Boston indie games community.

Although Nick has not been paid for his music production yet, he has found several opportunities to make video game music, expand his portfolio, express his creativity, and learn about other aspects of music production such as sound mixing and voice recording. He hopes to become a professional video game music producer and sound designer and expects to get paid for his work soon. He believes he has built a robust digital portfolio online and has connected with a network of indie game developers that will help him find paid job opportunities and projects with larger budgets that can cover his music production costs.

Nick's portfolio is an example of aspirational labor, where an economic actor produces some kind of output in hopes of later receiving social or monetary compensation, with an uneven reward structure. As cultural shifts toward creative professions and entrepreneurship encourage young people to enter nontraditional job hierarchies, aspirational labor has become increasingly prevalent, especially in digital spaces. Blogging, Instagramming, video game modding, and Nick's own music production are all examples of current activities that youth commit to in order to later make profit, either by cultivating a body of work or gaining social traction.

The third essay, "Virtual Collaboration", touches on the "soft" skills (as opposed to technical "hard skills") considered necessary to thrive in the digital economy as a highly networked ecosystem. This skill of "virtual collaboration" involves working with people from a variety of backgrounds and cultures and is discussed through the example of a collaborative project on Scratch, an online community for creating and sharing interactive multimedia projects. The following Story #3 introduces some of the key themes covered in the essay.

STORY #3

ASH AND HER COLLABORATION ON SCRATCH

Featured in Essay 3 – “Virtual Collaboration”

On July 6, 2016, Ash (15), a teenager from the U.S., shared the project “Hands – Open MAP (Multiple Animator Project) – For Orlando” (“Hands for Orlando”) on Scratch. This was the fourth MAP that Ash hosted on Scratch. Despite being relatively new to the Scratch community, Ash had earned a reputation as a talented creative programmer, animator, and MAP host, and had cultivated a network of more than 1,000 followers.

Ash framed the “Hands for Orlando” project as a tribute to the victims of the shooting at the Pulse Nightclub in Orlando, Florida on June 12, 2016. The MAP had a clear civic theme related to diversity, peace, tolerance, and lesbian, gay, bisexual, transgender, and queer (LGBTQ) equality. When describing the rules in the project’s “Notes and Credits” section, Ash stated, “This MAP is honoring the victims of a terrible tragedy.”

The project was inspired by the charity single “Hands” written by Justin Tranter, Julia Michaels, and BloodPop and recorded by 24 famous artists, including Britney Spears, Jennifer Lopez, and Pink. The song was made available to the public as a digital download on July 6, 2016 – the same day that Ash published the invitation to participate in the “Hands for Orlando” project on Scratch.

Ash worked quickly to spread the word among the Scratch community, establish project goals, and assign tasks to contributors. A total of 37 animators – spread across the U.S., Canada, and the U.K. – joined the “Hands for Orlando” project, choosing different parts of the song and creating short 10-second animations for each segment. Ash, as the MAP host, was in charge of collecting all animated segments, stitching them together, and assembling the completed animation. On September 16, 2016, Ash published the final product on the Scratch website and created a video of the project that he shared on YouTube.

This case study of Ash demonstrates the range of skills that youth are developing to succeed in the digital environment. The essay explains how the success of “Hands for Orlando” was due to Ash’s ability to virtually collaborate with peers. Decades of research has identified that collaboration is a key interpersonal skill critical to academic, occupational, and personal success. Virtual collaboration shares many aspects of collocated collaboration but also brings unique challenges. In this essay, drawing upon the Hands for Orlando MAP, we illustrate how effective virtual collaboration is built upon three key levers: effective leadership, trust-building, and establishing common ground.

The essays may be read as stand-alone papers or considered as part of a broader collection of works exploring youth engagement in the digital economy. It is the hope of the collaborators that additional

essays and case studies are added to this collection as our research progresses, informed by the initial research agenda outlined in the next section.

5. A POSSIBLE RESEARCH AGENDA

Based on the research conducted so far and our ongoing work with young people, discrete research areas have emerged that can provide a motivating framework for future investigation into the roles of young people in the digital economy. Each of these research areas provides short glimpses into the lives of young people and their practices, motivations, mindsets, abilities, and skill development needs. These research areas also highlight different observable structural inequalities, such as the imbalanced power relationships between platforms and users or youth being in a position of relative disempowerment when competing against adults for market share.

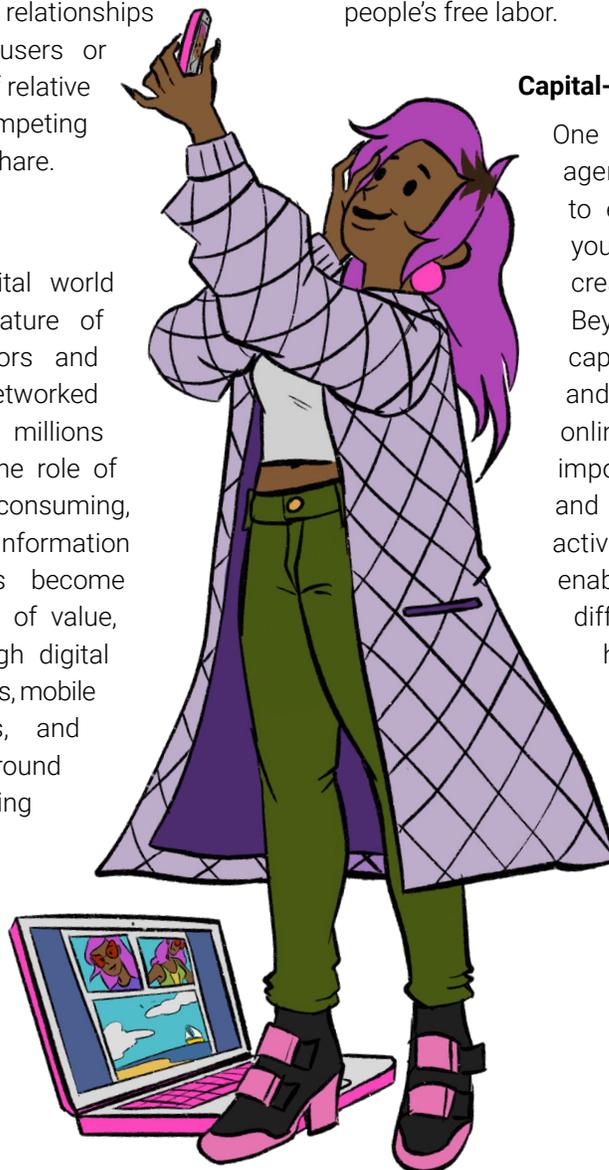
Youth as “Prosumers”

Advances within the digital world have transformed the nature of youth as economic actors and agents. As the digitally networked environment evolves with millions of young people online, the role of youth in creating, sharing, consuming, curating, and searching for information and cultural goods has become central for the generation of value, data, and content. Through digital technologies (e.g., computers, mobile phones, laptops, tablets, and game consoles), youth around the world are encountering opportunities to act as consumers, producers and users. The term “prosumer” combines the word “producer”

with “consumer” to describe the new duality (Toffler, 1980; Tapscott, 1995). “Prosumerism,” however, raises many issues for further exploration, such as the long-term effects of youth exposure to hyper-consumerism and hypercapitalism, the feasibility of youth competing with commercial content producers who control resources that enable high-quality production, such as capital and technical expertise, as well as the exploitative relationship of corporate entities, such as platforms, profiting from young people’s free labor.

Capital-Enhancing Activities

One way to understand youth agency in the digital economy is to examine the ways in which young people’s online activities create different forms of capital. Beyond earning economic capital, youth may develop social and cultural capital through their online engagement, which is also important for their development and status. By focusing on activities and practices that enable youth to cultivate these different forms of capital, we hope to better understand how youth — particularly, those who are negatively impacted by disparities across gender, race, and social class — may be empowered to engage in capital-enhancing activities.



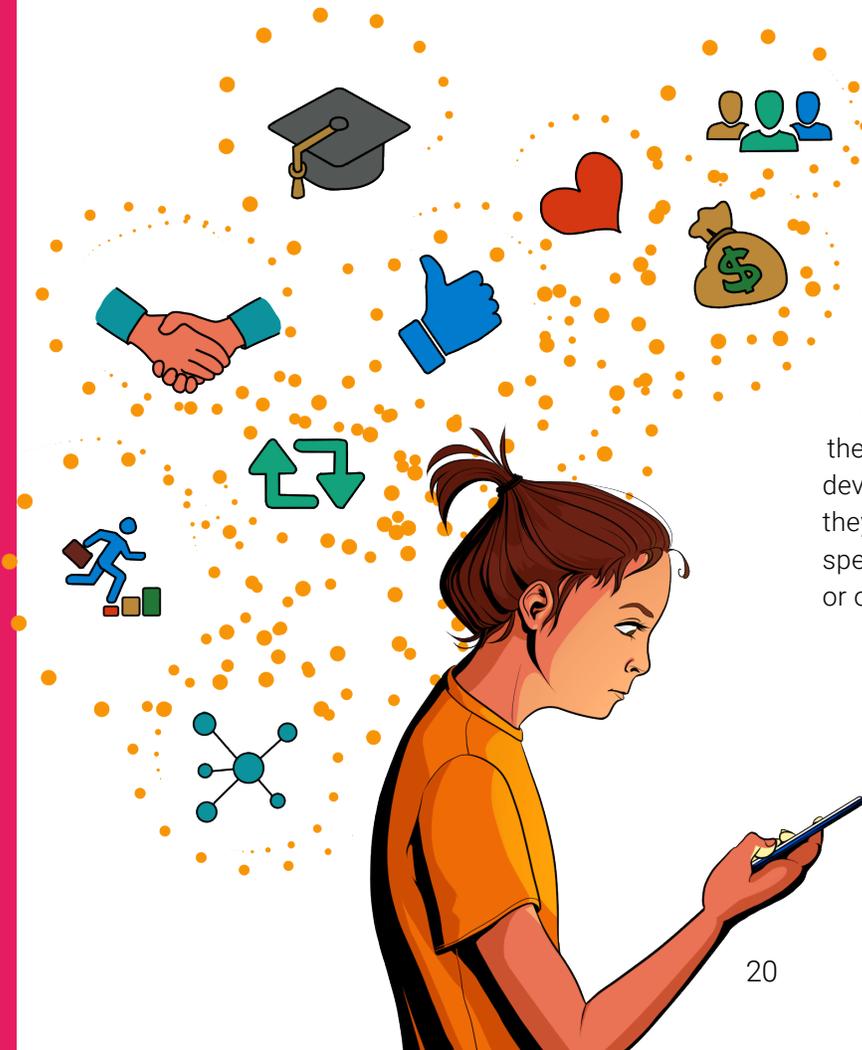
Intrinsic and Extrinsic Motivations

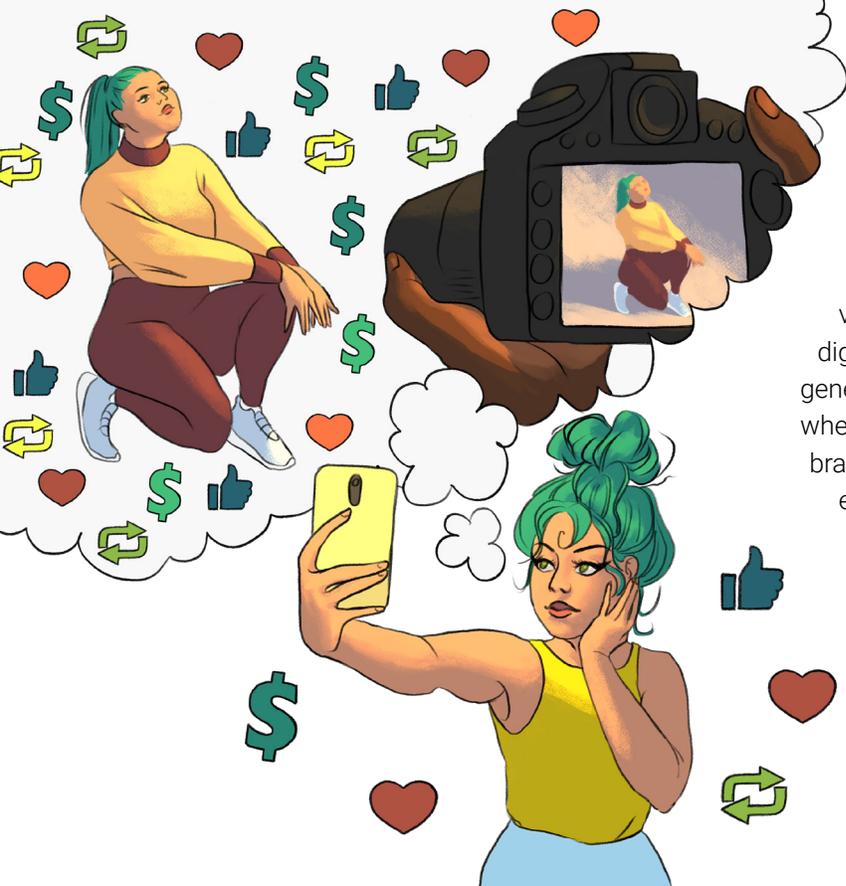
Any number of intrinsic and extrinsic motivations may drive youth participation in the digital economy. Intrinsic motivations include passion, enjoyment, creativity, self-expression, meaning, progress, and skill development. For example, youth who produce gaming videos on YouTube may feel a sense of pride in developing a certain style or in sharing high-quality content. They might continually try to improve the quality of their videos and think of new ways to express themselves. Among the extrinsic motivations, financial and social rewards feature as key inspirations. Some youth are chasing fame or seeking approval from their peers, while others hope to form connections online. As shown in Essay 1, young vegans, for example, have formed online communities through Instagram. Within these communities, users can share recipes and lifestyle tips, connect with others who have similar values and interests, earn a reputation by amassing “followers,” and even earn money through advertising products in their posts, if they have a high volume of followers.



