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12 Online Affinity Networks as Contexts for Connected Learning

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Abstract: *This chapter describes the ways in which online affinity networks motivate learning and support interest development. It builds on the model of “connected learning” that posits that learning is most resilient and meaningful when it is tied to social relationships and cultural identities, and spans in-school and out-of-school settings. The analysis draws from ethnographic case studies of youth-centered networks focused on fanfiction, knitting, professional wrestling, anime video remixers, Bollywood dance, YouTube vloggers, and communities surrounding two games, Little Big Planet 2 and StarCraft II. Factors that draw young people to online spaces to pursue their interests are diverse. For some, it is to find a safe space for a stigmatized interest. For others, it is because of an attraction to a narrow niche, leveling up, or technical specialization that is only accessible online. In all cases, however, high functioning online affinity networks are characterized by a strong set of shared values and culture that are the magnet for affiliation. In addition, a set of shared practices provide a focus of activity and engagement.*

Amy was 17 years old when she was interviewed as part of Pfister’s (2014, 2016) study of Ravelry.com (Ravelry), an online community for knitters and crocheters. Amy is an avid fiber crafter and pattern maker, and is also active on *Hogwarts at Ravelry*, a group within Ravelry focused on Harry Potter-related creations. Amy first learned to crochet from her grandmother and picked up knitting with her sister. Eventually she started to look online for designs and inspiration, and one of her friends introduced her to Ravelry. There she found a wealth of resources, new designs, and kindred spirits, including the sub-community of Harry Potter fans. One of Amy’s hat designs, inspired by a hat in the sixth Harry Potter movie, has been “favorited” by 1,100 people and in the queue of more than 400 people as something that they would like to make.

We are grateful for the contributions to this research by Adam Ingram-Goble (Verve Mobile), Neta Kligler-Vilenchik (Hebrew University of Jerusalem), Ksenia Korobkova (University of California [UC], Irvine), Yong Ming Kow (City University of Hong Kong), Sangita Shresthova (University of Southern California [USC]), and Timothy Young (Twitch). This work was supported by two John D. and Catherine T. MacArthur Foundation grants.

She has begun selling her patterns on Ravelry and, with the support of her father, is planning to launch a blog and expand her business online. Her passion for the fiber arts has even sparked interest from her parents: her mother has started to crochet and her father has picked up knitting.

This chapter describes the ways in which online affinity networks motivate learning and support interest development in the context of shared culture and purpose. It builds on the model of “connected learning,” which posits that learning is most resilient and meaningful when it is tied to social relationships and cultural identities, and spans in-school and out-of-school settings (Ito et al., 2013). Although Amy’s story has much that is familiar to earlier generations, it is worth noting some important differences. In an earlier era, Amy would have pursued her interest in knitting and crocheting with her family, friends, and possibly, eventually, a local knitting circle or related group. She might have been able to find others in her local community who could introduce her to the intricacies of pattern design, but it is unlikely that she would have found a critical mass of knitters who were also Harry Potter fans. While she might have designed a Harry Potter-inspired hat based on her personal interest, she would not have been able to connect to an audience of thousands of other Harry Potter fans who also appreciated her design. It is also unlikely that she would have been able to sell and market her designs, given the niche nature of the audience and the lack of distribution channels in local communities. The online affinity network of Ravelry, and opportunities for online distribution and sales, vastly expanded Amy’s ability to pursue a specialized interest, develop expertise, and connect this interest to future opportunities.

Factors that draw young people to online spaces to pursue their interests are diverse. For some, it is the need to find a safe space for a stigmatized interest. For others, it is an attraction to a narrow niche, leveling up, or technical specialization that is only accessible online. In all cases, however, high functioning online affinity networks are characterized by a strong set of shared culture and values that is the magnet for affiliation. In addition, a set of shared practices provides a focus of activity and engagement.

Young people like Amy are growing up in an environment of abundant connection to information, knowledge, and social interaction that offers new opportunities for learning and pursuing interests. Activities such as quickly googling for information, posting questions on specialized online forums, or publishing creative work online are now commonplace. It is easy to forget that these kinds of interactions have become widespread in the United States only in the last decade. These environments are a fertile ground for young people to engage in interest-driven learning, develop relationships centered on these interests, and contribute to shared causes and communities. They also provide unique case studies of interest development, learning, and motivation in which young people are connecting and contributing to communities where they feel a strong sense of affinity and belonging.

Building on a prior large-scale ethnographic study of online youth practices (Ito et al., 2010), the Leveling Up Study was designed to bring focus to online practices and networks that could bridge the divides between in-school and out-of-school learning. This chapter draws from ethnographic case studies of online affinity networks from the Leveling Up Study, as well as additional case studies from collaborating researchers in the Media, Activism, and Participatory Politics (MAPP) project. Our analysis pivots around how online affinity networks open up unique avenues for young people to find “their people” – peers and mentors who share an identity or interest. These case studies of affinity networks provide a lens through which to deepen our understanding of the relationships between social belonging, cultural affinity, learning, interests, and motivation.

After first describing the unique features of online affinity networks and how they relate to issues of learning and motivation, we describe the case study research that informs this chapter. In the second half of the chapter, we delve into the ethnographic material, illustrating how online affinity networks motivate participation and learning through shared culture and purpose.

Youth and Online Affinity Networks

Ever since its early days, the internet has been an avenue for people to connect with others around shared interests and identities, including fandoms, political discourse, gaming, and ethnic, religious, or LGBT identities. Rheingold (2000) described the unique bonding between participants in early online forums – like the Whole Earth ‘Lectronic Link (The WELL) – in his book, *The virtual community*. Many other researchers followed in his footsteps by studying, for example, virtual worlds (Boellstorff, 2008; Kendall, 2002; Turkle, 2005), online groups of gamers (Nardi, 2010; Taylor, 2009), fans (Baym, 2000; Bury, 2005; Jenkins, 2008), and bloggers (Russell & Echchaibi, 2009). Eventually, internet platforms like MySpace and Facebook became mainstream, mirroring the everyday networks that we navigate in school, community, and workplace. At the same time, niche and interest-centered online communities also continued to proliferate, and they now encompass almost every imaginable affinity and pursuit. The internet has provided a new infrastructure for people to communicate and organize around interests and affinity with ease, and in a more pervasive way. For children and youth who have limited access to face-to-face affinity groups, the impact of online affinity networks is particularly profound.

