

Conceptual Framework

Our work is guided by four key analytic foci that we apply to our ethnographic material: *genres of participation*, *networked publics*, *peer-based learning*, and *new media literacy*. In examining these different areas, we draw from existing theories that are part of the “social turn” in literacy studies, new media studies, learning theory, and childhood studies.

Genres of Participation

In order to understand new media engagement, we draw from models of learning that look to the learning in everyday activity and rely on a notion of social and cultural participation (Jenkins 1992, 2006; Karaganis 2007; Lave and Wenger 1991). We see learning with new media as a process of participation in shared culture and sociability as it is embodied and mediated by new technologies. In our descriptions of youth practice, we rely on a framework of “genres of participation” to describe dif-

ferent modes or conventions for engaging with new media (Ito 2003, 2008). Instead of looking to rigid categories that are defined by formal properties, genres of participation are a way of identifying, in an interpretive way, a set of social, cultural, and technological characteristics that are recognizable by participants as defining a set of practices.

We have not relied on distinctions based on given categories such as gender, class, or ethnic identity. Our genres are based on what we saw in our ethnographic material, patterns that helped us and our research participants interpret how media intersect with learning and participation. By describing these forms of participation as genres, we hope to avoid the assumption that these genres attach categorically to individuals. Rather, just as an individual may engage with multiple media genres, we find that youth will often engage in multiple genres of participation in ways that are situationally specific. We have also avoided categorizing practice based on technology- or media-centric parameters, such as media type or measures of frequency or media saturation. Genres of participation provide ways of identifying the sources of diversity in how youth engage with new media in a way that does not rely on a simple notion of “divides” or a ranking of more or less sophisticated media expertise. Instead, these genres represent different investments that youth make in particular forms of sociability and differing forms of identification with media genres.

- By *friendship-driven* genres of participation, we refer to the dominant and mainstream practices of youth as they go about

their day-to-day negotiations with friends and peers. These friendship-driven practices center on peers whom youth encounter in the age-segregated contexts of school but might also include friends and peers whom they meet through religious groups, school sports, and other local activity groups. For most youth, these local friendship-driven networks are their primary source of affiliation, friendship, and romantic partners, and their lives online mirror this local network. MySpace and Facebook are the emblematic online sites for these sets of normative practices.

- In contrast to friendship-driven practices, with *interest-driven* genres of participation, specialized activities, interests, or niche and marginalized identities come first. Interest-driven practices are what youth describe as the domain of the geeks, freaks, musicians, artists, and dorks, who are identified as smart, different, or creative, and who generally exist at the margins of teen social worlds. Youth find a different network of peers and develop deep friendships through these interest-driven engagements, but in these cases the interests come first, and structure the peer network and friendships, rather than vice versa. These are contexts where youth find relationships that center on their interests, hobbies, and career aspirations. It is not about the given social relations that structure youth's school lives but about both focusing and expanding an individual's social circle based on interests. Although some interest-based activities such as sports and music have been supported through schools and overlap with young people's friendship-driven networks, other

kinds of interests require more far-flung networks of affiliation and expertise.

Friendship-driven and interest-driven genres provide a broad framework for identifying what we saw as the most salient social and cultural distinction that differentiated youth new media practice. In addition, we have identified three genres of participation that describe different degrees of commitment to media engagement: *hanging out*, *messing around*, and *geeking out*. These three genres are a way of describing different levels of intensity and sophistication in relation to media engagement with reference to social and cultural context, rather than relying exclusively on measures of frequency or assuming that certain forms of media or technology automatically correlate with “high-end” and “low-end” forms of media literacy. In the second half of this report, we present an overview of our research findings in terms of these three genres of participation and related learning implications.

Participation in Networked Publics

We use the term *networked publics* to describe participation in public culture (Appadurai and Breckenridge 1988) that is supported by online networks. The growing availability of digital media-production tools, combined with online networks that traffic in rich media, is creating convergence between mass media and online communication (Benkler 2006; Ito 2008b; Jenkins 2006; Shirky 2008; Varnelis 2008). Rather than concep-

tualize everyday media engagement as “consumption” by “audiences,” the term *networked publics* foregrounds the active participation of a distributed social network in the production and circulation of culture and knowledge. The growing salience of networked publics in young people’s everyday lives is part of an important change in what constitutes the relevant social groups and publics that structure young people’s learning and identity.

This research delves into the details of everyday youth participation in networked publics and into the ways in which parents and educators work to shape these engagements. Youths’ online activity largely replicates their existing practices of hanging out and communicating with friends, but these characteristics of networked publics do create new kinds of opportunities for youth to connect, communicate, and develop their public identities. In addition to reshaping how youth participate in their given social networks of peers in school and their local communities, networked publics also open new avenues for youth participation through interest-driven networks.

Peer-Based Learning

Our attention to youth perspectives, as well as the high level of youth engagement in social and recreational activities online, determined our attention to the more informal and loosely organized contexts of peer-based learning. Our focus is on describing learning outside of school, primarily in settings of peer-based interaction. Although parents and educators often

lament the influence of peers, as exemplified by the phrase *peer pressure*, we approach these informal social settings as spaces of opportunity for learning. Our cases demonstrate that some of the drivers of self-motivated learning come not from the institutionalized “authorities” in youth’s lives setting standards and providing instruction but from their observing and communicating with people engaged in the same interests, and in the same struggles for status and recognition, that they are.

Both interest-driven and friendship-driven participation rely on peer-based learning dynamics, which have a different structure than formal instruction or parental guidance. Our description of friendship-driven learning describes a familiar genre of peer-based learning, in which online networks are supporting those sometimes painful but important lessons in growing up, giving youth an environment to explore romance, friendship, and status just as their predecessors did. Just like friendship-driven networks, interest-driven networks are also sites of peer-based learning, but they represent a different genre of participation, in which specialized interests are what bring a social group together. The peers whom youth are learning from in interest-driven practices are not defined by their given institution of school but rather through more intentional and chosen affiliations. In the case of youth who have become immersed in interest-driven publics, whom they identify as peers changes, as does the context for how peer-based reputation works. They also receive recognition for different forms of skill and learning.

New Media Literacy

Our work examines the current practices of youth and queries what kinds of literacies and social competencies they are defining as a particular generational cohort experimenting with a new set of media technologies. We have attempted to momentarily suspend our own value judgments about youth engagement with new media in an effort to better understand and appreciate what youth themselves see as important forms of culture, learning, and literacy. To inform current debates over the definition of new media literacy, we describe the forms of competencies, skills, and literacy practices that youth are developing through media production and online communication. Our work is in line with that of other scholars (e.g., Chávez and Soep 2005; Hull 2003; Mahiri 2004) who explore literacies in relation to ideology, power, and social practice in other settings where youth are pushing back against dominant definitions of literacy that structure their everyday life worlds.

We have identified certain literacy practices that youth have been central participants in defining: deliberately casual forms of online speech, nuanced social norms for how to engage in social network activities, and new genres of media representation, such as machinima, mashups, remix, video blogs, Web comics, and fansubs. Often these cultural forms are tied to certain linguistic styles identified with particular youth cultures and subcultures (Eckert 1996). The goal of our work is to situate these literacy practices within specific and diverse conditions of

youth culture and identity as well as within an intergenerational struggle over literacy norms.

Genres of Participation with New Media

Our goal has been to arrive at a description of everyday youth new media practice that sheds light on related social practices and learning dynamics. Hanging out, messing around, and geeking out are three genres of participation that describe different forms of commitment to media engagement, and they correspond to different social and learning dynamics. In this last half of the report, we draw from the lengthier description in our book (Ito et al., forthcoming) to highlight the key features of these genres of participation, supported with illustrative examples. In our book, we provide more substantial ethnographic support for our findings, organized based on key domains of youth practice: friendship, intimacy, family, gaming, creative production, and work. Here we draw from this material in order to highlight the three genres of participation and focus specifically on the learning dynamics that we documented.