Developing an Economic Mindset

As youth become increasingly aware of their ability to earn social, cultural, and economic capital through their online activity, they may cultivate an economic mindset. Such a way of thinking could be motivated by various rewards (intrinsic and extrinsic) – some monetary (e.g., advertising or sponsorship revenue), others more abstract (e.g., cultural and social gains through high followership); some short-term, others long-term according to young people’s needs, aspirations, and cultural and socioeconomic contexts. Future research could investigate the contributing factors that are relevant to the development of the economic mindset, whether they be age, race, gender, education, time spent online, peer influence, parental influence, or others.





Short-Term and Long-Term Gains

While it is likely that young people are initially focused on the short-term gains of social media activity, such as having fun online and connecting with peers, there is the potential that, as their social media use becomes increasingly sophisticated, they realize that they can try to work toward more long-term gains. Depending on contextual factors and the environment in which they grow up (e.g., their family, school, community), a young person might see the development of their online skills in the present as an investment in their future. Some youth undertake online activities for little to no compensation because they hold the opportunity of future social or economic capital. One example is Instagram “influencers” who invest time, effort, and money to accrue followers, earn reputation, and transition into paid activities (as described in Essay 1). This phenomenon has been called “aspirational labor” and is explored in Essay 2. It is important to note that the ability to participate in aspirational labor is restricted to those who can afford the significant outlay of money and time without reaping an immediate financial benefit.

Metrics of Youth Value Creation

The activities youth develop as they grow up as consumers, producers, and users generate value for platforms and services. Although this value is, in many cases, economic, such as when digital platforms profit from the data that users generate, it can also be social and cultural, such as when youth are able to build audiences and personal brands. However, independent of the kind of economic value youth generate when they engage with digital content and platforms, there are not yet clear metrics to assess and measure alternate forms of value creation. This lack of metrics has contributed to making invisible the creative and affective labor that youth are doing on digital platforms – the work of millions who have not become influencers or celebrities.

Collaboration and other Socioemotional Skills

Over the last two decades, there has been an increasing focus on identifying the skills youth need to develop for success in a digital world. Such skills may be technical, including sophistication in navigating the Internet or the ability to code. However, some researchers are honing in on the importance of non-technical socioemotional skills, such as collaboration, creativity, innovation, and empathy. Essay 3 provides a case study that demonstrates the importance of socioemotional skills in networked environments, focusing on how youth work together in projects online by deploying different levers for collaboration.

Young People’s Position in the Digital Economy

Using a socioeconomic macro-structural perspective – that is, by looking at the ownership of the means of production and communication, as well as the accumulation of financial capital – researchers have criticized the political economy of the networked media environment by revealing the imbalanced power relationships between corporate platforms and users. For further reading, see Essay 1. Young people are participants in a digital economy in which they produce personal, transactional, and user-generated data that is traded and mined by corporate platforms with for-profit business models. When youth, like





other users, watch videos on YouTube, share links on Facebook, post entries on Tumblr, publish photographs on Instagram, or play massive multiplayer online games, they generate data about their browsing and communication behaviors that is sold to advertisers and analyzed for marketing purposes, posing potential risks to privacy and surveillance. Hence critical perspectives have argued that corporations may take advantage — by trading, monetizing, and/or converting data into financial capital — of the labor of young people without compensating them for their product in an equitable way.

Digital Labor, Digital Play

By problematizing the pleasurable, creative, and voluntary nature of most of the activities that users do online, some scholars have also discussed the blurring lines between work and leisure, and work and play. These spheres of life, which have previously been conceptualized as independent realms, are undergoing a process of redefinition as online activities mix elements of play, fun, and leisure with work and value creation, particularly in creative industry settings. Scholars have even used the term “playbor,” a composite of play and labor, to describe the work that fans and gamers do on corporate platforms. In an additional effort to emphasize the fact that the majority of users do not receive monetary compensation for the various activities they do online, new terms such as “free labor,” “immaterial labor,” and “affective labor” have been used to describe the new irregular forms of labor that have emerged.

Youth and Adults: Competition and Collaboration

Generally, adults own, design, govern, and moderate the online platforms and services that are used by youth. This creates a power asymmetry in which youth tend to be in a position of disadvantage, particularly in regards to resources. For example, when competing for followers, sponsors, or viewers, adult producers, particularly corporate producers, have access to vast resources, such as teams of developers, designers, marketers, and capital (OECD, 2016). However, the digital economy provides an opportunity to flip the old power dynamic on its head. While youth producers of content may have limited resources when compared to corporate or adult producers, they still have other resources of value — like time, creativity, skills, and in-depth knowledge of the culture of their target audience (other young people). In combination with the direct access to the market that is afforded by the digital economy, it is no wonder that young people are now considered to be serious economic actors.

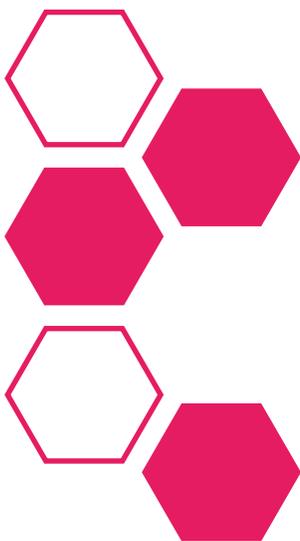


Supporting Youth Enterprise

Many adult stakeholders across the governmental, vendor, non-profit, and other sectors are increasingly engaging with youth's online entrepreneurial and consumer identities, self-brands, and lifestyles. Notable emerging engagement activities by governments provide youth with learning experiences (both in and out of traditional school settings) that relate to digital economic life, particularly through the framework of "digital citizenship."³ For example, the governments of Australia and Chile, as well as the state of Washington in the U.S., have developed educational initiatives around "digital citizenship" that try to foster the ability to produce and circulate content with digital tools and networks (Enlaces, 2017; Media Literacy Now, 2020; Wittman, 2019). Similar educational efforts are emerging in the non-profit space. For example, the LRNG platform creates learning pathways toward economic opportunity for youth. Other adult stakeholders are seeking to foster direct youth participation in the digital economy through market-based interactions. Commercial websites are engaging youth who seek to communicate their day-to-day activities through digital content (Hess, 2017), and the fashion sector is cultivating digital youth participation (Parmley, 2017).

Parental Guidance Advised

Market-oriented stakeholders are not limited to companies. Some parents are active "sharents," using their children's experiences to create and monetize content based on the parents' or families' lives. There have been moments when these practices have veered into terrain that many have found troubling, such as the parents who drove their children to tears and then recorded the results (Ohlheiser, 2017). But there are also many moments that gain notoriety for the spontaneity and joy that youth antics bring to viewers, such as the BBC interview that was derailed by a toddler (Hauser & Victor, 2017). As the lines between the previously more private spaces of childhood, home, and school blur into the public sphere, the methods and motivating factors for translating youth experiences into economic value are rapidly evolving.

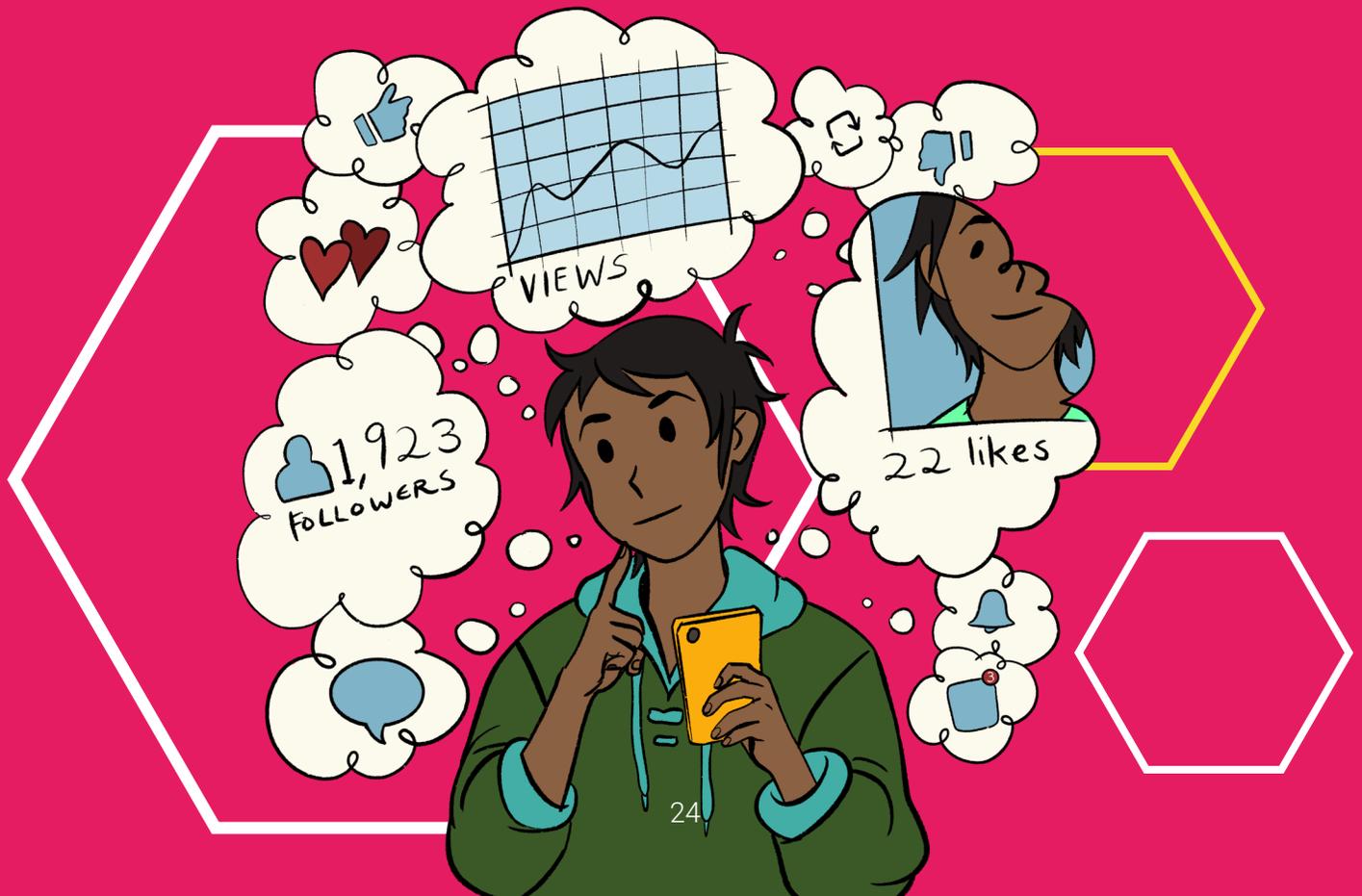


³ To learn more about frameworks around digital citizenship, and similar concepts, and the skills youth need to meaningfully engage online, please see Youth and Media's *Youth and Digital Citizenship+ (Plus): Understanding Skills for a Digital World* (Cortesi, Hasse, Lombana-Bermudez, Kim, & Gasser, 2020).

II. ESSAY 1 – YOUTH AND CAPITAL-ENHANCING ACTIVITIES

Abstract: Some youth are actively participating in the digital economy by engaging in online activities that help cultivate social, cultural, and economic capital. These activities involve the creation and sharing of multimedia content on a range of social media platforms, as well as making social connections and communicating with others. This type of participation can be understood as a form of cultural and technological labor that generates value and allows youth to earn different forms of capital and improve their status. However, as digital divide

scholars have argued, not all youth participate in these kinds of activities. Differential engagement in activities that enable youth to develop social, cultural, and economic capital creates a knowledge gap in terms of the skills needed to participate in the digital economy, and exacerbates offline inequalities. In this essay, we seek to answer the following questions: What are the online activities that allow youth to enhance capital? What forms of capital do they earn through online activities? On which platforms do these activities take place?