In online affinity networks, young people are pursuing what, in our earlier Digital Youth research (Ito et al., 2010), we described as “interest-driven” learning and participation – they are going online to find information, communities, and learning resources that support specialized interests and affiliations that may not be available in their local communities. In our earlier study, LiveJournal was

a gathering spot for these kinds of interactions, which later moved to platforms like Tumblr or Twitter. We contrasted this with “friendship-driven” forms of online communication that centered on MySpace and IM, and eventually text messages, Facebook, and Instagram. Teens might discuss romantic relationships and negotiate school-based popularity on Snapchat and Facebook, while they geek out on games, anime, or music on Tumblr and Twitter. While online affinity networks do utilize platforms like Facebook and Instagram, they also typically rely on sites and platforms that allow for more specialized forms of content creation, sharing, and reputation building. Young people describe how they segment their online identities between the friendship-driven and interest-driven platforms. For example, a young person’s Facebook network might include both local school-based relationships and friends from online affinity networks, but they will also be connected to the affinity network through platforms and online communities focused on the interest area.

Online affinity networks share some characteristics with longstanding hobby and sports networks, but they are not characterized by the organizational contexts, infrastructures, and face-to-face relations that we associate with these place-based groups. We see continuity between place-based affinity networks and online affinity networks in that both support learning and participation centered on the pursuit of interests. What differentiates online affinity networks from the hobby and sports groups in a young person’s local community is that they center on online space and infrastructure rather than brick-and-mortar organizations and settings. Although most hobby and interest groups now have some mix of online and place-based presence, online affinity networks are distinguished by their primary reliance on online infrastructure. We have identified three common features that characterize online affinity networks, which we elaborate in this section:

1. The network is *specialized*. It is centered on a specific affinity or interest, rather than being layered with other forms of affiliation. Organizations such as schools and workplaces can support affiliation based on specialized interests, but other affiliations and agendas come into play. In schools, teens negotiate romantic and peer relationships and academic competition, as well as pursue specialized interests. By contrast, in online affinity networks, teens’ status centers on knowledge, expertise, and contribution to the interest area.
2. Involvement is *intentional*. It is a voluntary “chosen” affiliation, and not part of a formal professional, school, or governmental affiliation. While some online affinity networks may have formal markers of membership and leadership, contributions and involvement are driven by personal interest and choice. Participants move more fluidly in and out of engagement than in formal organizations that directly determine young people’s academic and economic success.
3. Content sharing and communication takes place on *openly networked* online platforms. At least some dimension of every online affinity network

is discoverable on the “open” internet, without the gatekeeping of a financial transaction or formal institutional membership. Further, by definition, online affinity networks make use of digitally networked infrastructures that allow for broader visibility and access than place-based forms of communication.

As more and more young people go online, smartphones spread, and online affinity networks proliferate, we can expect that these networks will become more central to how young people socialize, learn, and pursue interests. In our earlier Digital Youth study, based on fieldwork in 2006–7, teens described a stigma associated with meeting new friends online – the pull of local relationships and the status and social capital derived from local place-based friendships exerted a much stronger influence on their online participation than did online affinity networks. This dynamic may be changing, however. Our current study was focused on active participants in online affinity networks, so it is not surprising that they were comfortable with making online friends through affinity groups. More recent survey research also indicates, however, that online friendships are becoming more and more commonplace. The majority of US teens now say they have met a new friend online (Lenhart et al., 2015). It is likely that the role of online affinity networks is growing in young people’s lives.

How Affinity Networks Connect Interests to Learning

Researchers who study learning have increasingly recognized the role of culture, social relationships, and shared practice in the discovery of interests and the persistence in pursuing them. A growing body of research on the development of technical interests has documented how familial support (Crowley & Jacobs, 2002; Crowley et al., 2015), the availability of shared activities (Azevedo, 2011, 2013), and rapport with teachers and mentors (Maltese & Tai, 2010) play a more significant role than formal instruction in the development of scientific interests. Our research on young people and affinity networks reinforces these views of interest development. We draw from Azevedo’s view that interests are an interaction between individual preferences and “lines of practice” – the ways in which interests are sustained over time through joint activities. We see an ongoing and dynamic interaction between individual inclinations and the network of relationships, affinities, and activities that are available in a young person’s social world. Even when a young person has a strong personal passion for a particular interest area, involvement waxes and wanes depending on whether they feel a sense of belonging, have friends and mentors who share the interest, and have access to activities that sustain their involvement. We describe young people’s personal predilection for an interest as an “affinity” in order to highlight its relational and culturally situated

nature. A young person's demonstration of interest is grounded in personal preference as well as whether they can relate to the culture, people, and practices that embody the interest. Whether it is math, surfing, or knitting, interests cannot be separated from their culture, people, and places. These contextual features are fundamental drivers of young people's attraction to the area of interest.

We see our work on sociocultural contexts for interest development as complementary to psychological research that investigates how interest is triggered, sustained, and deepened (e.g., Renninger & Hidi, 2016), and we hope to build more bridges between these bodies of research. We see deepening interest as both "internally" developmental and as an "external" process of building connections that are relational, cultural, and practical in nature. In other words, robust interest is characterized by more rather than fewer situational ties; the focus of our investigation has been the development of these sociocultural ties and networks. In this we draw from a long tradition in sociocultural learning theory that recognizes how learning is part and parcel of belonging in situated practices (e.g., Brown, Collins, & Duguid, 1989; Cole, 1996; Lave & Wenger, 1991). Unlike the seminal case studies of situated learning in professional "communities of practice" (Lave & Wenger, 1991; Orr, 1990; Wenger, 1998), however, our cases center on networks of affinity and interests that are only loosely institutionalized. We draw broadly on sociocultural approaches in the learning sciences, but focus specifically on the unique forms of social learning that thrive in technology-enabled affinity networks.