Hanging Out

For many American teenagers, coming of age is marked by a general shift from given childhood social relationships, such as families and local communities, to peer- and friendship-centered social groups. Although the nuances of these relation-

ships vary in relation to ethnicity, class, and family dynamics (Austin and Willard 1998; Bettie 2003; Eckert 1989; Epstein 1998; Pascoe 2007; Perry 2002; Snow 1987; Thorne 1993), kids and teenagers throughout all of our studies invested a great deal of time and energy in creating and finding opportunities to “hang out.” Unlike with other genres of participation (e.g., messing around and geeking out), parents and educators tend not to see the practices involved in hanging out as supporting learning. Many parents, teachers, and other adults we interviewed described young people’s hanging out with their friends using new media as “a waste of time,” and teenagers reported considerable restrictions and regulations on these activities at school, home, and in after-school centers. Moreover, availability of unrestricted computer and Internet access, competing responsibilities such as household chores and after-school activities (e.g., sports and music), and transportation frequently reflect the lack of priority adults place on hanging out.

In response to these regulations, most teenagers develop “work-arounds,” or ways to subvert institutional, social, and technical barriers to hanging out (see Horst, Herr-Stephenson, and Robinson, forthcoming). These work-arounds and back channels are ways in which kids hang out together, even in settings that are not officially sanctioned for hanging out, such as the classroom, where talking socially to peers is explicitly frowned upon. Young people also use work-arounds and back channels as a strategy at home when they are separated from their friends and peers. Because these work-arounds and back

channels take place in schools, homes, vehicles, and other spaces that structure young people's everyday lives, the teens who participated in our study had become adept at maintaining a continuous presence, or co-presence, in multiple contexts.

Once teens find a way to be together—online, offline, or both—they integrate new media within the informal hanging out practices that have characterized peer social life ever since the postwar era and the emergence of teens as a distinctive youth culture, a culture that continues to be tightly integrated with commercial popular-culture products targeted to teens. While the content and form of much of popular culture—music, fashion, film, and television—continue to change, the core practices of how youth engage with media as part of their hanging out with peers remain resilient (Cohen 1972; Corsaro 1985; Frank 1997; Gilbert 1986; Hine 1999; Snow 1987). This ready availability of multiple forms of media, in diverse contexts of everyday life, means that media content is increasingly central to everyday communication and identity construction. Ito (2008) uses the term *hypersocial* to define the process through which young people use specific media as tokens of identity, taste, and style to negotiate their sense of self in relation to their peers. While hanging out with their friends, youth develop and discuss their taste in music, their knowledge of television and movies, and their expertise in gaming. They also engage in a variety of new media practices, such as looking around online or playing games, when they are together with friends. For

example, GeoGem, a 12-year-old Asian American girl in Silicon Valley, describes her time after school:

And then when I came home, I invited a friend over today and we decided to go through my clothes. My dad saw the huge mess in my room. I had to clean that up, but then we went on the computer. We went on Millsberry [Farms]. And she has her own account too. So she played on her account and I played on mine and then we got bored with that 'cause we were trying to play that game where we had to fill in the letters and make words out of the word. That was so hard. And we kept on trying to do it and we'd only get to level two and there's so many levels so we gave up. And we went in the garage and we played some Game Cube. And that was it and then her mom came and picked her up. (Horst, Silicon Valley Families)

In addition to gaming, which is pervasive in youth culture, technologies for storing, sharing, and listening to music, and watching, making, and uploading videos are now ubiquitous among youth. Teens frequently display their musical tastes and preferences on MySpace profiles and in other online venues by posting information and images related to favorite artists, clips and links to songs and videos, and song lyrics. Young people watch episodes of shows and short videos on YouTube when they are sitting around with their friends at home, at their friends' houses, in dorms, and even at after-school centers. The ability to download videos and browse sites such as YouTube means that youth can view media at times and in locations that are convenient and social, providing they have access to high-speed Internet. These practices have become part and parcel of

sociability in youth culture and, in turn, central to identity formation among youth.

While acknowledging that not all practices online were necessarily positive (e.g., bullying, hate speech, and so on), we found that the facilitation of time and space to hang out reinforces informal, peer-based learning as well as the negotiation of identity. Through participation in social network sites such as MySpace, Facebook, and Bebo (among others) as well as instant and text messaging, young people are constructing new social norms and forms of media literacy in networked public culture that reflect the enhanced role of media in young people's lives. Some examples of these new forms of expression and social rules include the ability to mobilize tokens of media in socially meaningful ways, the construction of deliberately casual forms of online written communication, and the negotiation of norms of how to display friendships and romantic relationships online. The networked and public nature of these practices makes the "lessons" about social life (both the failures and successes) more consequential and persistent.

Always-On Communication Young people use new media to build friendships and romantic relationships as well as to hang out with each other as much and as often as possible. This sense of being always on and engaged with one's peers involves a variety of practices, varying from the browsing of extended peer networks through MySpace and Facebook profiles to more intense ongoing exchanges of personal communication among

close friends and romantic partners (Baron 2008). Youth use MySpace, Facebook, and IM to post status updates that can be viewed by the broader networked public of their peers—how they are faring in their relationships, their social lives, and other everyday activities. In turn, they can browse other people's updates to get a sense of the status of others without having to engage in direct communication. This kind of contact may also involve the exchange of relatively lightweight (in terms of content) text messages that share general moods, thoughts, or whereabouts. This keeps friends up-to-date with the happenings in different people's lives. Social network site profiles are key venues for representations of intimacy, providing a variety of ways to signal the intensity of a given relationship both through textual and visual representations.

Most of the direct personal communication that teens engage in through private messages, IM, and mobile phone communication involves exchange with close friends and romantic partners, rather than the broader peer group with whom they have more passive access. Teens usually have a "full-time intimate community" (Matsuda 2005) with whom they communicate in an always-on mode via mobile phones and IM. Derrick, a 16-year-old Dominican American living in Brooklyn, New York, explains the ways he moves between using new media and hanging out to Christo Sims (Rural and Urban Youth).

My homeboy usually be on his Sidekick, like somebody usually be on a Sidekick or somebody has a PSP or something like always are texting

or something on AIM. A lot of people that I be with usually on AIM on their cell phones on their Nextels, on their Boost, on AIM or usually on their phone like he kept getting called, always getting called.

For Derrick and other teens like him, new media are integrated within their everyday hanging out practices. A white 10-year-old, dragon, who was part of Heather Horst and Laura Robinson's study of Neopets, also illustrates that hanging out together in a game is important when friends are spread across time and space. At the time of his interview with Horst, dragon had recently moved from the East Coast to California. While he was in the process of making friends at his new school, dragon regularly went online after school to play Runescape in the same server as his friends back East, talking with them via the game's written chat facility. In addition to playing and typing messages together, dragon and his friends also phoned each other using three-way calling, which dragon places on speaker-phone. The sounds of 10-year-old boys arguing and yelling about who killed whom, why one person was slow, and reliving other aspects of the game filled the entire house, as if there were a house full of boys. New media such as social network sites, instant messaging programs, mobile phones, and gaming sites work as mediums for young people to extend, enhance, and hang out with people they already know.