1. INTRODUCTION

Unsure of what she wants to cook for dinner, Miray⁴ — a young vegan — scrolls through her Instagram feed looking at photographs of delicious restaurant meals, creative homemade dishes, and social gatherings within the vegan community. Although Miray has more than 50,000 followers, she only follows 500 of her favorite vegan feeds. The leafy green and fruit-filled square photos inspire her to create her own grilled peach and kale salad recipe. After making the dish, she posts a photo of the meal to her Instagram account and shares the new recipe with her followers. Sometimes, she makes recipes with products from companies that have sponsored her own posts. Other times, she shares a discount code to an online website — if her followers use the code to buy vegan goods, she will earn a commission. She hopes to publish and promote a new vegan cookbook in the upcoming year.

Though most youth will not have millions of followers on their accounts, social media is brimming with young users who are consuming, producing, and sharing content online. In this way, youth are not only contributing to a dynamic culture, but also participating in a changing economic landscape. The

networked communication environment has rapidly evolved in the past decade, consolidating itself as an ecosystem of commercial and non-commercial platforms that offer youth opportunities to learn, socialize, play, and earn different forms of capital. However, such an ecosystem also presents risks for youth, such as invasion of privacy, exploitation of free labor, and surveillance.

In this essay, we present a sociological framework for describing youth practices online and their participation in the digital economy. This framework allows us to describe the capital-enhancing activities of youth online and understand the tangible outcomes that may result. The outcomes are not only in the form of earning economic capital, but also in cultivating social and cultural capital. Developing these different forms of capital may improve prospects for success and social mobility. Drawing upon this sociological framework, this essay seeks to answer the following questions: What are the online activities that allow youth to enhance capital? What forms of capital do they earn through online activities? On which platforms do these activities take place?

2. CAPITAL-ENHANCING ACTIVITIES

In focusing our analysis on the micro-level of individual agency, this section examines the ways in which youth are developing different forms of capital online. Playing online computer games can help youth cultivate a strategic and collaborative mindset and an understanding of a specific subculture (Jenkins et al., 2009; Junco, 2014). Sharing self-produced music videos can garner attention and promote youth's talent. Liking or commenting on a friend's Facebook or Instagram posts can help maintain existing relationships. In this way, online activity can be understood as a form of agency, as it enables youth to participate in an economy that is not only associated with earning money, but also can result in the development of social and cultural capital.

In this essay, we focus on the activities that we believe generate more capital and have tangible outcomes; these activities will hereafter be referred to as capital-enhancing activities (CEAs). A guiding question for considering CEAs is: What are the benefits of these activities for the individual? CEAs have visible outcomes and reveal a concrete purpose for improving status and gaining some form of capital. Other activities may generate less or no capital, and not have tangible and visible outcomes. For example, engaging in single-player Facebook games would generate less social capital than interacting with other users on YouTube or Twitch by livestreaming, responding to audience comments, and creating a fun, interactive environment.

⁴ Miray is a fictional character based on real-world examples.

Previous research explored how “engaging in capital-enhancing activities is more likely to offer users opportunities for upward mobility than certain other types of online activities” (Hargittai & Hinnant, 2008, p. 607). Researching the multiple dimensions of inequality online, DiMaggio et al. (2004) identified variations in the uses of technology, highlighting the fact that while some activities increase economic welfare or social and cultural capital, others are merely recreational and do not contribute to improving one’s socioeconomic prospects.

Hargittai (2010), who was part of the research team led by DiMaggio at Princeton, explained in another study that CEAs “are types of online actions from which people may benefit, whereas [recreational activities] likely have fewer pay-offs related to one’s social status” (p. 95). Hence, CEAs are digital practices that have tangible outcomes. That is, benefits in terms of some sort of capital gain. In contrast to casual and recreational uses of technology, CEAs are more similar to traditional “work” in that they require more time and energy, as well as a particular disposition and confidence. These activities also allow youth to exercise their agency and express individuality and independence.

While the digital economy offers opportunities for youth empowerment as creators and more savvy consumers, this networked ecosystem also presents the risk of exacerbating existing social inequalities. Research on a so-called “third-level digital divide” has shown that individuals with higher social status benefit more from online engagement than those with lower socioeconomic status (van Deursen & Helsper, 2015). This divide goes beyond access to technology

(first-level) and skill development (second-level) to focus on outcomes of technology use — “gaps in individuals’ capacity to translate their Internet access and use into favorable offline outcomes” (van Deursen & Helsper, 2015, p. 30). These differential outcomes across socioeconomic lines emerge as a challenge for equity.

Some of the researchers looking at the participation gap have noticed these varying outcomes around Internet usage, particularly in terms of the production and publishing of content online, across different populations (Hargittai, 2009, 2010; Hargittai & Walejko, 2008; Robinson, 2009; Schradie, 2011; Seiter, 2008). Since not all youth are engaging in capital-enhancing activities — or not to the same extent — there is a differential ability to enhance social, cultural, and economic capital online (van Deursen & van Dijk, 2013; van Dijk, 2005).

When considering varying outcomes of Internet use, some digital divide scholars emphasize opportunities, such as seeking financial information, obtaining jobs, and learning about public issues (van Deursen & Helsper, 2015). However, we conceive of CEAs in a broader sense. Drawing from Pearce and Rice (2017), we understand CEAs in three groups: relational maintenance, access to new relationships and information, and reputation building. More concretely, youth engaging in CEAs are cultivating old and new friendships online; creating, consuming, and sharing content, such as photos, videos, and news stories; and cultivating their online presence in online communities and networks. These activities allow youth to connect to communities, networks, information, jobs, and politics.

3. DEVELOPING FORMS OF CAPITAL

The Sociological Approach

In this essay, we combine sociological frameworks to study different forms of capital. Drawing on Nan Lin’s “neo-capital theories,” we diverge from the traditional macro-level Marxian theory and focus instead on the micro-level explanation of individual actors (Lin, 2001, p. 17). Lin focuses on the actions and choices of individuals. New capital theories go beyond

economic capital to consider other forms of capital, such as social and cultural.

In neo-capital theory, Pierre Bourdieu, James Coleman, Nan Lin, and Robert Putnam emerge as prominent theorists. However, for the purpose of this essay, we will not present their nuanced theories. Instead, we present the three forms of capital — social, cultural, and economic — more generally, as a

lens with which to describe outcomes of youth activity online and better understand how social inequality is reproduced. There are many ways to develop these different types of capital, but it is crucial to consider all three forms in determining “the chances of success for practices” (Bourdieu, 1986, p. 15). As we map these different types of capital onto youth activity, we can better understand which online activities develop which forms of capital and how capital is distributed among different youth populations.

Social Capital

When navigating the digital space, social capital emerges as a key consideration, both in terms of maintaining existing ties and expanding one’s networks. Putnam (2000) defines social capital as “connections among individuals — social networks and the norms of reciprocity and trustworthiness that arise from them” (p. 16). For Putnam, there are two main forms of social capital: bridging and bonding. In the previous, social capital consists of connections across different populations. The latter, on the other hand, consists of connections among people with common interests (2000, p. 23). Through these networks, users may access information and influence, receive recognition, and develop social credentials.⁵

Within the community of young vegan Instagrammers, it is possible to identify ways in which activities on the Instagram platform enable development of social capital. Instagram allows users to share photos of their meals and recipes, as well as interact with others through comments, likes, and hashtags, thereby forming lifestyle communities online. It appears that the vegan Instagram community largely consists of young girls and women who are often white and from wealthier backgrounds. Those who maintain vegan diets likely have greater discretionary income and offline connections to these sorts of networks.

Within these communities, users often engage in CEAs. By maintaining and creating new connections through sharing and consuming content, exchanging

information about vegan living, and following other accounts, community members can expand their social networks and access a greater volume and diversity of resources. Immersion in an online vegan community can expose youth to the latest cooking trends, different vegan product contests, or reflections on the political aspects of veganism. These online communities sometimes create offline meetups. For example, sometimes they form local vegan community groups that host potlucks, panels, and information sessions. The main goal of these offline exchanges seems to be forming social connections or friendships for support and information-sharing, both of which benefit community members.

Bourdieu describes the “volume” of social capital held by one person as dependent on “the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected” (1986, p. 21). This “network of relationships” results from investing in social relationships that offer future benefit (Bourdieu, 1986, p. 22). Connections can serve as resources for Instagram users, but outcomes depend on how strong these relationships are or how effective users are at mobilizing them. Vegan Instagram users often befriend other vegans with popular Instagram accounts. If their relationship is strong, two vegan-oriented accounts may choose to promote one another in their respective feeds, thereby expanding each account’s reach.

One way young vegans mobilize their social capital is through effective management of followers, which, in turn, allows them to monetize their posts. The more followers an Instagram user has, the more attractive their account is to companies seeking advertising channels. Tina, a 15-year-old young vegan managing the @superkale2001 Instagram account, for example, curated a vegan feed that kept followers interested with photos of her latest food creations and aesthetically pleasing restaurant plates.⁶ By tagging the restaurant location or the company of

⁵ Putnam’s notion of bridging and bonding builds up on Mark Granoveter’s conceptualization of weak and strong ties. Granoveter (1973), a pioneer in social network theory, used the strength of ties to describe the different kinds of connections people develop and maintain with each other. Weak ties are the ones developed among acquaintances or strangers from different populations and groups (as in Putnam’s bridging). In contrast, strong ties are the connections people keep with their friends, family, and colleagues and are characterized by deep affinity (as in Putnam’s bonding).

⁶ Vegan names and Instagram handles are pseudonyms.

a product she used — e.g., “vegan banana bread studded with @coco_health coconut milk chocolate chunk” — Tina could profit from her social capital (50,700 followers as a count) through advertising posts. Young Instagram users, then, become brand managers and have to constantly post high-quality content to stay “relevant” — that is, to be interesting to their followers.

Another community in which social capital features largely is that of gamers on YouTube and Twitch. Fan bases of certain youth who publish video game reviews or stream their video game play often become loyal members of that group — to the extent that they threaten users who post negative comments. Subscribers sometimes identify as loyal fans and will follow all the account’s activity, increasing the view count, and consequently, the potential to earn money. @AaronGamer00, for instance, is a 12-year-old gamer who livestreams his play on Roblox, Minecraft, and mobile games on YouTube. He has 1.6 million subscribers and 900 million views on his account. The comments on his videos are usually praise, criticism, requests for recognition, and invitations to collaborate in projects. Since Aaron is a minor, his parents supervise his online communication and manage his YouTube channels, and other social media accounts (e.g., Instagram and Twitter). His parents also provide access to computers and media gear at home and support AaronGamer video production and streaming. @AaronGamer00 fans are representative of the social capital Aaron has gained. Leveraging that social capital, Aaron was able to build another popular YouTube channel (@Aaron), where he develops other genres of video such as unboxing and everyday vlogging.

While some youth watch gaming channels to improve their own gameplay, others watch them for entertainment. Differential social capital also raises the issue of access to information and knowledge. When youth have more social capital, they can have access to more opportunities. CEAs help youth obtain more helpful information and resources, which, in turn, allows them to save time and generate new opportunities (DiMaggio et al., 2004; Dobransky & Hargittai, 2006; Pearce & Rice, 2017; van Deursen & Helsper, 2015).

Cultural Capital

When considering CEAs, we must also explore cultural capital, which refers to the cultural knowledge of an individual that enables him or her to hold a certain social status. According to Bourdieu, cultural capital can exist in “objectified,” “embodied,” or “institutionalized” forms (Bourdieu, 1986).

Objectified cultural capital refers to physical objects that have significant cultural meaning (i.e., having luxury goods or the latest iPhone signifies one’s financial resources). It also means that one has the resources to engage with a certain subset of society. For example, those who own the technology necessary for posting high-quality photos on Instagram can better convey their cultural capital. The popular category of lifestyle bloggers and Instagrammers, for instance, has a high barrier of entry. The content of these accounts often consists of users dressed to the nines in luxury clothes, traveling to far-off places, and ordering from five-star menus.

Embodied cultural capital, on the other hand, refers to cultural capital that is developed over time, often as a result of one’s upbringing, and manifests in one’s language, tastes, and cultural knowledge. It is related to the “long lasting dispositions of the mind and body” (Bourdieu, 1986, p. 47). Consuming content is an important part of developing embodied cultural capital. For instance, young gamers often watch other gamers’ videos as part of knowing the ins and outs of a specific subculture (e.g., Steam, Twitch, and YouTube gamers) and developing certain kinds of dispositions, such as the particular jargon of a game and its players.

Finally, institutionalized cultural capital consists of the formal credentials given by an institution, such as a school or a university. Educational qualifications and titles, for instance, provide “entirely original properties on the cultural capital which it is presumed to guarantee” (Bourdieu, 1986, p. 47). However, other institutions, such as learning organizations and online learning platforms, may also provide forms of recognition that can be considered institutionalized cultural capital. Digital badges and certificates of completion of online courses, for instance, are examples of these forms of credentials.