How we support progression in learning and interest development is often viewed as a "pipeline" with a set of handoffs between educational institutions (see Figure 12.1). We argue that the network of informal supports is critically important to consider, in addition to the formal pipeline. Further, many informal supports, such as peer and family relationships or online affinity networks, transcend the boundaries of formal activities and organizational membership, and thus can be more resilient over time than relationships centered on a particular class, grade, or institution. If we return to the story of Amy, we can see that her process of developing interest and expertise relied on a growing network of relational supports, activities, and opportunities to share. Her online affinity network in *Hogwarts at Ravelry* helped fill gaps in her knowledge, as well as in her social and cultural supports, so that she could sustain her learning and interest in a unique specialization. Unlike an interest such as chess or basketball, which is often supported within schools and other community-based institutions, a specialization in knitting and pattern making would have been difficult to sustain without her online supports (see Figure 12.2).

The fundamental drivers of specialized, expert learning are the same as those we see in more traditional professional groups – learning in situ, sustained engagement with peers with related expertise, and productive social and cultural contributions. What differs is how Amy's interests are supported through an online, affinity-centered infrastructure that is only loosely institutionalized.

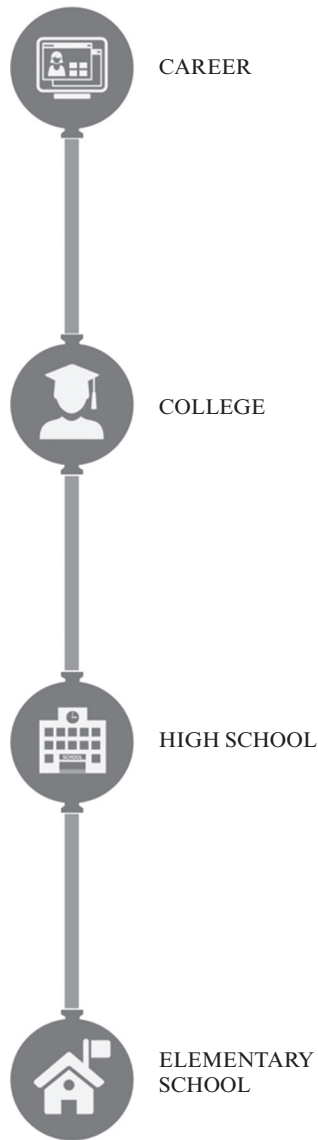


Figure 12.1. *Learning and interest development as a pipeline, or progression.*
Image designed by Nat Soti.

An online affinity network is much more accessible than a formal professional arts and crafts community or a community-based organization like a sports team. Conversely, it has fewer ties to the local community and context of participants; this lack of support in the local community for a niche interest is often what drives young people to online networks. In Amy's case, her family provided local support for knitting, and the online setting enabled Amy to connect to a more specialized and expert community of Harry Potter-fan knitters.

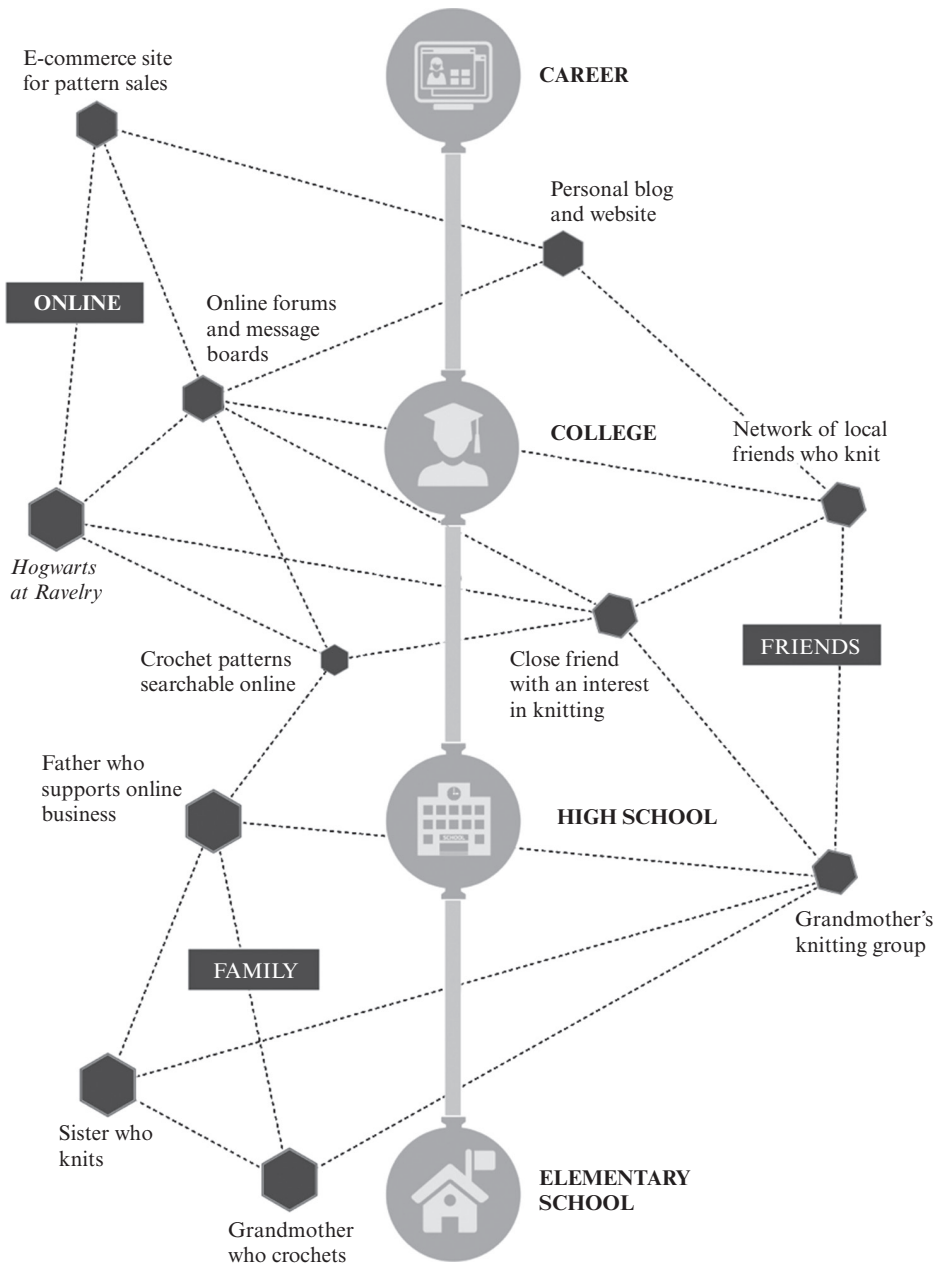


Figure 12.2. Amy's learning and interest development as a process of network building. Image designed by Nat Soti.