Across the projects, we also saw evidence of a more intense form of co-presence, what Ito and Okabe call "tele-cocooning in the full-time intimate community," or the practice of maintaining frequent and sometimes constant (if passive) contact with

close friends and/or romantic partners (Ito and Okabe 2005, 137). For example, C. J. Pascoe (Living Digital) has described the constant communication between Alice and Jesse, two 17-year-olds who have been dating for more than a year. The two individuals wake up together by logging onto MSN to talk between taking their showers and doing their hair. They then switch to conversing over their mobile phones as they travel to school, exchanging text messages throughout the school day. After school they tend to do their homework together at Jesse's house while Jesse plays a video game. When not together, they continue to talk on the phone and typically end the night on the phone or send a text message to say good night and "I love you" (see Pascoe, forthcoming-a). As becomes evident in the case of couples and close friends such as Jesse and Alice, many contemporary teens maintain multiple and constant lines of communication with their intimates over mobile phones, instant-message services, and social network sites, sharing a virtual space that is accessible by specific friends or romantic partners. In addition, and due in part to the affordances of media such as social network sites, many teens move beyond small-scale intimate friend groups to build "always-on" networked publics inhabited by their peers.

Flirting and Dating While hanging out with friends online on social networking and gaming sites is one way youth extend their offline relationships, teens interested in romantic relationships also use new media to initiate the first stages of a relationship,

what many teens refer to as “talking to” someone they have met and know through school or other settings. In this stage of the relationship, young people “talk” regularly over instant messaging and reference information found on sites such as MySpace and Facebook to verify and find out more information about the individuals, their friends, and their likes and dislikes. The asynchronous nature of these technologies allows teens to carefully compose messages that appear to be casual, a “controlled casualness.” John, a white 19-year-old college freshman in Chicago, for instance, likes to flirt over IM because it is “easy to get a message across without having to phrase it perfectly” and “because I can think about things more. You can deliberate and answer however you want” (Pascoe, *Living Digital*). Like John, many teens say they often send texts or leave messages on social networking sites so that they can think about what they are going to say and play off their flirtatiousness if their object of affection does not seem to reciprocate their feelings. For example, youth use casual genres of online language to create studied ambiguity. From the outside sometimes these comments appear so casual that they might not be read as flirting, such as the following early “wall posts” by two Filipino teens—Missy and Dustin—who eventually dated quite seriously. After being introduced by mutual friends and communicating through IM, Missy, a Northern California 16-year-old, wrote on Dustin’s MySpace wall: “hey . . . hm wut to say? iono lol/well i left you a comment... u sud feel SPECIAL haha =).”⁹ Dustin, a Northern California 17-year-old, responded a day later

by writing on Missy's wall: "hello there . . . umm i dont know what to say but at least i wrote something... you are so G!!!"¹⁰ (Pascoe, *Living Digital*). Both of these comments can be construed as friendly or flirtatious, thus protecting both of the participants should one of the parties not be romantically drawn to the other. These particular comments took place in public venues on the participants' "walls" where others could read them, providing another layer of casualness and protection.

If a potential couple later becomes more serious, these same media are used to both announce a couple's relationship status as well as to further intensify and extend the relationship. Social network sites play an increasing role as couples become solidified and become what some call "Facebook official." At this point in a relationship, teens might indicate relationship status by ordering Friends¹¹ in a particular hierarchy, changing the formal statement of relationship status, giving gifts, and displaying pictures. Youth can also signal the varying intensity of intimate relationships through new media practices such as sharing passwords, adding Friends, posting bulletins, or changing headlines. In effect, the public nature and digital representations of these relationships require a fair degree of maintenance and, if the status of a relationship changes or ends, may also involve a sort of digital housecleaning that is new to the world of teen romance, but which has historical corollaries in ridding a bedroom or wallet of an ex-intimate's pictures (Pascoe, forthcoming-a). Given the persistence of new media—old profiles can always be saved, downloaded, copied, and circulated—the

severing of a romantic relationship may also involve leaving, or changing, the social network sites in the interest of privacy.

For contemporary American teens, new media provide a new venue for their intimacy practices, a venue that renders these practices simultaneously more public and more private. Young people can now meet people, flirt, date, and break up outside of the earshot and eyesight of their parents and other adults while also doing these things in front of all of their online friends. The availability of networked public culture appears to be particularly important for marginalized youth, such as gay, lesbian, bisexual, or transgendered (GLBT) teens, as well as for teens who are otherwise marked as different and cannot easily find similar individuals in their local schools and communities. For such youth, online Web sites and other new media may emerge as a place for teens to meet different people. As C. J. Pascoe's work on the Living Digital project reveals, for many gay teens the Internet can become a place to explore their identities outside of the hetero-normativity of their everyday lives. As a result, dating Web sites and modes of communication between GLBT teens provide marginalized young people with greater opportunities to develop romantic relationships, with the same or similar level of autonomy experienced by their heterosexual peers. Moreover, participation in these online sites can represent an important source of social support and friendship.

Transformations in the Meaning of "Friends" and Friendship Alongside changing the ways in which romantic relationships develop,

the integration of Friends into the infrastructure of social network sites has resulted in transformations in the meaning of “friend” and “friendship” on an everyday level. Like the construction of deliberately casual online speech, development of social norms for how to display and negotiate online Friends involves new kinds of social and media literacy. These negotiations can be both enabling and awkward. For example, as Bob, a 19-year-old participant in Christo Sims’s (Rural and Urban Youth) study, explains, becoming Friends on Facebook

sets up your relationship for the next time you meet them to have them be a bigger part of your life. . . . Suddenly they go from somebody you’ve met once to somebody you met once but also connected with in some weird Facebook way. And now that you’ve connected, you have to acknowledge each other more in person sometimes.

As Bob suggests, the corresponding ritual of Friending lays the groundwork for building a friendship. The practice of Friending not only acknowledges a connection, but it does so in a public manner. This sense of public-ness is further heightened through applications such as MySpace’s “Top Friends,” which encourages young people to identify and display their closest friends. Like declaring someone a best friend, the announcement of a preferred relationship also marginalizes others left out of the Top Friends spots and, in many instances, leads to conflict, or “drama,” between friends. While these practices and conflicts were prevalent among teens in public spaces such as the school lunchroom or the mall, social network sites illuminate and intensify these tensions.

Although youth constantly negotiate and renegotiate the underlying social practices and norms for displaying friendship online, we have observed an emerging consensus about socially appropriate behavior that largely mirrors what is socially appropriate in offline contexts (boyd 2007, forthcoming). As at school, the process of adding and deleting Friends is a core element of participation on social network sites, one that is reinforced through passwords, nicknames, and other tools that facilitate the segmentation of their friend and peer worlds. Young people's decisions surrounding whom they accept and thus consider a Friend determines an individual's direct access to the content on their profile pages as well as the ways in which their decisions may affect others. These processes make social status and friendship more explicit and public, providing a broader set of contexts for observing these informal forms of social evaluation and peer-based learning. In other words, it makes peer negotiations visible in new ways, and it provides opportunities to observe and learn about social norms from peers.

Finally, and despite the perception that online media are enabling teens to reach out to a new set of social relations online, we have found that for the vast majority of teens, the relations fostered in school, summer camps, sports activities, and places of worship are by far the most dominant in how they define their peers and friendships. Even when young people are online and meet strangers, kids define social network sites, online journals, and other online spaces as friend and peer spaces. Teens consider adult participation in these spaces prob-

lematic and “creepy.” Furthermore, while strangers represent one category of people with whom communication on these sites feels “creepy,” parents represent a different set of issues. As a 14-year-old female named Leigh in Cedar Rapids, Iowa (danah boyd, *Teen Sociality in Networked Publics*), suggests, “My mom found my Xanga and she would check it every single day. I’m like, ‘Uh.’ I didn’t like that ‘cause it’s invasion of privacy; I don’t like people invading my privacy, so.” As many teenagers such as Leigh acknowledge, most of these parental acts are motivated by the protection of kids’ “well-being” rather than harassment for the sake of harassment. However, kids view these acts as a violation of trust, much like parents’ coming into their bedrooms without knocking or listening in on their conversations. They also see these online invasions as “clueless,” ill-informed, and lacking in basic social propriety.