Cultural capital, particularly the embodied and objectified forms, can be seen in the way youth build reputation and create personal “brands.” From building a small audience of followers to gaining more visibility online — even becoming a social media influencer or a celebrity — cultural capital figures prominently in the “success” of youth online. For the purposes of this essay, success is defined by the ability to improve one’s status. Likes, retweets, comments, and shares have all become cultural goods in the sense that they help increase one’s standing. For example, the number of YouTube video likes and views speaks to the cultural capital of the video producer. @AaronGamer00’s videos have high production value, which not only appeals to viewers, but also reinforces his position as a YouTube gamer of high status.

As Bourdieu (1986) explains, the accumulation of cultural capital in the embodied state, in what he refers to as “cultivation,” requires personal investment of time to improve the quality of the content one produces (p. 18). This cultural competence is important for building one’s reputation online as there are soft cues and unwritten guidelines for what one should produce in terms of content, how one should share content, or the ways in which one should engage with other users.

Economic Capital and Conversions

Economic capital is the most well-known form of capital. Youth have found many ways to monetize their activities, including corporate partnerships and advertising revenue. As Bourdieu (1986) notes, the different forms of capital are all related. He posits that all capital is derived from economic capital, even if it can never be reduced to that form, which renders the other forms of capital useful in their own ways (p. 24). These transformations of social or cultural capital into economic capital, and vice versa, are called “conversions” (Bourdieu, 1986, p. 25). Within the realm of youth activity, it is evident that social and cultural capital can be monetized, and that money often aids development of social and cultural capital.

With the previously mentioned example of young vegans, what starts off as a lifestyle choice and “play” in the kitchen can often develop into a revenue source and an entry point into learning social media strategies. Earnings may come from influencer marketing, which involves the advertising of products and restaurants to followers through posts. The economic mindset to gain more followers can often be seen in engagement with followers through contests and giveaways (e.g., promoting a contest to win a jar of almond butter by tagging friends in a photo).

Economic conversions can also be seen when youth review books on various social media platforms. Examples include Calen Armstrong, who has a large following on YouTube and Instagram, and Wing-ye, who blogs and uses Instagram. Oftentimes, these book reviewers will share their content across multiple platforms, with blogging sites and Instagram being the two most popular. In the process of reviewing books, these youth are developing reading and writing skills, as well as an economic mindset and entrepreneurial attitude. They must convince publishers that they are qualified or have an adequate reach in terms of followers in order to receive free books.

The social and cultural capital developed on these platforms can translate into earnings from advertising revenue, partnerships, or future jobs. YouTube, for example, offers users membership to their YouTube Partner Program — an opportunity for monetizing content through advertising revenue — once they have reached 10,000 public views. The lure of creating a successful brand and monetizing it has even resulted in entire stand-alone programs devoted to online branding and revenue-generating activities, such as SocialStar Creator Camp — a summer camp that helps youth learn the ropes of Internet stardom, brand management, and monetization. Twitch, another online video-streaming platform, offers a program called the Twitch Partnership Program (TPP) that gives streamers access to resources that will help them maximize their revenue, such as

monetizing channel subscriptions and broadcasts. In order to be part of the TPP, one must be 13 years or older and go through a formal process before being recognized as a partner. Many young video streamers use Twitch not just as a hobby, but also with aspirations to become a Twitch partner and in

the hopes of pursuing a potentially lucrative career, much like that of Tyler “Ninja” Blevins who reportedly earns 500,000 U.S. dollars a month from Twitch (Kim, 2018). Some have succeeded on a smaller scale, including 14-year-old Jaxstyle and Minim0E_tv.

4. CONCLUSION

With a focus on youth, it becomes clear that there are both opportunities and risks as the prevailing narrative shifts from youth as a vulnerable consumer population to youth as content consumers and producers. While critical political economy scholars such as Andrejevic (2009, 2013), Fuchs (2010, 2013), Terranova (2000, 2004, 2012) and Scholz (2008) present much of people’s online activity as exploitation and free labor — which is a legitimate concern — in this essay we investigated the ways in which this new ecosystem enables youth to develop social and cultural capital, as well as sometimes earn economic capital.

By shifting our analysis from the macro to the micro level — from traditional Marxist theories of capital to neo-capital theories — we can see how different forms of capital are at play within the digitally networked environment. More specifically, in this essay we describe the types of activities that develop each form of capital, expanding on the current understanding of CEAs. Beyond what digital divide and digital inequality researchers have considered, we see tangible outcomes in various forms of capital in a greater variety of youth activity online. Increasing followers and maintaining networks increases social capital, while participating in subcultures and online communities helps develop cultural capital.⁷ These forms of capital can often be converted into economic capital, which can further increase social and cultural capital as individuals will have access to better resources. This cycle, however, presents a risk for exacerbating existing inequalities.

In hypothesizing that there are differential outcomes of Internet usage across lines of socioeconomic difference, we believe it is important to understand why some youth are earning social, cultural, and economic capital, while others are not — or, at least, not to the same extent. Which activities allow youth to earn these forms of capital? What are the characteristics of youth who are able to earn capital? Are there disparities across lines of race, gender, and social class? How important is family background and parental support? We hope to explore these and other lines of inquiry in our upcoming round of focus groups with young people about their economic activities in the digital landscape.



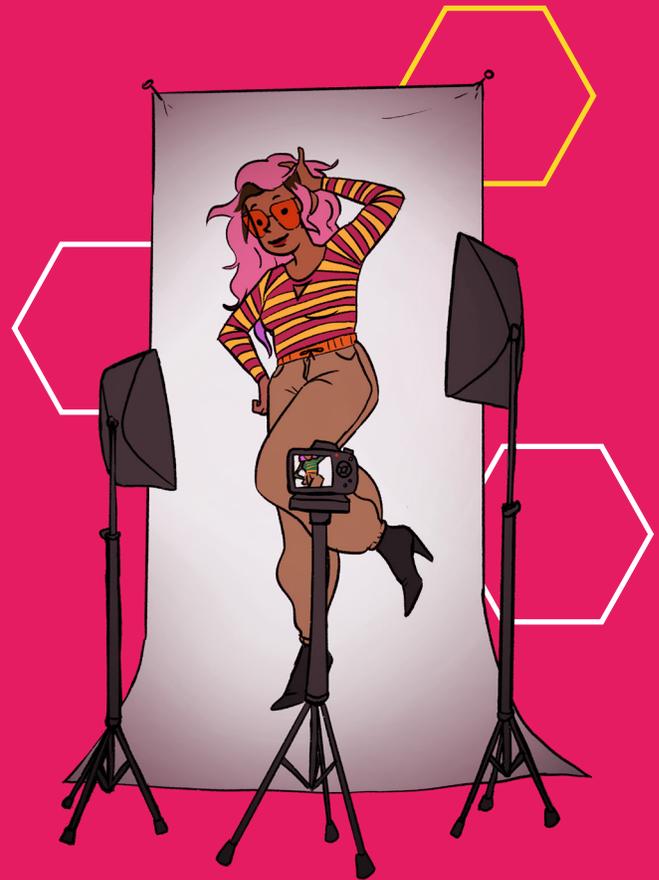
⁷ In the second essay of this collection, “Youth and Aspirational Labor,” we discuss how these activities can also be understood as forms of “hope” or “aspirational” labor. That is, labor that is performed as a way of gaining experience and exposure, as well as a practice that allows the development of skills.

III. ESSAY 2 – YOUTH AND ASPIRATIONAL LABOR

Abstract: Aspirational labor is a term used to describe young people undertaking labor for free in the hope of future payoff (Duffy, 2015, 2017). After a brief description of the structural factors in the economy that have encouraged this trend, we describe scholarly models connected to aspirational labor and those industries in which the practice is prevalent, particularly the creative industries. In the final section, we consider several factors in the context of this form of labor, such as the participation divide, the role of self-branding, and the dichotomy between aspirational labor as providing opportunities, as well as presenting risks.

1. INTRODUCTION

For the last four years, 20-year-old Nick has published the video game music he produced in his bedroom on SoundCloud, an online audio-distribution platform and music sharing website. Nick aspires to become a professional video game music producer. Nick is well connected in the local indie game community and contributes to projects by composing music. Although he is yet to receive any compensation for his work, Nick is hopeful that his connections will eventually lead to a paid job on commercial projects. In the meantime, he has rigorously pursued his passion by attending a music college, working in his own time to expand his digital portfolio, and learning from other online creators about production techniques, styles, and subgenres of music. Three years after joining SoundCloud, Nick had assembled a portfolio showcasing 10 video game soundtracks and three playlists, has almost 300 followers, and some of his tracks have been listened to thousands of times.



Stories such as Nick's demonstrate the phenomenon of "aspirational labor," a term used to describe young people undertaking labor for free in the hope of future payoff.

In recent years, the western economy has become progressively characterized by project-based, independent, and temporary work (Brophy, 2011; Bulut, 2015; Cohen, 2012; de Peuter, 2011; Gill, 2007; Horowitz & Rosati, 2014). Many young people, the Bourdieusian "precarious generation," are aware of this breakdown of traditional career structures and are particularly likely to find themselves un- or underemployed in low-paying and informal jobs with little expectation of traditional work security (Beck, 2000; Lehdonvirta & Ernkvist, 2011).

An awareness of neoliberal selfhood has increased the focus on entrepreneurialism as a desired work “mode,” as promoted by industry, governments, media, and individuals (Banet-Weiser, 2018; Florida, 2002; Neff, Wissinger, & Zukin, 2005; Ross, 2004; Ouellette, 2016). Young people are drawn to the promise of autonomy and employment flexibility with the freedom to control their own time (Arvidsson, 2008; Neff et al., 2005; Shirky, 2010). In Tanti’s (2015) article on the presentation of youth entrepreneurs within children’s media, Tanti notes that children’s programming on television reflects an idealization of creative labor to the extent of becoming focused on the challenges of balancing a childhood and career as youth fashion designers, celebrities, and newsmakers. Young people who aspire toward digital media work are indeed becoming “entrepreneurial,” organizing their work into “portfolio careers,” and perhaps becoming accustomed to the idea of precarious employment (Beck, 2000; Flew & Cunningham, 2010; Neff, 2012; Pink, 2001; Storey, Salaman, & Platman, 2005).

Young people seeking to join the digital media workforce face a lack of clarity as to methods and means of entry. Within digital media organizations, there is a widespread lack of standard career ladders, alongside a lack of formality and linear development, with many individuals creating a career along a

pattern of project work instead (Gill, 2010; Neff, et al., 2005; Townley & Beech, 2010). This dearth of formal structure is mirrored in ambiguity surrounding how to join these new digital careers. There is limited advice on how to become a fashion editor, video game programmer, or online journalist beyond the limited number of “success narratives,” namely the autobiographical advice of the few individuals who have “made it” (Brabham, 2008). The advice tends to focus on success as serendipitous or due to consistent platform exposure. A common thread in all these narratives is the “rhetoric of possibility,” which suggests – without any factual basis – that entry into these desirable careers is possible for everyone and success will be based on factors such as effort and passion (Chia, 2012; Duffy, 2016).

In reality, securing a position in desirable digital media industries is increasingly based on pre-demonstrated ability, social networks, and cultural and social capital, rather than formal credentials and job applications (Gill, 2002, 2008; Neff et al., 2005).⁸ Thus, there is a “career progression paradox” whereby aspiring entrants need industry connections and a track record of good work but have limited means of acquiring these assets (Corrigan, 2015). One of the few methods available for young people to gain industry connections and a track record of excellent work is to offer free labor online.

2. ASPIRATIONAL LABOR: AT THE HEART OF THE ISSUE

The model of providing free labor in the present for employment opportunities in the future has been the subject of scholarly discussion (Brabham, 2008, 2010; Hesmondhalgh, 2010; Kücklich, 2005; Murdock, 2011; Postigo, 2007; Ross, 2013; Tapscott & Williams, 2006) and has recently been conceptualized through a number of theoretical frameworks.

In 2012, building on her 2005 concept of “entrepreneurial labor” in which digital workers are encouraged to invest in entrepreneurial projects in their own time for greater economic security, Neff

developed the theoretical concept of “venture labor” (Neff, 2005, 2012). The “venture labor” model reflects how young people undertake individual risk and develop their skills in the present as an investment in their future (Livingstone & Sefton-Green, 2016).

Building upon philosophical studies of hope as a “historico-temporal process” (Bloch, 1986; Schumacher, 2003; Scioli & Biler, 2009), the “venture labor” framework was further advanced in the conceptualization of “hope labor” by Kuehn and Corrigan (2013). “Hope labor” theory is distinguished

⁸ In the first essay of this collection, “Youth and Capital-Enhancing Activities,” we discuss some of the online activities that allow youth to earn different forms of capital (social, cultural, and economic).

from “venture labor” by the recognition of uncertainty in the future outcome. In “hope labor,” strategic employment-centric activities are undertaken either for free or under-market wages to provide opportunities for employment in the future with the understanding that success is largely outside an individual’s control. Kuehn and Corrigan (2013) emphasize that in “hope labor,” individuals do not develop a “false consciousness” but nevertheless engage in a systematically asymmetric economy due to the hope of success.