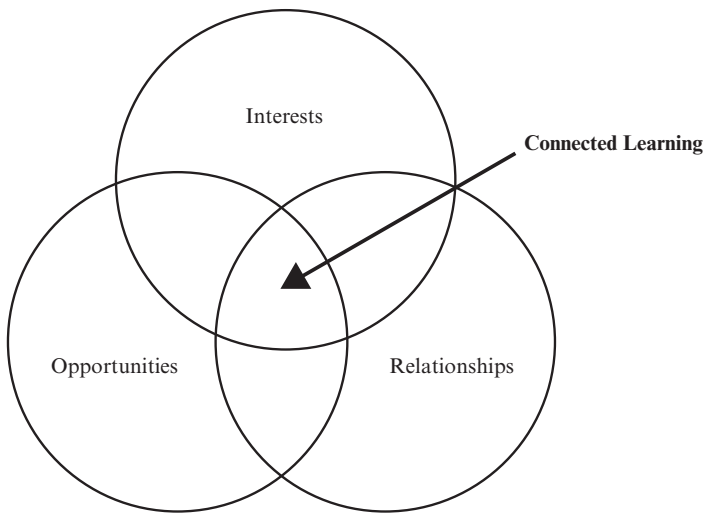


Figure 12.3. *Connecting the spheres of learning.* Image designed by Katie Salen Tekinbaş.

Our case studies of online affinity networks and connected learners like Amy enable us to understand these unique affordances of the online world, as well as reflect back on our assumptions about learning and interest development.

Although there are steps and pathways that young people traverse over time as they become more involved in an area of interest, connected learning is more appropriately conceived of as the growth of a network of connections than as a linear pathway or an internalization of skills and knowledge. Connected learners are situated within a set of personal and organizational relationships that knit together their interests and affinities, peer networks, and organizational sites of power and opportunity like schools, civic institutions, and workplaces (see Figure 12.3).

Online affinity networks can play a powerful role in connecting a young person's learning network, because they distill and make accessible a set of relationships and roles that are centered on personal interest and identities. For young people who do not have peers and mentors in their local community and organizations who share their interest, online affinity networks fill a vacuum in their connected learning network. Even with local supports for an interest, the online world can provide access to more depth and specialization. And when young people are able to connect the relationships and learning from their online affinity networks back to their local relationships and organizations, the outcomes can be transformational – opening up new educational pathways, civic engagements, and economic opportunity.

The Leveling Up Study

This chapter draws from case studies¹ of online affinity networks developed by researchers in the MacArthur Foundation-funded Connected Learning Research Network (CLRN) and Youth and Participatory Politics (YPP) Research Network.² The cases were not selected because they are typical of youth behaviors, but rather are positive examples that exhibit elements of connected learning. In this, the approach is akin to what those working in public health have described as a “positive deviance” model, which seeks out examples of practices in existing communities that can be spread and scaled to address systemic problems (Pascale et al., 2010). Our ethnographic case studies strategically sample from different populations and forms of social organization, combining in-depth, observational research with a comparative analysis that surfaces patterns and relationships between, as well as within, cases. We developed shared protocols and shared codes, using both a priori and emergent coding.³ This cultural and practice-based analysis is still interpretive and qualitative in nature, and does not rest on the kinds of sampling approaches and claims for representativeness characteristic of quantitative research. But it does offer a way of analyzing patterns of social organization and cultural forms that exceed the bounds of conventional case-based

- 1 The case studies were conducted using different data-collection methodologies, and we have varying degrees of contextual information about our participants. In every case, if we know the information, then we have indicated age, gender, and participant-identified racial or ethnic identity. If this information is not indicated, then we did not know it for this participant due to the constraints of the particular case study. For example, in some of the studies that focus on online affinity networks, interviews were conducted over the phone or through online chat. In most cases, we derived this information from self-reports in background questionnaires administered after most of our formal interviews. Although race is not the central analytic category in this chapter, there are times when we think it is relevant to our description, and we thought that if racial or ethnic identity were to be mentioned for some number of participants, then we needed to be symmetrical in our treatment and indicate racial identity for all respondents for whom we did have this information.
- 2 The Leveling Up project, part of the CLRN, and headed by Mizuko Ito at UC Irvine and Katie Salen Tekinbaş at UC Irvine, is the source of the majority of case studies. Members of the Leveling Up research team include: Adam Ingram-Goble of Verve Mobile; Ksenia Korobkova of UC Irvine; Yong Ming Kow of City University of Hong Kong; Crystle Martin of UC Irvine; Rachel Cody Pfister of UC San Diego; Matt Rafalow of UC Irvine; Amanda Wortman of UC Irvine; and Timothy Young of Twitch. Members of the MAPP project, led by Henry Jenkins at USC and part of the YPP network, have also contributed case material, including Neta Kligler-Vilenchik of Hebrew University of Jerusalem and Sangita Shresthova of USC.
- 3 The a priori coding scheme was derived from the framework and design principles developed by the CLRN in the report, *Connected learning: An agenda for research and design* (Ito et al., 2013). Each researcher coded the data they collected, and emerging themes were discussed often in coding meetings attended by all research team members. Analysis was facilitated by Dedoose, the first cloud-based qualitative analysis platform that is designed with an emphasis on collaboration. Analysis of key constructs provided a pooled Cohen's Kappa of 0.91, indicating high inter-rater reliability. The case studies from the MAPP team, and Ito's prior research with anime fans, were not part of this more intensive research coordination process; that material was brought in more selectively, at a later phase of the analysis, to enrich the core findings established by the Leveling Up case analyses.

research. It is a form of qualitative “meta-analysis” that draws findings from across varied case research that addresses similar questions.