Media and Mediation between Generations While young people tend to avoid their parents and other adults while using social network sites and instant-messaging programs—spaces they identify with friends and peers—a large share of young people’s engagements with new media occurs in the context of home and family life. Not surprisingly, parents, siblings, and other family members use media together while they are hanging out at home with their families. Stevens, Satwicz, and McCarthy (2007), for example, describe the settings in the home around the game console where siblings and playmates move fluidly in and out of game engagement with one another. Their findings

are supported by the studies conducted by the Entertainment Software Association (2007), which states that 35 percent of American parents say they play computer and video games. Among “gamer parents,” 80 percent report that they play video games with their children, and 66 percent say that playing games has brought their families closer together. In our studies of gaming, we found that video games are part of the common pool, or repertoire, of games and activities that kids and adults can engage in while enjoying time together socially (see Horst, forthcoming-a; Ito and Bittanti, forthcoming). Dan Perkel and Sarita Yardi discuss a 10-year-old in the San Francisco Bay area named Miguel who talked with them about playing Playstation with his dad and cousins (Digital Photo-Elicitation with Kids). As Miguel described:

Well, my dad, we used to play like every night . . . every Friday night, Saturday night, Sunday night, whatever . . . and he would invite my cousins to come over and stuff. We’d borrow games from my uncles. . . . They taught me how to play. Like, I used to . . . you know how when you play car games the car moves to the side and stuff? I would go like this with the control [moves arms wildly from side to side simulating holding a game controller as if he were racing]. So . . . they taught me how to keep still and look.

Although boys most closely identified with games, many of the girls we interviewed noted that they often played games such as Mario Kart, Dance Dance Revolution, and other popular games with their brothers when they were hanging out at home on the weekends or evenings. Other families engaged in ambi-

ent conversations while playing games, creating an atmosphere of sociality and communion around new media.

While gaming and television watching (using Tivo and other DVR devices) were the most pervasive shared family activities, one of the most interesting developments involved families who engaged in digital media production activities together. In these spaces, kids take advantage of the media available at home and get help from their parents with some of the more technical aspects of the devices. Among middle-class families these were often digital cameras, video cameras, and other editing software, and parents (typically fathers) often mobilized around their kids by trying to learn about and buy new things. In the case of the Miller family in Silicon Valley (Horst, *Silicon Valley Families*), the kids used a video camera at a family reunion and took turns helping to edit and sort through the best footage. In families such as the Millers (see Horst, forthcoming-b), parents use new media in their efforts to stay involved with, keep abreast of, and even participate in their kids' interests. Even if they were not part of the technology industry, as the Millers were, we found this level of involvement in other families with less confidence and knowledge of new media. In some cases, kids play an important role as the technology "expert" or "broker" in the family, translating Web sites and other forms of information for their parents. Twelve-year-old Michelle in Lisa Tripp and Becky Herr-Stephenson's study (*Los Angeles Middle Schools*) notes that she taught her mother, a single parent from El Salvador, how to use the computer, send emails,

and do other activities (see Tripp, forthcoming). Michelle says that “I taught her how to, like . . . sometimes, she wants to upload pictures from my camera, and I show her, but she doesn’t remember, so I have to do it myself. Mostly, I have to do the picture parts. I like doing the pictures.” In contrast to the generational tensions that are so often emphasized in the popular media, families do come together around new media to share media and knowledge, play together, and stay involved in each other’s lives.

Messing Around

Unlike hanging out, in which the desire is to maintain social connections to friends, messing around represents the beginning of a more intense media-centric form of engagement. When messing around, young people begin to take an interest in and focus on the workings and content of the technology and media themselves, tinkering, exploring, and extending their understanding. Some activities that we identify as messing around include looking around and searching for information online and experimentation and play with gaming and digital media production. Messing around is often a transitional genre in which kids move between hanging out and friendship-driven forms of participation to more interest-driven geeked-out ones. It involves experimentation and exploration with relatively low investment, where there are few consequences for failure, trial, and error.

Messing around with new media requires an interest-driven orientation and is supported by access to online resources, media production resources, as well as a social context for sharing of media knowledge and interests. Online and digital media provide unique supports for tinkering and self-exploration. When something piques their interest, given access to the Internet, young people can easily look around online. As Eagleton and Dobler (2007), Hargittai (2004, 2007), Robinson (2007), and others have noted, the growing availability of information in online spaces has started to transform young people's attitudes toward the availability and accessibility of information (Hargittai and Hinnant 2006; USC Center for the Digital Future 2004). Among our study participants who completed the Digital Kids Questionnaire, 87 percent ($n = 284$) reported using a search engine at least once per week, varying from Google, Yahoo!, and Wikipedia to other more specialized sites for information.¹²

The youth we spoke to who were deeply invested in specific media practices often described a period in which they discovered their own pathways to relevant information by looking around with the aid of search engines and other forms of online exploration. While the lack of local resources can make some kids feel isolated or in the dark, the increasing availability of search engines and networked publics where they can "lurk" (such as in Web forums, chat channels, and so on) effectively lowers the barriers to entry and thus makes it easier to look around and, in some cases, dabble or mess around any-

mously. In addition to online information and resources, digital production tools also enable messing around in the forms of casual media creation, customization, and tinkering.

We find that messing around with new media is generally conducted in a context of social exchange involving media and technology. This social context can be the family, friendship-driven networks, interest-driven networks, or educational programs such as computer clubs and youth media centers. The most important factors are the availability of technical resources and a context that allows for a degree of freedom and autonomy in self-directed learning and exploration. In contrast to learning that is oriented toward a set, predefined goal, messing around is largely self-directed, and the outcomes of the activity emerge through exploration.

Getting Started The youth we spoke to who were invested in specific media practices often described a period in which they first began looking around online for some area of interest and eventually discovered a broader palette or resources to experiment with, or an interest-driven online group. For example, Derrick, a 16-year-old teenager born in the Dominican Republic who lives in Brooklyn, New York, also looked to online resources for initial information about how to take apart a computer. He explains to Christo Sims (Rural and Urban Youth) how he first looked around online and did a Google image search for “video card” so he could see what it looked like. After

looking at photos of where a video card is situated in a computer, he was able to install his own. He did the same with his sound card. He explains, "I learned a lot on my own that's for computers. . . . Just from searching up on Google and stuff."

In addition to searching online for information of interest, messing around can be initiated by a range of different technology-related activities. Many young people we spoke to described how they first got started messing around with digital media by capturing, modifying, and sharing personal photos and videos. Interviews with youth who are active online are often peppered with references to digital photos they have taken and shared with family and friends. Photos and videos, taken with friends and shared on sites such as PhotoBucket and MySpace, become an initial entry into digital media production. Similarly, the friendship-driven practices of setting up a MySpace profile provide an initial introduction to Web page construction. Sociable hanging out while gaming is also a pathway into messing around with technology as youth get more invested in learning the inner workings and rules underlying a particular game.

These forms of casual, personal media creation can lead to more sophisticated and engaged forms of media production. For example, Alison, an 18-year-old video creator (who is of white and Asian descent from Florida) in Sonja Baumer's study (*Self-Production through YouTube*) is aspiring to be a movie maker. She is also engaged in personal media creation as part of her interest in visual media.

I like watching my own videos after I've made them. I am the kind of person that likes to look back on memories, and these videos are memories for me. They show me the fun times I've had with my friends or the certain emotions I was feeling at that time. Watching my videos makes me feel happy because I like looking back on the past.

Although the practices of everyday photo and video making are familiar, the ties to digital distribution and more sophisticated forms of editing and modification open up a new set of possibilities for youth creative production. In other words, digital media help scaffold a transition from hanging out genres to messing around with more creative dimensions of photo and video creation (and vice versa).