“Hope labor” involves the undertaking of risk, laboring on an unpaid or underpaid basis without the guaranteed promise of future reward. On the one hand, young people are able to take “economic risks” when they receive support from their parents or guardians. Moreover, young people have limited scope to earn money and lack a developed conception of fair compensation. In many cases of “hope labor,” the small economic gain that they might make in their “hope labor” activities is a gratefully received source of income rather than under-compensation for their fair labor.

Further expanding the theoretical framework with a focus on gender, Duffy (2015, 2017) introduced “aspirational labor,” a term that describes how “[a]spirational laborers pursue productive activities that hold the promise of social economic capital; yet the reward system for these aspirants is highly uneven” (2015, p. 441). They “seek to mark themselves as creative producers who will one day be compensated for their talents – either directly or through employment in the culture industries” (Duffy, 2015, p. 446).

For young people, this future-oriented “aspirational labor” model reflects how they undertake individual risk and develop their skills in the present as an investment in their future (Duffy, 2015; Livingstone & Sefton-Green, 2016). These activities are mirrored in the notion of the “youth” developmental period as a time for growth, learning, and skill acquisition. At school, students acquire education that might help them in the future job market and take on extracurricular activities to further increase their friendship networks and skills. For young people who are expanding their skills and networks online

– learning through creative expression – their actions should be seen as an online extension of their education.

For example, blogging, particularly fashion blogging, is a prominent area of “aspirational labor” (Boston & Duffy, 2015; Chia, 2012; Deuze, 2007; Duffy, 2015, 2016; Duffy & Hund, 2015; Luvaas, 2013; Marwick, 2013, 2015; McQuarrie, Miller, & Phillips, 2013; Nathanson, 2014; Rocamora, 2012). Blogs are a popular medium for teenagers in the formation and enactment of their developing tastes and social identities (Chittenden, 2010; Nurmi, 2004). They are discursive spaces to write and publish their thoughts, enabling teenagers to trade cultural and social capital. The EU Kids Online 2010 survey found that one in 10 children wrote a blog (Livingstone, Haddon, Görzig, & Ólafsson, 2011a, 2011b).

Academic studies in this field have been illustrative of the nature of blogging among young people as an “aspirational labor” activity. For example, Chia (2012) used a discursive analysis of personal blogging handbooks and personal blogs; McQuarrie et al. (2013), utilizing the theory of cultural capital, documented 10 fashion bloggers who achieved sizable audiences; Duffy and Hund (2015) conducted a qualitative analysis of the textual and visual content of leading fashion bloggers alongside in-depth interviews; and Duffy (2016) conducted in-depth interviews with participants on fashion blogs. These studies showed that, while the ostensible purpose of blogs is personal enjoyment, a common thread was that many young bloggers aimed to leverage their online labor and develop networks to transition into paid employment in a related field, such as fashion, television, or news media. In a related industry called “vlogging,” YouTube celebrities profit from advertising revenue from their video blogs (Chen, 2013; Palfrey & Gasser, 2016). A handful of success stories about YouTube celebrities – such as the 6-year-old boy who made \$11 million in 2017 by reviewing toys on YouTube – obscures the very low prospects of achieving fame as a vlogger. A recent randomized sampling analysis of 19,025 YouTube channels indicated the top 3% of channels in 2016 received almost 90% of YouTube’s total views (Bärtl, 2018) – meaning that the vast majority of YouTube videos disappear into irrelevancy.

Closely related to blogging and vlogging, and, in many cases, overlapping in terms of participation, are “social media influencers,” predominantly on Instagram. Influencers are young people who invest time, effort, and money to become a “microcelebrity” so as to expand their network and transition into paid activities, whether direct employment or sponsored advertisements (Abidin, 2016; Kozinets, de Valck, Wojnicki, & Wilner, 2010; Senft, 2008). Most influencers are able to profit from paid advertorials (Kozinets et al., 2010).

Related fields include the provision of free marketing, corporate public relations, and brand ambassadorship by individuals in order to gain exposure and integrate themselves into a company’s sphere of activity and consciousness (Boston & Duffy, 2015; Duffy, 2016). According to Schor (2004), tweens, namely those aged between 8 and 13, are “the most brand-conscious generation in history” (p. 25). Postigo (2003, 2009), examining the role of brand ambassador “community leaders” in online fora, found that among AOL volunteers, the desire to eventually be hired was a motivating factor. Kuehn (2016) examined consumer reviewing on Yelp, noting that reviewing was an instrument for self-branding and viewed as a tool to be utilized for current or future gain with many participants even graduating to become Yelp “ambassadors.” However, noting the exploitative nature of the relationship where companies are actively requesting free public

relations, Duffy states that, for the aspiring worker, “payment through visibility ensures that . . . labor remains invisible” (Duffy, 2016, p. 452).

We also see “aspirational labor” being carried out by young people within the artistic sphere. Fuller, Jawecki, and Mühlbacher (2007), investigating online consumer communities for basketball shoes, found that users were motivated to share their designs not only due to inherent enjoyment, but also “to become known as creative and innovative designers, get in touch with one of the major brands, [and] get an opportunity to start working for a well-known basketball company” (p. 69). Similarly, Brabham (2008, 2010) conducted a series of interviews with artistic contributors on the sites Threadless and iStockphoto to explore the motivations for participation, finding that the production and sharing of free artistic content was viewed as a way of gaining experience and exposure.

Given the close alignment between work and play in aspirational labor, another significant sphere of aspirational labor is online video games. Among teens, interest in video gaming is extensive, with the 2018 Pew Research Center Survey finding that 90% of American teens play video games of any kind (97% of boys and 83% of girls). One perceived route into the video game industry is in “fan-programming,” also known as “modding” (Hartley, 2006; Jenkins, 2006; Postigo, 2007, 2009; Taylor, 2006). Modding has become a dominant entry point for a career in the video game industry. Postigo (2007, 2009), Kücklich (2005), and later Bulut (2015) all noted a strong desire to exhibit skills and transition into paid work opportunities in the video game industry.

Participation in “modding” has been actively promoted by the video game industry since the 1990s with the inclusion of “authoring tools” in game packages (De Peuter & Dyer-Witherford, 2005). De Peuter and Dyer-Witherford (2005, p. 11) elaborate:



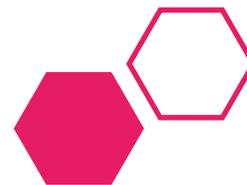
[When] young 'hardcore' gamers spend their evenings modding a level of a computer game, or sculpting an avatar for a virtual world – or, for that matter, contributing to their favorite developer's online 'community' forum – the boundaries between 'play' and 'content provision' subtly dissolve.

Yee (2006) has argued that players of virtual games can invest so much time in their virtual careers that playing becomes a form of obligation. Castronova (2005) similarly discussed how the trade of in-game artifacts from video games has become a job for many gamers who can earn money through selling virtual items. "Modding" is merged even further into work. Nieborg and van der Graaf (2008), exploring the relationship between non-market game developers (modders) and the developer company, found that many mod-projects are driven by industrial logic and

organized according to industrial-like practices: "In the case of the development of total conversion mods such as Counter-Strike, the development teams are seldom 'just guys'" (p. 189).

A second "aspirational labor" route into the video game industry is on the other side of the screen, with the phenomenon of Twitch.tv livestreaming. Increasingly, viewers are tuning in to online platforms, like Twitch.tv, to livestream their video gaming to an audience, organizing competitions, and tournaments (e-sports) (Hamilton, Garretson, & Kerne, 2014; Kaytoue, Silva, Cerf, Meira, & Raïssi, 2012; Pires & Simon, 2015; Taylor, 2018). Some of the top streamers on Twitch.tv have close to 2.5 million followers, and the site is one of the highest trafficked on the Internet. Similar to the more traditional "social media influencer," this form of Internet celebrity has sponsors and social media followers (Kaytoue et al., 2012).

3. THE FIRST STEPS TO SUCCESS: UPSIDES OF ASPIRATIONAL LABOR



When considering the benefits of aspirational labor for young people, one element that should not be overlooked is how these activities provide genuine enjoyment. These activities are unlikely to have commenced in the first place, unless they were an enjoyable hobby or creative outlet (Chittenden, 2010). Leadbeater and Miller (2004) noted that pro-ams (professional-amateurs) get intense, pleasurable, and satisfying experiences from their activities. Lakhani, Jeppesen, Lohse, and Panetta (2007), studying the crowdsourcing company InnoCentive, likewise found that intrinsic motivators, such as the enjoyment of problem solving, were significant for motivating those engaging in what we would term "aspirational labour." Brabham (2010), through a series of interviews, noted how community members who engaged in crowdsourcing work self-identified as "addicted" to the activity. Therefore, work should not be considered inherently objectionable or alienating just because it is free (Hesmondhalgh,

2010). As Kuehn and Corrigan (2013) stress, "Hope labour functions because it is largely not experienced as exploitation or alienation" (p. 12).

Another benefit of aspirational labor is the development of skills, which can be utilized later in seeking employment (Brabham, 2008; Hesmondhalgh, 2010; Livingstone & Helsper, 2010). Lakhani et al. (2007) identified skill acquisition as a key motivation for "crowdwork" participants. Postigo (2007), looking at "modders," saw that fan creation was a way of exhibiting and increasing skills so as to add content to resumes. Brabham (2008, 2010) similarly found that, alongside earning money, the opportunity to develop skills during free crowdwork labor outranked other motivations.

Bringing in social capital theory, scholarship has highlighted the networking element of aspirational labor.⁹ As previously discussed, due to the networked nature of the job market, it is crucial for young people

⁹ In the first essay of this collection, we review some of the neo-capital theories that sociologists have put forth to understand and analyze different types of capital, including social and cultural capital.

to develop what Deuze (2007) calls a “networked reputation,” alongside Mauss’ “profitable alliances” (Gill, 2010; Wittel, 2001). Online, young people are able to gain exposure and networks (Coté & Pybus, 2007). Chittenden (2010) and Chia (2012) both explored this concept, noting how, for bloggers, reader comments were considered paramount and could even be viewed as a form of payment, alongside advertising dollars. Similarly, Postigo (2007) noted that feedback in “modding” communities was an important motivation, and Kuehn (2016), discussing Yelp reviewers, noted the incentivizing and validating effect of social feedback. Arvidsson (2008), theorizing on “socially recognized self-realization,” notes the importance of peer recognition for young people who provide free labor online. This kind of exposure helps young people to build their own “brands” online.

Since its inception in the late 1990s, the movement of self-branding to improve employment opportunities has developed rapidly across the professional sphere. Increasingly, in today’s socially networked economy, people are looking toward future work opportunities to strategically brand themselves as a “product” both online and offline (Abidin, 2014, 2016; Arvidsson, Gandini, & Bandinelli, 2016; Arvidsson & Peitersen, 2013; Banet-Weiser, 2012; Chia, 2012; Gershon, 2014; Hearn, 2008, 2010; Lair, Sullivan, & Cheney, 2005; Marwick, 2013, 2015; Pooley, 2010; Wissinger, 2015). Gandini (2016), examining the position of self-branding among freelancers, argues that performing unpaid labor is a strategic device to construct social capital online due to the need to have a social reputation to secure work in the future. Theoretical concepts have also evolved around this element. Abidin (2014) has proposed the term “visibility labor” to describe the work of individuals in self-curating their online presentations so as to be noticeable for prospective employers. Wissinger (2015) further coined the term “glamour labor” to indicate the work undertaken to manage appearance both online and offline.

Since “aspirational labor” is undertaken in part to achieve exposure, self-branding is of vital importance (Coté & Pybus, 2007; Gandini, 2016; Gill, 2008; Hearn, 2008). It requires that young people performatively articulate their personal values and market themselves

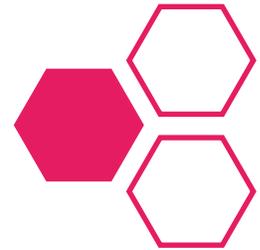
to construct a digital self (boyd, 2006; Hodkinson, 2015; Hodkinson & Lincoln, 2008; Livingstone, 2005; Papacharissi, 2002; Schau & Gilly, 2003; Sundén, 2003). Context, audience, and environment are all key factors driving self-presentation. Young people learn to be attentive to audience perception and conform to the “imagined audience’s” values (boyd, 2006; Ellison, Heino, & Gibbs, 2006; Litt & Hargittai, 2016). Teens present themselves online before the “imagined audience” of companies they would like to work for, in addition to their family, friends, and usual social network (Baron, 2008; Brake, 2012; Litt, 2012; Marwick & boyd, 2011). Young people adapt by switching social contexts, such as different social networking sites, to discuss interests, work, or to socialize (boyd, 2014a; Ito et al., 2009).