The Leveling Up project began in fall 2011, with the majority of the fieldwork taking place in 2012 and 2013. This work is unusual among qualitative field-based studies in that it includes cross-case analysis of a large number of complementary studies. The cases include a variety of affinity networks that make use of online spaces and employed research methods ranging from questionnaires, surveys, semi-structured interviews, and observation to content analyses of media, profiles, videos, and other online artifacts.⁴ When we present ethnographic research in this chapter, we indicate from which of the case studies the example is drawn. To acknowledge young people as agents, we use the pseudonyms and ethnic and racial categories that our interviewees used to describe themselves. Here, we draw from five case studies conducted as part of the Leveling Up Study and from three other complementary cases of online affinity networks that were conducted as part of other research studies:

1. Ksenia Korobkova’s *One Direction fanfiction* case study delved into an online fanfiction community, members of which are connected to each other in two ways: (1) with an online forum and other media outlets, and (2) through Directioner fan art.
2. The *Ravelry* case study, led by Rachel Cody Pfister, examined an online community and database for fiber crafting (knitting, crocheting, weaving, and spinning). The research focused on *Hogwarts at Ravelry*, an interest group that combines the interests of Harry Potter and fiber crafting to create a fictional universe.
3. Two gaming case studies examined the creative culture and practices among both players and industry game developers engaged with *LittleBigPlanet 2* and *StarCraft II*. Adam Ingram-Goble, Matthew Rafalow, Yong Ming Kow, Katie Salen Tekinbas, and Timothy Young collaborated on these two case studies.
4. The *professional wrestling fandom* case study, led by Crystle Martin, examined fan communities of professional wrestling, with a focus on fantasy wrestling through role-playing narratives.
5. The *anime music video (AMV) community* case study was conducted by Mizuko Ito as part of the earlier Digital Youth Study, and focused on a

4 Collectively, the Leveling Up research team conducted 166 semi-structured interviews and chronicled more than 1,500 hours of observation, which were cataloged in field notes. In addition, a demographic and media background survey was completed by 83 participants. Supplemental data from USC’s Media, Activism, and Participatory Politics project include: 15 participant interviews, two expert interviews and 35 hours of observation for the Nerdfighter case study; and 120 interviews with dancers and choreographers globally (40 interviews in the United States), more than 200 hours of on-site observation, and extensive in-depth media analysis for the Bollywood case study. The Anime Music Video case study draws on 23 interviews, an online survey with 277 valid responses, and over 300 hours of observation at conventions and online.

sub-community of English-language fans of Japanese anime who create and share remixed videos.

6. The *Nerdfighter* case study, led by Neta Kligler-Vilenchik, was based on research from the MAPP project led by Henry Jenkins at USC, and part of the YPP network. It centered on an informal community formed around the YouTube vlog channel for brothers John and Hank Green. Many of the participants were high school and college age, united by a shared identity as "nerds" and a broad common goal of "decreasing world suck."
7. The *Bollywood dance* case study built on Sangita Shresthova's decade-long research on live Bollywood dance communities. This case study explored Bollywood dance as a participatory, interest-driven practice in the United States as it delves into the Hindi Film Dance competition scene on college campuses, and the online sharing of media related to these activities.

We sought out affinity networks and young people who exhibited "positive deviance" in that they were more likely than other affinity networks to exhibit elements of connected learning. We also sought out cases that represented a wide spectrum of online interests, taking care to include groups under-represented in research on online communities, specifically girls and black and Latino youth. The case studies of *StarCraft II* and *LittleBigPlanet 2* represent the more stereotypically "geeky" end of the spectrum, showcasing the state of the art in game development, networked community organization, and peer production. The *AMV* case also represents a highly tech savvy group, dominated by white and Asian young men. The case study of the *Nerdfighters*, from the MAPP project, describes a highly digitally activated geek community of predominantly young women that has pushed innovation in civic activation through digital networks. Our case study of professional wrestling fans represents an interest popular among black and Latino youth. The Bollywood case is centered on Asian young women. Two other cases were also selected because of their appeal to women and girls: the case study of the *One Direction (1D) fanfiction* affinity network taps into the energies of one of the most activated and mainstream fandoms for younger teenage girls, and *Ravelry* represents an older female age set, which has enabled us to look at intergenerational connections through an interest area that has stood the test of time.

Although encompassing a diverse range of interests and affinities, our case studies offer a window into the common characteristics of online affinity networks that support connected learning. These include strongly shared culture and practices, varied ways of contributing, high standards, and effective ways of providing feedback and help. Unlike much of the learning that young people encounter in school, affinity networks provide opportunities that are self-selected and intentional, and are also tied to contributions to social communities and authentic recognition in these communities. This can involve being a community organizer, publishing work online, competing in a public tournament, and providing feedback and expertise for others. Young people

have historically had these kinds of opportunities for learning, contribution, and recognition in adult-sponsored athletics and the arts; the online world increases the possibilities, making these kinds of opportunities more varied, accessible, and youth driven.

Shared Culture and Purpose

Well-organized online affinity networks are successful in sustaining participation, deepening interests, and fueling learning because they are able to parlay participants' feelings of affinity into a sense of belonging and shared purpose. These contexts can be powerfully motivating, because they cultivate a niche or subcultural identity and engage participants in sometimes epic shared endeavors or friendly competition. We discuss these features of online affinity networks in terms of shared culture and shared purpose.

Shared Culture

At the heart of any affinity network is a set of shared interests, identities, culture, and values that binds participants together. Although online affinity networks exist for every imaginable interest area, they are particularly active and robust for groups that are specialized, lack a critical mass in local communities, and hold to high standards of knowledge and expertise. In other words, people tend to congregate in online affinity networks when they want to geek out with others who are passionate experts and they lack these relationships in their offline lives. They often feel a particularly profound sense of belonging to these groups because of this shared niche culture and identity.

For example, shared interests in fiber crafting and Harry Potter is a niche combination that lacks a critical mass in most local communities, but is a magnet for over 1,000 participants to connect on Ravelry. "We all belong here," said Amazon, a white, 28-year-old *Hogwarts at Ravelry* member based in Cleveland. Her description of why she loves *Hogwarts at Ravelry* captures how a shared passion for a niche interest binds members of an online affinity network:

The camaraderie and instant friendship, especially in your own house, though interhouse love is also prevalent. I can talk to someone I've never met before and because of the history inherent at Hogwarts, we've passed each other in the halls a thousand times. We go to the same charms class. We know the same lingo, share the same inside jokes.