Whether it is self-directed searching, taking personal photos and videos, or putting up a MySpace profile, what is characteristic of these initial forays into messing around is that youth are pursuing topics of personal interest. In our interviews with young people who were active digital media creators or deeply involved in other interest-driven groups, they generally described a moment when they took a personal interest in a topic and pursued it in a self-directed way (see Lange and Ito, forthcoming). This may have been catalyzed by a school project or a parent, but they eventually took this up on their own initiative. For example, one successful Web comics writer interviewed by Mizuko Ito (Anime Fans) said: "Basically, I had to self-teach myself, even though I was going to school for digital media. . . . School's more valuable for me to have . . . a time frame where I could learn on my own." Similarly, a 15-year-old

white girl, Allison, from Georgia, describes how she learned to use video tools:

Trial and error, I guess. It's like any—whenever I learn anything with computers, I've taught myself how to use computers, and I consider myself very knowledgeable about them, but I just—I learn everything on my own, just figure it out, and the same with cameras. It's like a cell phone. I just figure out how to do it, and it's pretty quick and easy. (Patricia Lange, YouTube and Video Bloggers)

The media creators we interviewed often reflected this orientation by describing how they were largely self-taught, even though they might also describe the help they received from online and offline resources, peers, parents, and even teachers.

Tinkering and Exploration Messing around is an open-ended activity that involves tinkering and exploration that is only loosely goal directed. Often this can transition to more “serious” engagement in which a young person is trying to perfect a creative work or become a knowledge expert in the genre of geeking out. It is important to recognize, however, that this more exploratory mode of messing around is an important space of experimental forms of learning that open up new possibilities and engagements.

Tinkering often begins with modifying and appropriating accessible forms of media production that are widely distributed in youth culture. For example, Perkel (2008) describes the importance of copying and pasting code in the process of My-

Space profile creation, a practice in which youth will appropriate media and code from other sites to create their individual profiles. He characterizes MySpace profile creation as a process of “copy and paste” literacy, in which youth will appropriate media and code from other sites to create their individual profiles. Although this form of creative production may appear purely “derivative,” young people see their profiles as expressions of their personal identities. This mode of taking up and modifying found materials has some similarities to the kinds of reframing and remixing that fan artists and fan fiction writers engage in. Some youth described how one of the main draws of MySpace was not just that this was the site that their friends were already using, but that the site seemed to allow a great deal more customization than other sites, a chance to not just socialize online, but also to display a visual identity. Ann, an 18-year-old white girl in Heather Horst’s Silicon Valley Families study, saw her MySpace profile as a way to portray her personal aesthetic. She designed a MySpace page in her signature colors of pink and brown, the same colors as her bedroom.

Although young people did take time to mess around and modify their profiles, what they ended up putting online was usually not the case of planning and careful consideration, but whatever they happened to see while making or revisiting their profiles. For instance, danah boyd (Teen Sociality in Networked Publics) spoke with Shean, a 17-year-old black male from Los Angeles, who said, “I’m not a big fan of changing my background and all that. I would change mine probably every four

months or three months. As long as I keep in touch with my friends or whatever, I don't really care about how it looks as long as it's, like, there." This approach toward tinkering and messing around is typical of the process through which profiles are made and modified. For youth who saw online profiles primarily as personal social spaces, this casual approach to their profiles was typical, and they tended not to update them with much frequency, or only when they grew tired of one. Nick, a 16-year-old male from Los Angeles who is of black and Native American descent, told danah boyd:

That's the main time I have fun when I'm just putting new pictures and new backgrounds on my page. I do that once every couple of months because sometimes it gets real boring. I'll be on one page. I'll log on to my profile and see the same picture every time. I'm man, I'm gonna do something new. (Teen Sociality in Networked Publics)

Similarly, we saw many instances of youth who started engaging with a new Web site or blog, or started writing a piece of fan fiction, but eventually discarded these experiments. The Internet is full of this evidence of youth experimentation in online expression.

This casual approach to messing around with media is also characteristic of a large proportion of video game play that we observed. Interactive media, because they allow for a great deal of player-level agency and customization, support messing-around activities as a regular part of game play. In the early years of gaming, the ability to do player-level modifications was minimal for most games, unless one were a game hacker and

coder or it was a simulation game that was specifically designed for user authoring. Today, players take for granted the ability to modify and customize the parameters of a game. For example, we found that not only were youth constantly experimenting with the given parameters and settings of a game, but they also relied on game modifications and cheats to alter their game play. In Lisa Tripp and Becky Herr-Stephenson's study of Los Angeles immigrant families (Los Angeles Middle Schools), Herr-Stephenson had the opportunity to see how cheat codes operated in the everyday game play of Andres, a 12-year-old Mexican American. In her field notes she describes how Andres pulled out of his pocket a sheet of paper, which had game cheat codes written on it. After he uses a series of codes to "get the cops off his back," make his character invisible, and get free money, she asks him where he got the codes. He explains that he got them from some older kids. Herr-Stephenson writes: "I don't think he's ever thought about it as cheating (despite calling them 'cheat codes') and instead just thinks that such codes are a normal part of game play."

Cheat codes are an example of casual messing around with games and experimenting with their rules and boundaries. Another example of casual messing around with game parameters is players who enjoyed experimenting with the authoring tools embedded in games. Games such as Pokémon or Neopets are designed specifically to allow user authoring and customization of the player experience in the form of personal collections of customized pets (Ito 2008a; Ito and Horst 2006). This kind of

customization activity is an entry point into messing around with game content and parameters. In Laura Robinson and Heather Horst's study of Neopets, one of Horst's interviewees describes the pleasures of designing and arranging homes in Neopets and Millsberry. She did not want to have to bother with playing games to accrue Neopoints to make her Neohome and instead preferred the Millsberry site, where it was easier to get money to build and customize a home:

Yeah, you get points easier and get money to buy the house easily. And I like to do interior design. And so I like to arrange my house and since they have, like, all of this natural stuff, you can make a garden. They have water and you can add water in your house [continues for a while discussing the attributes of her home].

Similarly, Emily, a 21-year-old from San Francisco, tells Matteo Bittanti (Game Play): "I played *The Sims* and built several Wii Miis. I like to personalize things, from my playlists to my games. The only problem is that after I build my characters I have no interest in playing them, and so I walk away from the game."

Whether it is the casual creation of a MySpace profile, a blog, or an online avatar, messing around involves tinkering and exploration of new spaces of possibility. Most of these activities are abandoned or only occasionally revisited in a lightweight way. While some view these activities as dead-ends or a waste of time, we see them as a necessary part of self-directed exploration in order to experiment with something that might eventually become a longer-term, abiding interest in creative

production and, in the process, youth learn computer skills they might not have developed otherwise.

Social Contexts for Messing Around Messing around with digital media is driven by personal interest, but it is supported by a broader social and technical ecology. One of the primary drivers of personal media creation is sharing these media with others. The traffic in media and practices such as profile creation is embedded within a social ecology, where the creation and sharing of media is a friendship-driven set of practices (see boyd, forthcoming; Pascoe, forthcoming-a). Online sites for storing and circulating personal media are facilitating a growing set of options for sharing. Youth do not need to carry around photo albums to share photos with their friends and families; a MySpace profile or a camera phone will do the trick. Consider the following observation by Dan Perkel (Judd Antin, Christo Sims, and Dan Perkel, *The Social Dynamics of Media Production*) in an after-school computer center:

Many of the kids had started to arrive early every day and would use the computers and hang out with each other. While some kids were playing games or doing other things, Shantel and Tiffany (two apparently African American female teenagers roughly 15 to 16 years old from a low-income district in San Francisco) were sitting at two computers, separated by a third one between them that no one was using. They were both on MySpace. I heard Shantel talking out loud about looking at pictures of her baby nephew on MySpace. I am fairly sure she was showing these pictures to Tiffany. Then, she pulled out her phone and called her sister and started talking about the pictures.