The development and projection of an identity online intersects with the development of youth identity offline, impacting the offline personality (Chittenden, 2010). Young, aspiring workers must now be consistently “on brand” across all platforms in both public and private, encouraging the building of one’s entire existence around work and blurring lines between work and non-work (Banet-Weiser, 2012; Gershon, 2014; Gill, 2010; Gregg, 2011; Hearn, 2008; Marwick & boyd, 2011). By engaging in the digital marketplace and shaping identity accordingly, young people are perhaps becoming more “business”-focused at an earlier age.

However, there is a tension between the need to be recognizable as an aspiring worker online by displaying traditional markers of job suitability, while simultaneously demonstrating a distinctiveness, individuality, and authenticity to stand out (Gershon, 2014). Though long standing as a concept within commercial marketing, authenticity has received increased attention recently through marketing exercises, where authentic “amateur” productions are seen as more real, and thus, more valuable for companies that want audiences to “relate” to their product (Banet-Weiser, 2012; Botterill, 2007; Duffy, 2013; Keen, 2007; Rettberg, 2008). As Rose and Wood (2005) note, “Consumers increasingly value authenticity in a world where the mass production of artifacts causes them to question the plausibility of value” (p. 286).

Authenticity has thus become a desirable aesthetic for young aspirational laborers, particularly for bloggers who want to remain “relatable” to their audience while distancing themselves from the market-driven environment they are engaged in (Duffy, 2013, 2015; Hesmondhalgh & Baker, 2011; Hopkins & Thomas, 2011; Jenkins, 2006; Kuehn, 2016; Marwick, 2013; McQuarrie et al., 2013; Salisbury & Pooley, 2017; Sherfin, 2004). This has led to what Pooley (2010) terms “calculated authenticity,” where identities

are strategically curated to be “authentic” for the purposes of self-branding. It requires a constant extension of what Hardt and Negri (2000) call “affective labor,” whereby individuals must display enthusiasm for the work they are doing regardless of reality. Additionally, the use of seemingly genuine connections to further a career can result in the instrumentalization of relationships (Duffy, 2016; Hearn, 2010; Kennedy, 2009).



4. ASSESSING THE TRUE COST: DOWNSIDES OF ASPIRATIONAL LABOR

Alongside these benefits are clear downsides for young people engaging in aspirational labor. First, is the rationalization of inherently unfair labor conditions through both the rhetoric of “passion” (Arvidsson, Malossi, & Naro, 2010; Duffy & Hund, 2015; Postigo, 2009) and the focus on future rewards over present circumstances (Daniel & Daniel, 2013; Daugherty, 2011; Frenette, 2013; Neff & Arata, 2007; Siebert & Wilson, 2013).

The “do what you love” philosophy that drives aspirational labor implies that passion and dedication will be rewarded in a meritocratic system (Duffy, 2015). However, this mentality obscures inequalities regarding class, race, ability, and education (Margolis, 2018; Tokomitsu, 2014; Watkins et al., 2018). Instead, there remains a strong participation divide within aspirational labor, mirroring the physical sphere in which internships that give people an “unpaid foot in the door” disproportionately go to those with high stocks of capital, both social and cultural (Lee, 2011; Murdock, 2011; Perlin, 2012; Townley & Beech, 2010). The ability to participate is restricted to those who can afford the significant outlay of money and time, naturally precluding many who might aspire to join digital industries (Duffy, 2016; Marwick, 2015) and creating a divide between affluent sectors of youth and the non-affluent. The importance of networks in digital and creative industries also means that the employment benefits from “aspirational labor” are disproportionately awarded to those who are already well connected offline and imbued with considerable

social capital (Lee, 2011; Townley & Beech, 2010). Further, scholars have noted that adherence to traditional ideals of beauty also appears to provide benefits within the system, particularly in visual sectors, such as fashion blogging (Banet-Weiser, 2012; Duffy, 2016; Duffy & Hund, 2015).

The myth of “universality” — that aspirational labor can be a viable route for anyone — is further dismantled after consideration of the self-defined “pro-amateur” category. The “pro-amateur” category, a term coined by Leadbeater and Miller (2004), creates a hierarchy within the “amateur” community by promoting certain individuals above others based on success and exposure, mirroring the patterns of a traditional media hierarchy (Chia, 2012; Duffy, 2015). The term “amateur” is not used to mean “one without experience,” but rather “one who is not paid” (Leadbeater & Miller, 2004; Lessig, 2004). Critically, Brabham (2010) has argued that the label of “amateur” is being used by companies to undermine how the work serves their profit motives, allowing them to make use of the work and avoid attention being placed on the individuals as laborers; thus, people deserving fair pay and workers’ rights (Brabham, 2010, 2012).

Problematically, these “pro-amateurs” are held up as models for emulation, suggesting that opportunities to transition into paid work are attainable by anyone, requiring no formal entry requirements for participation. Thus, failure to achieve goals leads to

a situation in which young people blame themselves (Ross, 2013). Further, due to the focus on the self as the protagonist, a “locked in” effect is created, whereby the level of investment (time, skill, emotional labor, effort) acts as a structural disincentive to leave the competition, becoming a sunk cost fallacy. Because of the ongoing rhetoric of employment “serendipity,” being “randomly discovered” can happen at any time, and thus giving up is advised against.

Further undermining this rhetoric of universality is that “pro-amateurs” tend to have formal schooling or qualifications, access to professional resources, work at professional standards (Brabham, 2012; Duffy, 2015; Leadbeater & Miller, 2004), and investments in financial capital. Oftentimes, “pro-amateurs” continue to draw upon notions of “amateur” and “authentic” so as to present themselves as “ordinary” individuals in order to downplay their economic outlay and income, while enabling themselves to create a distinct “space” through which they may enter the traditional industry environment (Banet-Weiser, 2012; Duffy, 2010, 2013, 2014, 2015, 2016; McQuarrie et al., 2013). However, by making money and achieving mass audiences and inclusion within traditional systems, “pro-amateurs” face being labeled a “sell out” due to the seemingly irreconcilable differences between “profit focus” and “authenticity” (Duffy, 2016; Kozinets et al., 2010; McQuarrie et al., 2013).

For example, Chia (2012), studying the economy of blogging, noted that “despite the rousing assurances from guidebooks that anyone can become a pro-blogger, in reality, most blogs languish in digital obscurity.” Across traditional blogs, video blogs, and social media sites, there is a clear hierarchical nature of success in which success is measured by audience size (Abidin, 2016; Marwick, 2015). It is well documented that paid opportunities due to certain marketing and exposure logic increase proportionately as individuals achieve a bigger audience (Abidin, 2016; Duffy & Hund, 2015; Kaytoue et al., 2012; Kozinets et al., 2010; McQuarrie et al., 2013). Mandansky and Arenberg (2008), exploring the disparity in earnings across U.S. bloggers, found that while the top 1% earned more than \$200,000 annually, the median income of the other 99% was merely \$200 annually.

In this framework, the use of the term “followers” as opposed to “friends” to describe an audience reaffirms a performative hierarchy and enables the individual to utilize the audience to achieve personal motivations (Chittenden, 2010). Moreover, the presence of dedicated marketing companies that curate social media profiles, produce professional-level YouTube videos, or attract additional followers creates an element of gamification, turning the system away from meritocratic attention reception (Coté & Pybus, 2007; Duffy, 2016; Lehdonvirta & Ernkvist, 2011).

A further downside is that it appears young people may be devaluing the jobs they want to obtain by supplying the work for free (Kuehn & Corrigan, 2013). Once companies can rely on freely produced digital content, the number of full-time employee positions dwindle and pay drops, becoming an economic race to the bottom (Hofman & Steijn, 2003). Ross (2013), discussing content farms, points out that free labor, in general, has undercut professional wages and job availability. Siebert and Wilson (2013) also argue that unpaid work experience has a negative impact on the labor conditions of workers currently within the industry. Bulut (2015) discussed how, in the case of the video game industry, the presence of a “large reserve army of labor” creates precarity at entry levels by lowering wages and allows more control over the workforce. Reactions from professionals, noted through business and trade publications, are generally negative toward the growth of free labor (Corrigan, 2015; Gollmitzer, 2014; Siebert & Wilson, 2013).

The final question remains as to whether “aspirational labor” is, overall, exploitative. Despite its drawbacks, aspirational labor activities are usually undertaken for enjoyment, as well as the development of skills and networks. However, if aspirational labor becomes an informal but necessary entry requirement, then arguments for exploitation gain greater justification. Similarly, if the processes and manifestations of aspirational labor are encouraged even when there is



no possibility of transition into paid work, then it is again potentially exploitative. Of critical importance is that, in certain cases of aspirational labor, individuals are providing genuine value for companies without compensation. In co-production instances, for example, aspiring designers might provide labor for free but from which companies profit (Andrejevic,

2009, 2013; Boston & Duffy, 2015; Cohen, 2012; Corrigan, 2015; Hesmondhalgh, 2010; Hesmondhalgh & Baker, 2011). When value is extracted by companies in exchange for “exposure” rather than pay, without any sense of intrinsic enjoyment, then it is hard to avoid the claim of exploitation.

5. CONCLUSION

Aspirational labor, in its many forms, is an important element in the discourse surrounding youth engagement in the digital economy and has been given less attention than it deserves. In Staksrud, Livingstone, Haddon, and Ólafsson’s (2009) classification of children’s online opportunities and risks, self-exploitation was not included as a potential risk. Conversely, economic rewards were similarly excluded as a potential opportunity. This dualism of risk and opportunity is nevertheless a prominent feature of adolescence, particularly with regard to the general behavior of youth on the Internet and social networking (Livingstone et al., 2013, 2017; Livingstone & Helsper, 2010; Mascheroni & Olafsson, 2014; O’Neill, Livingstone, & McLaughlin, 2011).

In the face of a flexible and entrepreneurially-driven digital economy, young people desiring career entry into popular digital media professions are being driven toward unpaid online activities, such as vlogging and gaming. However, rather than viewing youth as merely “vulnerable innocents” in need of protection from the risks of the Internet, we should remember the opportunities they are building for themselves. Aspirational labor activities are undertaken for enjoyment, as well as the development of skills and networks. For many young people, these activities are creative outlets and a method of making new friends with similar interests. A side effect of many of these activities is the generation of income, variable in amount but with the potential to result in considerable sums of money.

In addition to present income is the hopeful generation of opportunity. The hope element is important because of the limited nature of this activity. There is a rhetoric of open meritocracy for amateurs: Anyone can succeed if they try hard enough. However, this belies the fact that success is limited to those who have the means to succeed. For example, joining online platforms is initially free except for the outlay of computer equipment, but continuing upward often requires investment in better equipment, online subscriptions, and expensive outlays on travel and/or material consumption. Indeed, the introduction of supplementary economic activity, such as professional photographers and curators of online content, further imbalances the nature of aspirational labor. Thus, such labors are both hopeful and aspirational because success is limited and out of reach to many who aim for it. Nevertheless, the presence of “success narratives” is taken as proof of its efficacy and keeps hope alive for many.

Whether the trade-off of free labor for the hope of future economic rewards is exploitative depends on the viewpoint and circumstances. While it would be easy to view it as objectively exploitative, it can also be viewed as an adaptation to current economic requirements. Youth are not only finding new pathways to current jobs, but are also creating new jobs by themselves.



IV. ESSAY 3 – YOUTH AND VIRTUAL COLLABORATION

Abstract: Over the last two decades, researchers, policymakers, entrepreneurs, governments, and educators have attempted to identify the skills youth need to succeed in a digital world. From technical skills to sociocultural literacies, a range of competencies has been described as necessary for participation in a rapidly changing digital economy. Among the various skills, researchers have identified collaboration as an important interpersonal ability at the basis of many sociocultural and economic interactions (Claro et al., 2012; Jenkins et al., 2009; Levin, 2015; OECD, 2016a). This essay describes how the affordances of new technologies and online platforms – such as synchronous and asynchronous

communication, social interactions, and exchanges – provide youth with an opportunity to develop the skill of collaboration. The Scratch platform is used as a case study to explore how collaboration is practiced by youth ages 8 to 16. We focus on one example of a Multiple Animator Project (MAP) on Scratch to illustrate how youth deploy three levers for virtual collaboration: effective leadership, trust-building, and establishing common ground. In the conclusion, we discuss how practicing collaboration on youth-driven platforms, like Scratch, can support learning, social networking, and cultural production processes that are essential for success in the digital economy.

1. INTRODUCTION

The words “communication” and “community” are both derived from the Latin root *communis*, which means common – underscoring the inextricable link between these two concepts. Watson (1997) explains, “Without ongoing communication among its participants, a community dissolves. Communication re-creates and maintains community through the interaction of participating members” (p. 104). In online communities, youth are learning first-hand the inseparable connection between “community” and “communication” as they socialize with peers and work together to create content. From the dialogue in the

comments section of a YouTube fan video, to a conversation in a Facebook group, or the message exchange in a collaborative project on the online learning community Scratch, youth are leveraging digital and networked technologies to communicate, participate in online communities, and engage in cultural production.