Amazon describes the unique pleasure of sharing cultural context and insider references with others with shared tastes, passions, and expertise. Rich content worlds like the Harry Potter series offer a treasure trove of specialized knowledge that provides ample fodder for geeking out and social organizing by engaged fan communities (Jenkins, 2012).

Anime fandom also supports a wide range of highly specialized affinity networks within the fandom. The AMV scene is one such niche, a network that centers around the specific practices of video remixing within the broader anime fandom. Gepetto, an 18-year-old from Brazil who had been an anime fan for some time, describes the moment when he first discovered AMVs. He was shocked to realize that the AMV was created by “a fan just like me.” As he recounts this memory, he continues, “Actually, my heart is racing right now just remembering. Of course, I’m a weird person but it’s still racing.” After discovering AMVs, Gepetto went on to become an active participant in *animusicvideos.org*, a center of gravity for the AMV community. “I love the forums, I love the chats, I love answering questions and having mine answered in turn. I could spend 24 hours straight discussing AMVs without so much as a coffee break.” His ongoing interest and engagement is fueled by the shared referents and connoisseurship of anime, as well as by the deep technical expertise around video remixing that is discussed in the forums.

Competitive esports like *StarCraft II* represent a highly tuned arena for players and fans to compete in and strive for excellence. In these competitive affinity networks, young people will connect online or in tournaments outside their local community in order to pursue an ongoing challenge. Often their affinity network will include a mix of local peers as well as online networks that allow them to specialize and level up. Mona,⁵ a 22-year-old Asian college student from New Jersey, vividly recalled how relationships forged through *StarCraft II* motivated her to do her best in game matches; she remembered “getting butterflies in my stomach because I have to play for my team and I don’t want to let them down.” Mark, a junior in high school from California, recalled how watching a *StarCraft II* tournament and feeling a part of a community that shared his passion provided the rush and drive to pursue his interest in *StarCraft II*. Remembering the tournament, he described, “I can’t even emphasize how addicted that made me to *StarCraft* as a game. I saw that and I was like, this is it. This is the game that I’m going to play. This is the community that I want to be a part of and this is what I want to do for a really long time.”

Another pull for young people to connect online comes if an interest is stigmatized. Online affinity networks provide an attractive safe haven, even when young people might have local friends who share the interests. This was true for both the One Direction fanfiction writers and the members of *The Wrestling Boards*, where some felt they needed to hide their interests from their local communities. Tween and teen obsession over boy bands is often culturally devalued, particularly among adults, and many fans of One Direction didn’t share their interests with teachers and parents. Katie, a 15-year-old white girl in Australia, said that although she was a prolific writer, she did not feel comfortable telling her teachers about her fanfiction because they “wouldn’t get it plus they would ask questions.”

5 Real name used with permission.

Although many WWE fans came into the interest through their families, the interest is often stigmatized among peers. Jonathan, a white, 16-year-old participant on *The Wrestling Boards* from England, said that wrestling was viewed negatively in his area, and that “no one that I know likes WWE as they see it as being ‘childish’ or ‘immature.’” WacoKid, a white and Native American male in his 30s from Texas, said that although conversations in his local community would sometimes reveal people’s wrestling interests, it was generally something that people kept to themselves and did not openly discuss or participate in: “For the most part, WWE fans (or any pro wrestling fans) around here seem to be in the closet.” For these fans, their wrestling interests were not just unsupported by their local communities but were something to be hidden.

Shared Purpose

Activity in online affinity networks is fueled by shared practices that give purpose to participation in the network. Unlike purely social online “hanging out,” online affinity networks involve organized production, collaboration, and competition. These networks are examples of what Jenkins et al. (2009) have called “participatory culture” – “a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one’s creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices” (p. xi). In affinity networks, participants are not simply consuming media, but are actively involved in creation, circulation, curation, and commentary. We describe the shared practices of online affinity networks in two categories: collaborative production, and contests and challenges.

Collaborative production. Collaborative production offers members the opportunity to engage in meaningful and hands-on learning where they blend skills, envision new creations, and build affinity as they work toward the shared purpose of the community (Ito, 2012; Ito et al., 2013; Moran & John-Steiner, 2004; Searle, 2004).

In *The Wrestling Boards*, members role-play as wrestlers, write background stories for their characters, and carry out wrestling matches with other members through the coordinated exchange of creative writing and role-play. *Hogwarts at Ravelry* members similarly use role-playing and crafting to build a fantasy world that parallels the Hogwarts of the Harry Potter series. For example, in a discussion about moving a conversation to a different message board thread, Knitting Principal,⁶ the leader of *Hogwarts at Ravelry* and a white woman from Idaho, switched to role-play and began “*waving wand frantically ... shouting WHOOSH!!!*” In other small moments, members “dropped their suitcases” in the discussion threads for their houses as new school years

6 Real screen name used with permission.

began and sometimes would “trip over broomsticks” lying around in classes. These small moments of role-play continually reinforce the fantasy world of the group. Images of crafted items are also abundant and help create a visual representation of the fantasy world; Hagrid’s pumpkin patch was recreated through knit pumpkin toys and crocheted pot holders, and members filled the Great Hall’s tables with images of crocheted food items at Thanksgiving.

The Bollywood Dance case study is of an online affinity network centered on production and competition in dance performance. Members of university dance teams combine specialized skills and work together to craft a Bollywood dance performance. Akash, a college student from California, used his engineering skills to build props, his musical interests to research and develop hip-hop inspired choreography, and his filmography interests to create introductory videos for his team’s competitions. Neesha, a college student from Palo Alto, learned to use GarageBand to create sound mixes for her team. Other roles included costume designing, fundraising, and the creation of stories for performances.

The One Direction fan community of Wattpad centers on the production of fanfiction and media related to One Direction. While most fanfiction benefits from some type of collective feedback or suggestions, some authors also create “collab-accounts” through which multiple authors collaboratively author a work. It is also common for members to work collaboratively on a project through a “blending of skills” (Moran & John-Steiner, 2004, p. 11). For example, one person may write a fanfiction story and another person creates the book cover graphics to accompany it. Additionally, some members work together to collaboratively produce GIFs (short looping digital images) around their One Direction interests. Similarly, Nerdfighters use collab channels on YouTube to help overcome some of the challenges of online production. Creative production is a high-effort endeavor. Producing a video involves multiple stages of planning, scripting, filming, editing, posting, and tagging. By joining forces, young Nerdfighters lower the bar to entry for posting videos to YouTube, as well as the expectation of maintaining constantly updated content.