This scene that Perkel describes is an example of the role that photos archived on sites such as MySpace play in the everyday lives of youth. Shantel can pull up her photos from any Internet-connected computer to share casually with her friends, much as researchers have documented that youth do with camera phones (Okabe and Ito 2006). The fact that photos about one's life are readily available in social contexts means that visual media become more deeply embedded in the everyday communication of young people. The tinkering with MySpace profiles and the attention paid to digital photography are all part of the expectation of an audience of friends that makes the effort worthwhile. Youth look to each other's profiles, photos, videos, and online writing for examples to emulate and avoid in a peer-driven learning context that supports everyday media creation.

In the case of MySpace and other forms of media production that are widely distributed among youth, technical support is generally sought within the local friendship network. For most of the cases that we documented, at least one other person was almost always directly involved in creating kids' profiles. When asked about this, common responses were that a sibling, a cousin, or a friend showed them how to do it. In their research, Judd Antin, Christo Sims, and Dan Perkel (*The Social Dynamics of Media Production*) watched in one after-school program as people would call out asking for help and others would come around doing it for them (literally taking the mouse and pushing the buttons) or guiding them through the process. In an

interview at a different site, Carlos, a 17-year-old Latino from the East Bay, told Perkel that he had initially found the whole profile-making process “confusing” and that he had used some free time in a Saturday program at school to ask different people to help him. Then later, when he knew what he was doing, he had shown his cousin how to add backgrounds. He says he explained to her that “you can just look around here and pick whichever you want and just tell me when you’re finished and I’ll get it for you.”

Just as in the case of photo sharing and MySpace profiles, gamers also find support for their messing around activities in their local social relationships. Among boys, gaming has become a pervasive social activity and a context where they casually share technical and media-related knowledge. For example, several active fansubbers interviewed by Mizuko Ito in her *Anime Fans* study described how they initially met the members of their group through shared gaming experiences. When we had the opportunity to observe teens, particularly boys, in social settings, gaming was a frequent focus as well as topic of activity that often veered into technical subjects. In Katynka Z. Martínez’s *Computer Club Kids* study, she notes that most of the boys associated with the club are avid gamers. After the computers in the lab became networked (in a moment they called “The Renaissance”), they would show up during lunch and even their 15-minute nutrition breaks to play *Halo* and *Counter-Strike* against one another. The hanging out with gaming was part of their participation in a technically sophisticated friendship group that focused on computer-based interests.

In other words, messing around with media is embedded in social contexts where friends and a broader peer group share a media-related interest and social focus. For most youth, they find this context in their local friendship-driven networks, grounded in popular practices such as MySpace profile creation, digital photography, and gaming. When youth transition to more focused interest-driven practices, they will generally reach beyond their local network of technical and media expertise, but the initial activities that characterize messing around are an important starting point for even these youth.

Transitions and Trajectories Although most forms of messing around start and end with casual tinkering that does not move beyond the context of everyday peer sociability, we have observed a range of cases in which kids transitioned from messing around to the genre we describe as geeking out. We have also seen cases in which messing around has led to the eventual development of technical expertise in tinkering and fixing, which positions youth as local technology experts.

For example, 22-year-old Earendil describes the role that gaming played in his growing up and developing an interest in media technology. Earendil was largely home-schooled, and although his parents had strict limits on gaming until he and his brother were in middle school, Earendil describes how they got their “gaming kicks” at the homes of their friends with game consoles. After his parents loosened restrictions on computer time, his first social experiences online, when he was 15, were

in a multiplayer game based on the novel *Ender's Game* and in online chats with fellow fans of *Myst* and *Riven*. When he started community college he fell in with “a group of local geeks, who, like myself, enjoyed playing games, etc.” These experiences with online gamers and gamer friends in college provided a social context for messing around with a diverse range of media and technology, and he branched out to different interests such as game modding and video editing. He plans to eventually pursue a career in media making (Mizuko Ito, Anime Fans).

We also encountered a small number of youth who translated messing around with media to messing around with small ventures (Ito, forthcoming). Toni, a 25-year-old who emigrated from the Dominican Republic as a teen (Mizuko Ito, Anime Fans), describes how he was dependent on libraries and schools for his computer access through most of high school. This did not prevent him from becoming a technology expert, however, and he set up a small business selling *Playboy* pictures that he printed from library computers to his classmates. Zelan, a 16-year-old youth interviewed by Christo Sims (Rural and Urban Youth), first learned to mess around with digital media through video game play while his parents prospected for gold. Sims writes:

After getting immersed in the Game Boy he pursued newer and better consoles. As he did so he also learned how they worked. His parents did not like buying him gaming gear so he became resourceful. When his neighbors gave him their broken PlayStation 2, he took it apart, fixed it, and upgraded from his PlayStation 1 in the process. (Sims, forthcoming)

Driven by economic necessity, Zelan tinkered and learned how to manipulate technology. Eventually he began to market his skills as a technology fixer and now envisions the day when he will start his own business repairing computers or “just about anything computerwise.” In her study of *Computer Club Kids*, Katynka Z. Martínez also encountered a young entrepreneur who learned the spirit of tinkering from his father, who is proficient with computers and also likes to refurbish classic Mustangs with his son. Martínez writes about Mac Man, a 17-year-old boy:

When he learned that a group of teachers were going to be throwing away their old computers, he asked if he could take them off their hands. Mac Man fixed the computers and put Windows on them. The computer club was started with these computers. Mac Man still comes to school with a small bag carrying the tools that he uses to work on computers. Teachers and other adults kept giving him computers that were broken and he had to figure out what to do with them. He fixed them and realized that he could sell them on eBay. He makes \$100 profit for every computer that he sells. (Martínez, forthcoming)

These are not privileged kids who are growing up in Silicon Valley households of start-up capitalists, but rather they are working-class kids who embody the street smarts of how to hustle for money. They were able to translate their interest in tinkering and messing around into financial ventures that gave them a taste of what it might be like to pursue their own self-directed careers. While these kinds of youths are a small minority among those we encountered, they demonstrate the ways in which messing around can function as a transitional genre that leads to more sustained engagements with media and technology.

Geeking Out

For many young people, the ability to engage with media and technology in an intense, autonomous, and interest-driven way is a unique feature of the media environment of our current historical moment. Particularly for kids with newer technology and high-speed Internet at home, the Internet can provide access to an immense amount of information related to their particular interests, and it can support various forms of geeking out. This genre primarily refers to an intense commitment or engagement with media or technology, often one particular media property, genre, or type of technology. In our book, the chapters “Gaming” (Ito and Bittanti, forthcoming), “Creative Production” (Lange and Ito, forthcoming), and “Work” (Ito, forthcoming) describe some of the cases of kids who geek out on their interests and develop reputation and expertise within specialized knowledge communities. Geeking out involves learning to navigate esoteric domains of knowledge and practice and participating in communities that traffic in these forms of expertise.

Ongoing access to digital media is a requirement of intensive commitment to new media that is characteristic of geeking out. Additionally, in many of our cases, we have found that technological access is just part of what makes participation possible. Family, friends, and other peers in on- and offline spaces become particularly important in facilitating access to the technology, knowledge, and the social connections required to geek out. Just as in the case of messing around, geeking out requires

the time, space, and resources to experiment and follow interests in a self-directed way. Furthermore, it requires access to specialized communities of expertise. Contrary to popular images of the socially isolated geek, almost all geeking out practices we have observed are highly social and engaged, although these are not necessarily expressed as friendship-driven social practices. Instead, geeking out is supported by specialized knowledge networks and communities that are centered on specific interests and by a range of social practices for sharing work and opinions. The online world has made these kinds of specialized hobby and knowledge networks more widely available to youth. Although generally considered marginal to both local, school-based friendship networks and academic achievement, the activities of geeking out provide important spaces of self-directed learning that are driven by passionate interests. Geeking out represents a mode of learning and developing expertise that is peer-driven but focused on gaining deep knowledge and expertise in specific areas of specialization.