This type of cultural production represents a pervasive form of online activity among youth. In the U.S. alone, nearly two-thirds of teenagers create content online – from blogging to remixing – and approximately one-third of youth share the content they have developed online with others (Lenhart & Madden, 2005). In many cases, this content creation and distribution occurs within the context of a “participatory culture” (Jenkins, 2006). A participatory culture exists in spaces with relatively low participation barriers in which youth can connect with one another, sharing and developing content.



Online platforms and communities have become spaces where youth, particularly those with digital literacy skills and access to technology, can engage in the production of information and become part of a participatory culture, generating content while forging connections (Jenkins, 2006; Trespalacios,

Chamberlin, & Gallagher, 2011). The Scratch platform is a popular environment among youth for these types of activities. By participating and interacting within the Scratch community, working with others to create and share content, youth have the opportunity to collaborate in virtual teams.

2. SCRATCH: AN ONLINE AND YOUTH-DRIVEN PLATFORM

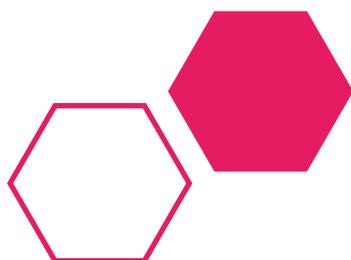
In order to understand how youth are practicing virtual collaboration, this paper focuses on the Scratch online community. Launched in 2007 by the MIT Media Lab, Scratch (<http://scratch.mit.edu>) has become a dynamic social space where youth, mainly between the ages of 8 to 16, create, remix, and share interactive multimedia projects. Although initially designed to serve as a space for sharing the media created with the Scratch programming language offline, the online platform evolved to provide the possibility of coding online using a web editor embedded in the website. The Scratch website allows youth to design and program their own interactive media, such as animations and games, and share these with members from around the world. The online community is home to more than 50,000,000 users with more than 45,000,000 projects shared on the platform (Scratch, 2019).

Scratch is rich in examples of how digital tools and networks are being used by youth to engage in virtual collaboration. From remixing the projects of other members to exchanging knowledge in discussion forums, the Scratch website has been designed in a way that promotes creative collaboration (Aragon, Poon, Monroy-Hernández, & Aragon, 2009; Brennan & Resnick, 2013; Monroy-Hernandez, 2012; Roque, Kafai, & Fields, 2012; Roque, Rusk, & Resnick, 2016). Scratch tools that support this type of collaboration and foster a constructionist learning environment include the comments section of projects where

members can provide feedback and connect with each other, as well as studios or galleries where members can collectively curate projects.

Scratch enables learning based on the collaborative creation of digital artifacts — a learning by doing and experimentation, as well as sharing and working with others (Papert, 1980; Roque, 2012). On the platform, youth create new knowledge through designing their own artifacts, such as a musical animation or a video game. Thus, Scratch can be considered an amateur design community (Fields, Giang, & Kafai, 2013).

A constructionist learning environment also affords youth the opportunity to display, discuss, and collaboratively reflect on the artifacts they create, cultivating individuals' social skills (Hay & Barab, 2001; Stager, 2001). Because all interactions are done on the online platform, many Scratchers have become accustomed to connecting with others through asynchronous computer-mediated communication. Despite the potential challenges that asynchronous communication can create for collaboration, many Scratch members are able to successfully form virtual teams and work together to develop creative content.



3. VIRTUAL COLLABORATION AND TEAMWORK IN SCRATCH

Rapid technological development over the last several decades has ushered in an array of electronic tools individuals can use to communicate with one another. As the quality of these digital technology platforms continues to advance, individuals are increasingly working together not face-to-face, but over computer-mediated environments (Driskell, Radtke, & Salas, 2003). Known by some researchers as e-collaboration, virtual collaboration has been described as the “use of digital technologies that enable organizations or individuals to collaboratively plan, design, develop, manage, and research products, services and innovative IT and E-commerce applications” (Turban, King, Liang, & Turban, 2015, p. 260). Although there are variations in the type of technology and platforms of communication used in online teams, the defining characteristic of a virtual team is that interdependent members work toward a shared purpose while being spatially separated (Driskell et al., 2003).

One of the most important aspects of virtual collaboration is that it has the potential to promote learning (Roque, 2012; Stahl, Koschmann, & Suthers, 2006; Steinkuehler, 2008). Computer-supported collaborative learning (CSCL) has become an important branch of the learning sciences that integrates distance education, computer mediation, and collaboration. According to Stahl et al. (2006), as people work together online and participate in groups with shared goals, they are able to collaboratively construct knowledge. Solving problems, creating digital artifacts, and gathering information on online platforms represent social activities where learning occurs. Virtual collaboration takes different forms on the Scratch online community that vary in scale and purpose. Given the size of the community, some collaborative initiatives involve hundreds of members working together. Role-playing games (RPGs) represent one type of large scale example. In RPGs, members of the community create and share projects about specific characters that are part of a unique story world. The story is built using the studio tool and is open to any Scratcher. To participate, members simply create a character and act out parts of the story within a project or in the studio comments (Roque et al., 2016).

Thus, as different members of the community join the RPG, they contribute to a story world that develops in different directions and across multiple modalities. RPGs, such as [Jellyville](#) and [Color Divide](#), have given rise to hundreds of within-studio projects and comments. These RPGs have become so popular in the Scratch community that their characters and story worlds have expanded beyond the original RPG studio and turned into new RPGs (known in the Scratch community as Sagas) and other interactive projects, such as magazines, fan clubs, and spin-off stories.

In contrast to the large-scale collaboration that characterizes these RPGs, there are also initiatives that involve smaller groups of Scratchers working together. Two examples of this type of collaborative work include companies and multiple animator projects (MAPs) (Aragon et al., 2009; Monroy-Hernandez, 2012; Roque, 2012). Companies, for instance, are self-organized groups of Scratchers that work together across a range of projects, assuming different roles and tasks, as well as setting up shared goals. Also known as “collabs,” companies are formed by leveraging the studio tool and setting up specific goals related to the production of a particular kind of project (e.g., animation, video game, or drawing). The founder of the company creates the studio page, invites other Scratchers to join, and explains the roles and tasks in the studio description. The comments section of the studio is used to coordinate tasks among the company members.

In MAPs, a self-organized small group, ranging from 12 to 40 participants, works together to produce an animated music video (Aragon et al., 2009; Roque, 2012). In contrast to companies and RPGs that organize their activities leveraging the affordances of the studio tool, MAPs are organized within a Scratch project that is carefully prepared by the MAP host. As a leader, the MAP host assumes the role of a coordinator and is in charge of choosing the music (usually a popular song) and theme, as well as creating segments of the project that can be assigned to other collaborators. The host is also responsible for promoting the MAP within the Scratch community,

recruiting participants, creating a set of rules that needs to be followed by all the collaborators, and establishing deadlines for the project.

MAPs have become highly popular in the Scratch community. Hundreds of MAPs have been created by Scratchers exploring themes as diverse as fandoms (e.g., Doctor Who, Undertale, and GravityFalls), alternate universes, civic causes, parodies, and animation styles. Although thousands of MAPs have been created, only a few have been fully completed. Some of the most popular completed MAPs are “Everything Stays,” “Scars to Your Beautiful,” “Harry Potter,” “**EARTH DAY**,” and “Abstract Animation.”

There are certain commonalities among all the different types of virtual collaboration on the Scratch online community. First, collaboration on Scratch is based on asynchronous communication; members cannot communicate in real time or concurrently. Second, the language used for communicating is

primarily English. Third, members engaged in virtual collaboration are dispersed geographically and rarely meet with each other face-to-face. Fourth, all forms of virtual collaboration are supported by the shared values of the Scratch community that are clearly stated in the community guidelines: “Be respectful, be constructive, share, keep personal information private, be honest, and help keep the site friendly” (Scratch, n. d.).

As a youth-oriented platform that supports program and design learning in an online community, Scratch represents an innovative space for virtual collaboration. However, not all collaborative projects in Scratch are successful. As Monroy-Hernandez (2012) notes, like a multitude of free software projects and other commons-based peer production initiatives, many collaborative projects in Scratch do not work as expected.

4. CASE STUDY: “HANDS FOR ORLANDO,” A MULTIPLE ANIMATOR PROJECT

A case study of “Hands for Orlando,” a successfully completed MAP developed by 38 Scratchers, allows us to understand how youth deploy three different levers of collaboration: 1) effective leadership; 2) trust-building; and 3) cultivating common ground.

Background

On July 6, 2016, a Scratcher from the U.S., who goes by the name of Ash on the platform, shared the project “Hands for Orlando.”¹⁰ Ash invited other Scratch members to contribute through advertising the project on several studios dedicated to MAPs and on their Scratch profile page. This was the fourth MAP project that Ash hosted on Scratch. In the span of 10 months, he/she successfully completed three other MAPs: Youth, Immortals, and Perfect Together. Despite being relatively new to the

Scratch community, Ash had earned a reputation as a talented and creative programmer, animator, and MAP host and cultivated a network of more than 1,000 followers.

As the MAP host, Ash framed the project as a tribute to the victims of a tragic event: the shooting at Pulse nightclub in Orlando, Florida, on June 12, 2016. The MAP had a clear civic theme related to diversity, peace, tolerance, and LGBT equality. When describing the rules of the “Hands for Orlando” in the project Notes and Credits section, Ash stated, “This MAP is honoring the victims of a terrible tragedy.”

The MAP was inspired by the song “Hands” written by Justin Tranter, Julia Michaels, and BloodPop and recorded into a charity single by 24 famous artists, such as Britney Spears, Jennifer Lopez, and Pink. The

¹⁰ All Scratch user names in this case study are pseudonyms and have been changed in order to protect the identity of the users.



song was made available to the public as a digital download on July 6, 2016 – the same day that Ash started the MAP. By launching the MAP the same day that the song was released, Ash was able to emphasize the importance of honoring the victims and creating a tribute as a gesture of solidarity. In the description of the project, Ash wrote, “I thought that if these inspirational artists could come together to make this touching song for Orlando, we Scratchers could put together something for them too. <3.”

Given that the MAP was launched the same day “Hands” was released, Ash worked quickly to spread the word among their followers and friends on the Scratch community, establish project goals, and assign tasks to contributors. A total of 37 animators from the Scratch community spread across the U.S., Canada, and the U.K. joined “Hands for Orlando,” choosing different parts of the song and creating 10-second short animations for each segment. Ash, as the MAP host, was in charge of collecting all animated segments, stitching them together, and assembling the complete animation. On September 16, 2016, Ash published the completed animation on the Scratch website (<https://youtu.be/etIFpu20wEs>) and shared a video of the project on YouTube.

The following section, “Levers for Virtual Collaboration,” explains how Ash and the “Hands for Orlando” MAP members successfully worked together to create this animation, employing three levers for virtual collaboration: effective leadership, trust-building, and establishing common ground.

Levers for Virtual Collaboration

Effective Leadership (Unification and Tasking)

Leaders of all teams, whether virtual or collocated, often face the challenge of balancing leader direction with team member participation. Efforts to manage this complex role often lead to negative leadership reactions, such as role conflict (Manz & Sims, 1987) and concerns about appearing ineffectual (Manz, Keating, & Donnellon, 1990). These challenges are amplified by the computer-mediated nature of virtual collaboration. Collocated team leaders can utilize physical observation, leveraging cues, such as gestures or facial expressions, to understand when members need further clarification or when there is a need to rebuild team momentum (Malhotra, Majchrzak, & Rosen, 2007). The lack of face-to-face communication inherent in virtual teams restricts a leader’s capacity to track members’ performance and balance the fine line between direct guidance and member discretion (Huang, Kahai, & Jestice, 2010).

To address the challenge of establishing effective team leadership, virtual leaders can focus on task-related skills, such as creating a shared team vision to mobilize efforts, as well as assigning members’ tasks and roles (unification and tasking, respectively). As virtual teams often consist of individuals of a variety of backgrounds, members typically do not hold shared norms and approaches for completing work (Kirkman, Rosen, Gibson, Tesluk, & McPherson, 2002). Similar to effective leadership in collocated teams, at the outset, a competent team leader can help cultivate cohesion through presenting a unified team goal and a set of norms for collaboration and knowledge sharing (Huang et al., 2010). Effective virtual team leaders must also clearly articulate individual member tasks, provide regular feedback and guidance, and ensure follow-through on these assignments (Kayworth & Leidner, 2002).

In the case of the “Hands for Orlando” MAP, the host, Ash, successfully led a virtual team of 37 youth distributed across three continents and helped them work together to produce an animated video (04:29). He/she was able to effectively leverage the affordances of the Scratch online platform to organize the tasks and roles of all the participants of the project. Additionally, as a leader, he/she utilized the lever of unification, defined a compelling common goal for the project, and articulated shared values.