The *Sackboy Planet* affinity network also offers an example of how collaborative production involves combining and blending specialized knowledge and skills. The shared purpose of this affinity network is the construction of *LittleBigPlanet 2* game levels. *Sackboy Planet* members devote much of their creative energy to level design, *LittleBigPlanet 2*’s most innovative feature. Many complex skills go into level creation, including game design, programming, art, story development, and scripting. Players use the level design forum of *Sackboy Planet* to find others with whom to create levels; they post a thread asking others with specific skill sets to join forces and create a level. Co-creation presents opportunities for designers to combine their specific design skills and ideas in a way that can produce a collaborative and creative synergy. Ninjadude, a white 19-year-old from the United States, pointed out that collectively sharing insights and new ideas was an important part of level

creation. When players asked him for help, he will “take a look at it and try to figure it out,” and he has gone “in and helped them with specific things.”

Sackboy Planet demonstrates how collaborative production can play a powerful role in supporting shared purpose through building connections and combining skills. Players acquire and advance their skills through meaningful activities, embodying their learning as they build, tinker, and troubleshoot levels. The complex and diverse skills required to build levels encourage players to form connections with others and combine their specialized knowledge, gain creative insights, and produce a more masterful level than any one player could build. This collaborative production advances individual learning, but it also advances the collective shared purpose through building affinity and producing more creative and more expert levels.

Contests and challenges. Contests and challenges are another category of collective practice that help motivate and structure engagement in most online affinity networks. They are particularly salient in affinity networks centered on competitive games like *StarCraft II*, whose online platform matches players based on past performance on “the ladder,” providing continuous challenge, transparent ranking, and the potential for leveling up. In addition to this everyday play and practice, the *StarCraft II* community organizes a host of tournaments for different levels of players, including the pro leagues, the after-hours gaming league for working professionals, the *Collegiate Starleague*, and the *High School Starleague*. Another popular social format is “BarCraft,” where players commandeer sports bars for after-work viewings of esports competitions. Social viewing of this kind is an important vehicle for players and fans to develop a more sophisticated understanding of sports. Games like *StarCraft* have earned the moniker “esports” because of similarities with traditional sports; esports has professional players, spectators and fans, and high-stakes competitions. Further, because players can compete at any time of day or night with comparatively little physical exhaustion, the performance and practice demands of esports are in some ways more relentless than traditional athletics.

Competition is a source of creative inspiration in *Over the Ropes*, the fantasy wrestling federation of *The Wrestling Boards*. Writers co-construct fantasy wrestling matches using role-play and narratives. At the beginning of a season, players describe their character’s background, physical characteristics, wrestling style, moves, and appearance. If their wrestler is selected by the Booker, who manages the fantasy wrestling federation and can be selected from anyone in the community, the player spends the first part of the week role-playing dialogue with their opponent and co-constructing a storyline. Rubin, for example, role-played as his wrestler Trent Dixon and taunted his opponent, “Do whatever the hell you want, chuck in another seven guys for all I care, I’ll just dismantle them in exactly the way I plan to do to Exterminator.” The Booker awards points for quality, authenticity, and quantity. At the end of the week, the exchanges (or “feuds”) between the two wrestlers are compiled

into a narrative, with the winner determined by the number of points given by the Booker. Better collaboration results in a better storyline, meaning the accumulation of more points. The point system becomes a powerful way to reward collaborative competitions and group participation, and to motivate members to accumulate more wrestling knowledge and improve their writing abilities.

Similarly, a competitive narrative powers the fantasy world of *Hogwarts at Ravelry*. The penultimate competition is the House Cup, for which the different houses – or sub-communities of the group – compete. Members participate in classes and challenges that ask them to learn more about their Harry Potter interests, advance their crafting skills, and embody this learning through producing crafted items. Professor Briana,⁷ an active community member from Utah, asked students to complete a star chart, wherein they would discover that major Harry Potter characters were named after stars and constellations. One herbology class assignment asked Mary, a 21-year-old white woman in Canada, to learn more about the magical herb gillyweed and craft an item with “bobbles” to represent it. Through this assignment, Mary drew on her knowledge of the fourth Harry Potter book, and she looked to a knitting book and then to her mother to learn the bobble stitch.

LittleBigPlanet players at times organize contests that would appeal to other players. For example, Jaron (27 years old, white, and from the United States) was “helping plan and execute the very first LBP Hunger Games competition.” Ninjadude organized a contest that was a “caption contest,” where the organizer would give a “blank scene that would be kind of funny and everyone would enter and put their caption on. What are the sack people in this thing thinking or saying?” This provided a very different type of participation in the *LittleBigPlanet 2* affinity network than the usual game playing and level creation, while still drawing on the shared interests of the players.

In the Bollywood dance scene, competitions are a growing force in structuring and motivating participation. They include both regional and national events, with Bollywood America as the penultimate competition. Thousands of dancers organize through Facebook and more specialized channels such as desidanceteams.com. Preparing for a competition is a major production, which includes not only choreographing and practicing dance, but fundraising, creating videos, and making props and costumes. This pride and excitement around creative competitions is also evident in Wattpad, where a range of official and community-sponsored challenges are an ongoing focus of attention for young writers. In particular, the annual Watty awards are a centerpiece of the competitive landscape of Wattpad. The AMV world also organizes around competitions. Most major anime conventions feature an AMV screening and competition, which is one of the most well-attended events. Xstylus, a

7 Real name used with permission.

28-year-old white male, describes the moment when his video was recognized as a winner at a major convention:

The massive auditorium gave me a standing ovation. The only people who could ever come close to experiencing such a feeling are Hollywood directors having won an Academy Award for Best Picture. It was the finest, greatest, most moving moment of my entire existence. Nothing will ever top it. Ever.

Winning competitions is the penultimate form of recognition for video editors, and awards are proudly displayed on their online profiles. AMV also organizes an annual viewers' choice awards, in addition to a wide range of "top" lists and rankings, that is based on community scoring and reviews of videos.