Specialized Knowledge Networks When young people geek out, they are delving into areas of interest that exceed common knowledge; this generally involves seeking expert knowledge networks outside of given friendship-driven networks. Rather than simply messing around with local friends, geeking out involves developing an identity and pride as an expert and seeking fellow experts in far-flung networks. Geeking out is usually supported by interest-based groups, either local or

online, or some hybrid of the two, where fellow geeks will both produce and exchange knowledge on their subjects of interest. Rather than purely “consuming” knowledge produced by authoritative sources, geeked-out engagement involves accessing as well as producing knowledge to contribute to the knowledge network.

In her study of anime music video (AMV) creators (Anime Fans), Mizuko Ito interviewed Gepetto, an 18-year-old Brazilian fan.¹³ He was first introduced to AMVs through a local friend and started messing around creating AMVs on his own. As his skills developed, however, he sought out the online community of AMV creators on animemusicvideos.org to sharpen his skills. Although he managed to interest a few of his local friends in AMV making, none of them took to it to the extent that he did. He relies heavily on the networked community of editors as sources of knowledge and expertise and for models to aspire to. In his local community he is now known as a video expert by both peers and adults. After seeing his AMV work, one of his high-school teachers asked him to teach a video workshop to younger students. He jokes that “even though I know nothing,” to his local community, “I am the Greater God of video editing.” In other words, the development of his identity and competence as a video editor would never have been fully supported within his local community.

In the geeked-out gaming world, players and game designers now expect that game play will be supported by an online

knowledge network that provides tips, cheats, walk-throughs, mods, and reviews that are generated both by fellow players and commercial publishers. Personal knowledge exchange among local gamer friends, as well as this broader knowledge network, is a vital part of more sophisticated forms of game play that are in the geeking-out genre of engagement. While more casual players mess around by accessing cheats and hints online, more geeked-out players will consume, debate, and produce this knowledge for other players. Rachel Cody notes that the players in her study of *Final Fantasy XI* routinely used guides, produced both commercially and by fellow players. The guides assisted players in streamlining some parts of the game that otherwise took a great deal of time or resources. Cody observed that a few members of the linkshell in her study kept Microsoft Excel files with detailed notes on all their crafting in order to postulate theories on the most efficient ways of producing goods. As Wurlpin, a 26-year-old male from California, told Rachel, the guides are an essential part of playing the game. He commented, "I couldn't imagine [playing while] not knowing how to do half the things, how to go, who to talk to."

Interest-Based Communities and Organizations Interest-based geeking-out activities can be supported by a wide range of organizations and online infrastructures. Most interest groups surrounding fandom, gaming, and amateur media production are loosely aggregated through online sites such as YouTube,

LiveJournal, or DeviantArt, or more specialized sites such as animemusicvideos.org, fanfiction.net, and gaming sites such as Allakhazam or pojo.com. In addition, core participants in specific interest communities will often take a central role in organizing events and administering sites that cater to their hobbies and interests. Fan sites that cater to specific games, game guilds, or media series are proliferating on the Internet, as are specialized networks within larger sites such as LiveJournal or DeviantArt. Real-life meetings such as conventions, competitions, meet-ups, and gaming parties are also part of these kinds of distributed, player- and fan-driven forms of organization that support the ongoing life and social exchange of interest-driven groups.

As part of Mizuko Ito's case study on Anime Fans, she researched the practices of amateur subtitlers, or "fansubbers," who translate and subtitle anime and release it through Internet distribution. In our book, the chapter "Creative Production" has described some of the ways in which they form tight-knit work teams, with jobs that include translators, timers, editors, typesetters, encoders, quality checkers, and distributors (Lange and Ito, forthcoming). Fansub groups often work faster and more effectively than professional localization industries, and their work is viewed by millions of anime fans around the world. They often work on tight deadlines, and the fastest groups will turn around an episode within 24 hours of release in Japan. For this, fansubbers receive no monetary rewards, and they say that they pursue this work for the satisfaction of

making anime available to fans overseas and for the pleasure they get in working with a close-knit production team that keeps in touch primarily on online chat channels and Web forums. Fansubbing is just one example of the many forms of volunteer labor and organizations that are run by fans. In addition to producing a wide range of creative works, fans also organize anime clubs, conventions, Web sites, and competitions as part of their interest-driven activities.

The issue of leadership and team organization was a topic that was central to Rachel Cody's study of *Final Fantasy XI*. Cody spent seven months observing participants in a high-level "linkshell," or guild. Although many purely social linkshells do populate *FFXI*, Cody's linkshell was an "endgame" linkshell, meaning that the group aimed to defeat the high-level monsters in the game. The linkshell was organized in a hierarchical system, with a leader and officers who had decision-making authority, and new members needed to be approved by the officers. Often the process of joining the linkshell involved a formal application and interview, and members were expected to conform to the standards of the group and perform effectively in battle as a team. The linkshell would organize "camps" where sometimes more than 150 people would wait for a high-level monster to appear and then attack with a well-planned battle strategy. Gaming can function as a site for organizing collective action, which can vary from the more lightweight arrangements of kids' getting together to play competitively to the more formal arrangements that we see in a group such as Cody's link-

shell. In all of these cases, players are engaging in complex social organizations that operate under different sets of hierarchies and politics than those that occupy them in the offline world. Although these relationships are initially motivated by media-related interests, these collaborative arrangements and ongoing social exchanges often result in deep and lasting friendships with new networks of like-minded peers.

Feedback and Learning Interest-based communities that support geeking out have important learning properties that are grounded in peer-based sharing and feedback. The mechanisms for getting input on one's work and performance can vary from ongoing exchanges on online chat and forums to more formal forms of rankings, critiques, and competition. Unlike what young people experience in school, where they are graded by a teacher in a position of authority, feedback in interest-driven groups is from peers and audiences who have a personal interest in their work and opinions. Among fellow creators and community members, the context is one of peer-based reciprocity, where participants can gain status and reputation but do not hold evaluative authority over one another.

Not all creative groups we examined have a tight-knit community with established standards. YouTube, for example, functions more as an open aggregator of a wide range of video-production genres and communities, and the standards for participation and commentary differ according to the goals of particular video makers and social groups. Critique and feed-

back can take many forms, including posted comments on a site that displays works, private message exchanges, offers to collaborate, invitations to join other creators' social groups, and promotion from other members of an interest-oriented group. Simple five-star rating schemes, while useful in boosting ranking and visibility, were not valued as mechanisms for actually improving one's craft. Fansubbers generally thought that their audience had little understanding of what constituted a quality fansub and would take seriously only the evaluation of fellow producers. Similarly, AMV creators play down rankings and competition results based on "viewer's choice." The perception among creators is that many videos win if they use popular anime as source material, regardless of the merits of the editing. Fan fiction writers also felt that the general readership, while often providing encouragement, offered little in the way of substantive feedback.

In contrast to these attitudes toward audience feedback, a comment from a respected fellow creator carries a great deal of weight. Creators across different communities often described an inspiring moment when they received positive feedback and suggestions from a fellow creator whom they respected. In Dilan Mahendran's study (*Hip-Hop Music Production*), Edric, a 19-year-old Puerto Rican rapper describes his nervousness at his first recording session and the moment when he stepped out of the booth. "And everyone was like, 'Man, that was nice. I liked that.' And I was like, for real? I was like, I appreciate that. And ever since then I've just been stuck to writing, developing my

style.” Receiving positive feedback from peers who shared his interest in hip-hop was tremendously validating and gave him motivation to continue with his interests. Some communities have specific mechanisms for receiving informed feedback from expert peers. Animemusicvideos.org has extended reviewer forms that can be submitted for videos and it hosts a variety of competitions in which editors can enter their videos. All major anime conventions also have AMV competitions in which the best videos are selected by audiences as well as by fellow editors.