To organize unification and tasking efforts, Ash used the Notes and Credits section of the original “Hands for Orlando” project. This section allows creators to publish textual information on a column that is next to the Scratch project display. Ash wrote text in English, precisely communicating the specific project objectives, and the overarching goal of the MAP: “I thought that if these inspirational artists could come together to make this touching song for Orlando, we Scratchers could put together something for them too. <3”.

As the overall project objective illustrates, the main goal of the MAP was to create a collaborative animation with an accompanying song that would serve as a homage to the victims of the Orlando tragedy. The timely selection of this theme allowed Ash to create a compelling narrative that could motivate many Scratchers to work toward a meaningful, shared goal (unification).

Ash also wrote a list of 16 rules. Although most of the rules referred to specific animation tasks that participants were responsible for, some rules denoted the shared values of the project and reinforced objectives. In the 11th rule, for example, Ash wrote, “Be thoughtful. This MAP is honoring the victims of a terrible tragedy.” And in the 13th rule: “Animate from your heart <3”.

Moreover, Ash was able to exercise task-oriented leadership by clearly defining, assigning, and organizing group member assignments. As other Scratchers have done when hosting MAPs on the Scratch community, Ash started the project by cutting the music into several short sections (40 in total). Scratchers participating in the MAP would then select specific segments to animate. In this way, Ash was able to assign different parts of the project to specific animators.

The rules that Ash included in the Notes and Credits section were also crucial for organizing the tasks of the 37 animators that participated in “Hands for Orlando.” Ash specified the deadline for completing the animation (“Deadline is preferably within the next [two] months, but try to get it in before August!”), stated some parameters for the animation (especially pointing out the styles to avoid: “Try to refrain from using stick figures”; “No blood / gore”; “do NOT use effects”), and noted several technical issues that animators needed to consider. By precisely specifying tasks and explaining the team’s overall vision and norms at the start of the project, Ash successfully worked to create a unified virtual team where members had a clear understanding of project goals and individual assignments.

Trust-building

Trust-building is an essential lever of virtual collaboration. The development of trust within teams, whether virtual or in-person, rests upon both cognitive and affective trust (McAllister, 1995). Cognitive trust is based upon one’s perceptions of another’s integrity and reliability, while affective trust is built upon members’ socioemotional ties with one another (Lewicki & Bunker, 1995). An atmosphere of trust promotes group learning, allows teams to manage conflict and reach consensus more effectively, and increases creativity (Brahm & Kunze, 2012; Hasler-Waters & Napier, 2002). Team members who fail to cultivate trust are less likely to exchange ideas and information, resulting in lower quality performance (Zand, 1972).



In virtual teams, like collocated teams, members can develop cognitive trust through reliable performance and frequent communication (Jarvenpaa & Leidner, 1999). Prompt communication is particularly important in a virtual environment. Silence or lags in response may be misinterpreted by others as a lack of commitment or ability, which can result in slower development of cognitive trust and harm already-established trust at any stage of group work (Greenberg, Greenberg, & Antonucci, 2007). To encourage member communication and participation, leaders and other members should acknowledge each other's contributions and feedback with positive encouragement (Greenberg et al., 2007).

This capacity to support team members and their ideas also ties into the development of affective trust. Members of teams that exhibit high levels of affective trust work to create a supportive environment by frequently offering positive and motivational messages to one another (An, Kim, & Kim, 2008). Members can cultivate affective trust through performing extra role behaviors, such as providing other members with guidance on tasks and working extra hours to ensure a project is completed (Webber, 2008). Individuals on online teams can also develop this type of trust through socioemotional communication, such as using emoticons and casual language. An atmosphere of trust helps to create strong bonds among individuals and promotes the exchange of information and ideas. During the production of "Hands for Orlando," participants were able to successfully build trust in two main ways: through the exchange of socioemotional content via text-based messages, and reliable performance and frequent communication.

In order to build trust and bonds among the virtual team that produced the MAP, participants exchanged text-based messages that provided social and emotional cues. As the Scratch platform does not provide tools for synchronous communication, Scratchers had to leverage the affordances of the Comments and the Notes and Credits sections of their projects to initiate and sustain dialogue.

Participants wrote messages to each other in these sections, where they could signal their emotions and simulate a social presence.

Ash, as MAP leader and host, frequently wrote positive messages in the comments of each animation that were created for the MAP. In almost all of the messages, he/she used the word "love," a textual emoticon, and an exclamation mark. For instance, Ash wrote to the U.S.-based Scratcher Riverlight in the comments of Part 9: "Oh my gawd I love it! <3." Addressing Cameron99, another Scratcher from the U.S., Ash wrote, "Ahhh this is great!! Thanks so much for entering!! <3."

Using text, Scratchers reciprocated this socioemotional sentiment and conveyed their gratitude for, and engagement with, the collaborative project. For example, Cameron99 responded, "Thanks :D" and Dana11, "huurrinnkkadinkkk, thank you! ~~~." The use of textual emoticons represents an effective form of socioemotional communication because it provides cues that generate social context and support social relationships (Aragon et al., 2009).

In addition to socioemotional, affect-based trust, group members cultivated cognitive trust through their reliable performance and consistent communication. Given that the MAP was completed in two months, this collaborative effort represents a strong example of team members' ability to efficiently complete tasks in a timely fashion despite their geographic distribution and lack of face-to-face interaction. As further evidenced in the next subsection, Ash was able to successfully create a dialogue with members, offering feedback and guidance to them, and, in turn, members provided thoughtful and prompt responses. This bidirectional communication pattern, coupled with members' ability to successfully complete the project, promoted cognitive trust within this virtual team.



Establishing Common Ground

Establishing common ground means developing an efficient dialogue in which participants have a clear and mutual understanding of group goals and tasks. In the successful development of “Hands for Orlando,” participants of the project established common ground by communicating through both the comments and the Notes and Credits section. As noted previously, all communication was asynchronous, in written text, and in the English language.

After each group member completed their designated animation, they published their work as a single Scratch project on the online platform. In the Notes and Credits of their projects, they wrote a public message in which they explained how they completed their task and provided additional information about their project. Group members also thanked Ash for starting the MAP. In a certain way, these messages were a continuation of a dialogue that Ash had started (through the creation of detailed rules in the Notes and Credits section of the original “Hands for Orlando” project). For instance, the Scratcher Eli24 seemed to be directly responding to Ash’s rule (“Animate how you interpret this song, whether it be coming together as one world, gun control, love is love, etc.”) when she wrote, “Not my best work, but I kinda like it’s simplicity! I read into the lyrics which is how I came up with the whole ‘hope’ thing. All art by me, except the hands shown in the thumbnail.” Thus, the Notes and Credits section of Scratch projects represents one tool that Scratchers leverage to establish mutual understanding among community members.

When the conversation between the team leader or MAP host and the participants needed to expand beyond the two exchanges in the Notes and Credits sections, Scratchers relied on the comments section of their individual projects. Ash was able to directly reply to members’ comments and continue the dialogue. For instance, Jordan7000, a Scratcher from Canada who completed the animation of Part 7, wrote in

the Notes and Credits section, “It’s done! thanks Ash! I hope you like!” Ash replied in the comments of the user’s individual project, providing positive feedback: “AHHH THE ART IS SO GOOD OMG.” After Jordan7000 wrote back to him (“really! I thought it was pretty darn bad.”), Ash was able to give more instructions and advice. The MAP host wrote, “Just remember to add more animation~ But it’s looking great so far!!” The practice of providing positive feedback first and then following up with more detailed instructions proved to be highly effective, and Ash used this technique with a number of Scratchers throughout the project. Thus, effective communication across both the Notes and Credits and Comments sections allowed participants of the “Hands for Orlando” MAP to establish common ground and successfully engage in virtual collaboration. Although the leader and host of the MAP, Ash, was the most active participant across all the project’s dialogue, other participants were also engaged. Additionally, the positive feedback that Ash gave to all the group members created a supportive environment. The use of words such as “love,” “great,” and “thanks” used by the MAP host helped to cultivate a space in which the contributions of all participants were valued. In the same way, all the virtual team members initiated a dialogue with the project host, expressing their excitement about the project and thanking the host and leader for starting it.



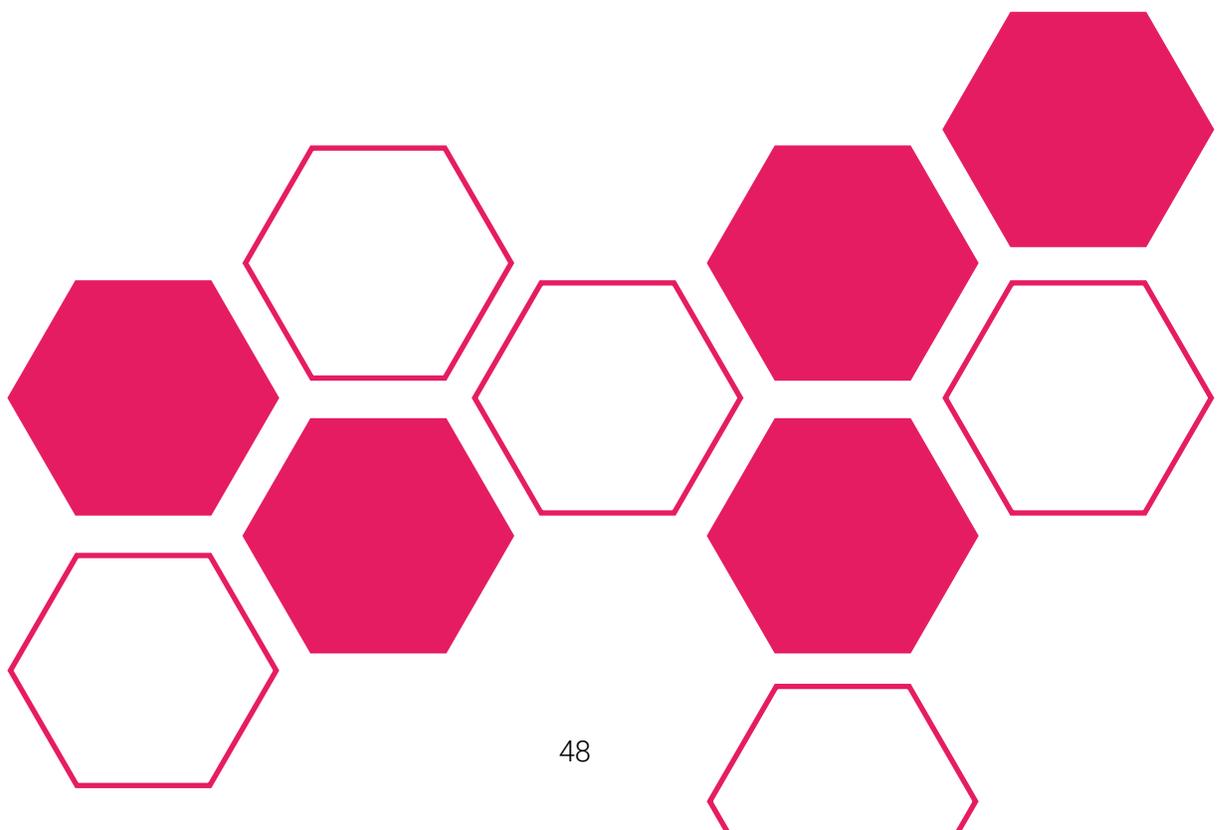
5. Conclusion

Online communities represent vibrant sociocultural spaces where youth may have the opportunity to leverage the affordances of computer-mediated communication while participating in virtual teams and pursuing common goals. By working on projects such as the “Hands for Orlando” MAP, youth encounter opportunities to engage in cultural production and practice virtual collaboration with their peers. As the case study of this project demonstrates, youth deployed three levers of effective collaboration – leadership, trust-building, and establishing common ground – to successfully create an animated video. Using the features of the Scratch platform, 38 youth across four continents engaged in virtual collaboration for two months and created a multimedia artifact as a homage to the victims of the Pulse nightclub tragedy.

Despite the challenges asynchronous and computer-mediated communication creates for effective leadership, trust-building, and cultivating common ground, youth leveraged the tools of the Scratch website to achieve a shared goal. The 38 participants of “Hands for Orlando” used the Comments and the Notes and Credits sections of the individual Scratch projects to communicate with each other, exchange text messages, and provide social and

emotional cues to each other. In this way, they were able to signal their emotions and simulate a social presence regardless of the fact that all of them were distributed geographically across four continents. Furthermore, leveraging these sections of the Scratch projects, the host and leader of the MAP exercised effective leadership by assigning tasks and roles and articulating a common and unified objective.

Online collaboration, as illustrated by this case study, requires a mix of both technical and interpersonal skills. As youth-oriented online learning communities continue to proliferate, additional research is needed to paint a more nuanced picture of the challenges and opportunities of these various virtual platforms. For example, how do youth themselves view the obstacles and opportunities of online collaboration? In what ways can virtual platforms be improved to facilitate coordinated work? Further advancing the field will provide parents, educators, and policymakers with a better understanding of how youth are leveraging digital and networked technologies to explore, create, and learn in online communities.



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