Concluding Thoughts

Online affinity networks are a unique genre of social and cultural organization that has emerged with the growth of digital networks. These online networks share many similarities with affinity networks that are rooted in places, such as sports, creative groups, and other community-based organizations. What makes them unique, however, is that they are leveraging open online networks to create more specialized niches with relatively low barriers to participation. This means that young people today have the opportunity to connect with peers who share interests that may not have a critical mass in their local communities or in their families, and to go much deeper in these specialties. While our research indicates how online affinity networks can fuel the development of interest and expertise, few educational institutions are tapping into these networks. In addition, our research highlights the positive learning potential of online affinity networks, but we recognize that most young people are not reaping the learning benefits of these forms of engagement. Harnessing the learning potential of these networks for all youth would require more investigation and design research on how to effectively connect these communities of interest to our educational institutions, workplaces, and civic organizations.

References

- Azevedo, F. S. (2011). Lines of practice: A practice-centered theory of interest relationships, cognition and instruction. *Cognition and Instruction, 29*(2), 147–84. doi: 10.1080/07370008.2011.556834.
- Azevedo, F. S. (2013). The tailored practice of hobbies and its implication for the design of interest-driven learning environments. *Journal of the Learning Sciences, 22*(3), 462–510. doi: 10.1080/10508406.2012.730082.
- Baym, N. (2000). *Tune in, log on: Soaps, fandom, and online community*. Thousand Oaks, CA: Sage Publications.

- Boellstorff, T. (2008). *Coming of age in second life: An anthropologist explores the virtually human*. Princeton, NJ: Princeton University Press.
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1), 32–42. doi: 10.3102/0013189X018001032.
- Bury, R. (2005). *Cyberspaces of their own: Female fandoms online*. New York, NY: Peter Lang Publishing.
- Cole, M. (1996). *Cultural psychology: A once and future discipline*. Cambridge, MA: The President and Fellows of Harvard College.
- Crowley, K., Barron, B., Knutson, K., & Martin, C. K. (2015). Interest and the development of pathways to science. In K. A. Renninger, M. Nieswandt, & S. Hidi (Eds.), *Interest in mathematics and science learning*. Washington, DC: AERA.
- Crowley, K. & Jacobs, M. (2002). Building islands of expertise in everyday family activity. In G. Leinhardt, K. Crowley, & K. Knutson (Eds.), *Learning conversations in museums* (pp. 333–56). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ito, M. (2012). Contributors versus leechers: Fansubbing ethics and a hybrid public culture. In M. Ito, D. Okabe, & I. Tsuji (Eds.), *Fandom unbound: Otaku culture in a connected world* (pp. 179–204). New Haven, CT: Yale University Press.
- Ito, M., Baumer, S., Bittanti, M., Boyd, D., Cody, R., Herr-Stephenson, B., ... Tripp, L. (2010). *Hanging out, messing around, and geeking out: Kids living and learning with new media*. Cambridge, MA: MIT Press.
- Ito, M., Guitierrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., ... Watkins, C. S. (2013). *Connected learning: An agenda for research and design*. Irvine, CA. Retrieved from <http://dmlhub.net/publications/connected-learning-agenda-research-and-design>.
- Jenkins, H. (2008). *Convergence culture: Where old and new media collide*. New York, NY: New York University Press.
- Jenkins, H. (2012). “Cultural acupuncture”: Fan activism and the Harry Potter Alliance. *Transformative Works and Cultures*, 10. doi: 10.1057/9781137350374_11.
- Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A. J. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century*. Cambridge, MA: MIT Press.
- Kendall, L. (2002). *Hanging out in the virtual pub: Masculinities and relationships online*. London: University of California Press.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. New York, NY: Cambridge University Press.
- Lenhart, A., Smith, A., Anderson, M., Duggan, M., & Perrin, A. (2015). *Teens, technology & friendships*. Washington, DC. Retrieved from www.pewinternet.org/files/2015/08/Teens-and-Friendships-FINAL2.pdf.
- Maltese, A. V. & Tai, R. H. (2010). Eyeballs in the fridge: Sources of early interest in science. *International Journal of Science Education*, 32(5), 669–85. doi: 10.1080/09500690902792385.
- Moran, S. & John-Steiner, V. (2004). How collaboration in creative work impacts identity and motivation. In D. Miell & K. Littleton (Eds.), *Collaborative creativity: contemporary perspectives* (pp. 11–25). London: Free Association Books.
- Nardi, B. (2010). *My life as a night elf priest: An anthropological account of world of warcraft*. Ann Arbor, MI: University of Michigan Press.

- Orr, J. (1990). Sharing knowledge, celebrating identity: War stories and community memory in a service culture. In D. S. Middleton & D. Edwards (Eds.), *Collective remembering: Memory in society* (pp. 169–189). Beverly Hills, CA: Sage Publications.
- Pascale, R., Sternin, J., & Sternin, M. (2010). *The power of positive deviance: How unlikely innovators solve the world's toughest problems*. Cambridge, MA: Harvard Business Review Press.
- Pfister, R. C. (2014). *Hats for house elves: Connected learning and civic engagement in Hogwarts at Ravelry*. Irvine, CA: Digital Media and Learning Hub.
- Pfister, R. C. (2016). *Unraveling Hogwarts: Understanding an affinity group through the lens of activity theory* (Unpublished doctoral dissertation). San Diego, CA.
- Renninger, K. A. & Hidi, S. (2016). *The power of interest for motivation and engagement*. New York, NY: Routledge.
- Rheingold, H. (2000). *The virtual community: Homesteading on the electronic frontier*. Cambridge, MA: MIT Press.
- Russell, A. & Echchaibi, N. (Eds.). (2009). *International blogging: Identity, politics and networked publics*. New York, NY: Peter Lang Publishing.
- Searle, R. H. (2004). Creativity and innovation in teams. In D. Miell & K. Littleton (Eds.), *Collaborative creativity: Contemporary perspectives* (pp. 175–88). London: Free Association Books.
- Taylor, T. L. (2009). *Play between worlds: Exploring online game culture*. Cambridge, MA: MIT Press.
- Turkle, S. (2005). *The second self: Computers and the human spirit*. Cambridge, MA: MIT Press.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. New York, NY: Cambridge University Press.