Young people participating in online writing communities can get substantive feedback from fellow writers. In fan fiction, critical feedback is provided by “beta readers,” who read “fics” before they are published and give suggestions on style, plot, and grammar. Clarissa (17 years old, white), an aspiring writer and one of the participants in C. J. Pascoe’s study *Living Digital*, participates in an online role-playing board, *Faraway Lands*. Aspiring members must write lengthy character descriptions to apply, which are evaluated by the site administrators. After receiving glowing reviews for her application, Clarissa has been a regular participant on the site and has developed friendships with many of the writers there. She has been doing a joint role play with another participant from Spain, and she has a friend from Oregon who critiques her work and vice versa. She explains how this feedback from fellow writers is more authentic to her than the evaluations she receives in school. “It’s something I can do in my spare time, be creative and write and not have to

be graded,” because, “you know how in school you’re creative, but you’re doing it for a grade so it doesn’t really count?” (Pascoe, forthcoming-b)

Recognition and Reputation In addition to providing opportunities for young people to learn and improve their craft, interest-driven groups also provide a mechanism for gaining recognition and reputation and an audience for creative work. Although audiences are not always considered the best mechanism for gaining feedback for improving their work, most participants in interest-driven communities are motivated by the fact that their work will be viewed by others or by being part of an appreciative community.

For example, zalas, a Chinese American in his early 20s and a participant in Mizuko Ito’s study of Anime Fans, is an active participant in the anime fandom. zalas is an officer in his university anime club, a frequent presenter at local anime conventions, and a well-known participant in online anime forums and IRC, where he is connected to fellow fans 24/7. He will often scour the Japanese anime and game-related sites to get news that English-speaking fans do not have access to. “It’s kinda like a race to see who can post the first tidbit about it.” He estimates that he spends about eight hours a day online keeping up with his hobby. “I think pretty much all the time that’s not school, eating, or sleeping.” He is a well-respected expert in the anime scene because of this commitment to pursuing and sharing knowledge.

Specialized video communities, such as AMVs or live-action vidding,¹⁴ will often avoid general-purpose video-sharing sites such as YouTube because they are not targeted to audiences who are well informed about their genres of media. In fact, on one of the forums dedicated to AMVs, any instance of the term *YouTube* is automatically censored. Even within these specialized groups, however, creators do seek visibility. Most major anime conventions now will include an AMV competition in which the winning works are showcased in addition to venues for fan artists to display and sell their work. The young hip-hop artists Dilan Mahendran spoke to also participated in musical competitions that gave them visibility, particularly if they went home with awards. Even fansubbers who insist that quality and respect among peers are more important than download numbers will admit that they do track the numbers. As one fansubber in Ito's study of Anime Fans described, "Deep down inside, every fansubber wants to have their work watched, and a high amount of viewers causes them some kind of joy whether they express it or not." Fansub groups generally make their "trackers," which record the number of downloads, public on their sites.

Young people can use large sites such as MySpace and YouTube as ways of disseminating their work to broader audiences. In Dilan Mahendran's Hip-Hop Music Production study, the more ambitious musicians would use a MySpace Music template as a way to develop profiles that situate them as musicians rather than a standard teen personal profile. Similarly, video

makers who seek broader audiences gravitate toward YouTube as a site to gain visibility. YouTube creators monitor their play counts and comments for audience feedback. Frank, a white 15-year-old male from Ohio on YouTube, stated, “But then even when you get one good comment, that makes up for 50 mean comments, ‘cause it’s just the fact of knowing that someone else out there liked your videos and stuff, and it doesn’t really matter about everyone else that’s criticized you” (Patricia Lange, YouTube and Video Bloggers).

In some cases, we have seen young people parlay their interests into income and even a sustained career. Max, a 14-year-old boy in Patricia Lange’s YouTube and Video Bloggers study, turned into a YouTube sensation when he recorded his mother singing along to the Boyz II Men song playing in her headphones. She is unaware that people around her can hear her and have started to laugh. Max posts the video on YouTube and it attracts the attention of ABC’s television show, *Good Morning America*, on which the video eventually airs. In the two years since it was posted, the video has received more than 2 million views and more than 5,000 text comments, many of them expressing support. Max’s work has also attracted attention from another media company, which approached him about the possibility of buying another of his videos for an online advertisement. We also have cases of hip-hop artists who market their music, fan artists who sell their work at conventions, and youth who freelance as Web designers. Among the case studies of anime and Harry Potter fans, we have encountered examples

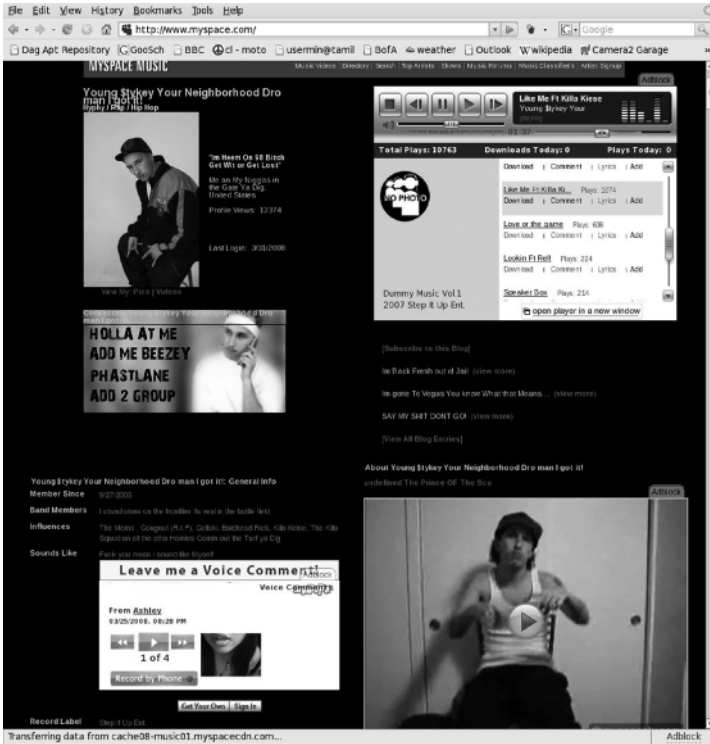


Figure 1
An Image of a MySpace Music Profile (Screen Shot by Dilan Mahendran, 2006)

of youth who have successfully capitalized on their creative talents. Becky Herr-Stephenson's study of Harry Potter fans (Harry Potter Fandom) focuses in part on podcasters who comment on the franchise. Although most podcasters are clearly hobbyists, a small number have become celebrities in the fandom who go on tours, perform "Wizard Rock," and in some cases, have gained financial rewards.

By linking "long tail" (Anderson 2006) niche audiences, online media-sharing sites make amateur- and youth-created content visible to other creators and audiences. Aspiring creators do not need to look exclusively to professional and commercial works for models of how to pursue their craft. Young people can begin by modeling more accessible and amateur forms of creative production. Even if they end there, with practices that never turn toward professionalism, they can still gain status, validation, and reputation within specific creative communities and smaller audiences. The abilities to specialize, tailor one's message and voice, and communicate with small publics are facilitated by the growing availability of diverse and niche networked publics. Gaining reputation as a rapper within the exclusive community of Bay Area Hyphy-genre hip-hop,¹⁵ being recognized as a great character writer on a particular role-playing board, or being known as the best comedic AMV editor for a particular anime series are all examples of fame and reputation within specialized communities of interest. These aspirational trajectories do not necessarily resolve into a vision of "making it big" or becoming famous within the mode of estab-

lished commercial media production. Yet they still enable young people to gain validation, recognition, and audience for their creative works and to hone their craft within groups of like-minded and expert peers. Gaining recognition in these niche and amateur groups means validation of creative work in the here and now without having to wait for rewards in a far-flung and uncertain future in creative production.