
The John D. and Catherine T. MacArthur Foundation Reports on
Digital Media and Learning

Living and Learning with New Media

Summary of Findings from the Digital Youth Project

Mizuko Ito, Heather Horst, Matteo Bittanti, danah boyd,
Becky Herr-Stephenson, Patricia G. Lange, C. J. Pascoe,
and Laura Robinson

with Sonja Baumer, Rachel Cody, Dilan Mahendran, Katynka Z. Martínez,
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Series Foreword

The John D. and Catherine T. MacArthur Foundation Reports on Digital Media and Learning, published by the MIT Press, present findings from current research on how young people learn, play, socialize, and participate in civic life. The Reports result from research projects funded by the MacArthur Foundation as part of its \$50 million initiative in digital media and learning. They are published openly online (as well as in print) in order to support broad dissemination and to stimulate further research in the field.

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Executive Summary

Young people in the United States today are growing up in a media ecology where digital and networked media play an increasingly central role. Even youth who do not possess computers and Internet access at home are participants in a shared culture where new social media,¹ online media distribution, and digital media production are commonplace among their peers and in their everyday school contexts. The implications of this *new media ecology* weigh heavily on the minds of parents and educators alike, who worry about the changes new media may present for learning and literacy as well as for the process of growing up in American society.

This report summarizes the results of a three-year ethnographic study, funded by the John D. and Catherine T. MacArthur Foundation, examining young people's participation in the new media ecology. It represents a condensed version of a longer treatment of the project findings (Ito et al., forthcoming). We present empirical data of new media in the lives of

American youth in order to reflect on the relationship between new media and learning. In our research, one of the largest qualitative and ethnographic studies of American youth culture, we examine what sociality among young people actually looks like in this new media ecology as well as how the emergence of *networked public culture* may shape and transform social interaction, *peer-based learning*, and *new media literacy* among young people.

This research was designed to address a gap in the literature surrounding the role of digital media in the lives of American youth. While there are a growing number of quantitative studies surveying the overall distribution of youth digital media practices, most qualitative research is based on single case studies, making it difficult to document the broader social and cultural contours, as well as the overall diversity, in youth engagement with digital media. Given the lack of research in this area, our study was motivated by two primary research questions:

- How are new media being taken up by youth practices and agendas?
- How do these practices change the dynamics of youth-adult negotiations over literacy, learning, and authoritative knowledge?

In framing the analysis of this research, we believe that there are four key concepts that characterize the ways youth live and learn with new media and, in turn, our perspective on the

practices and conditions that define young people's engagements with new media.

New Media Ecology We use the term *new media* to describe a media ecology where more traditional media such as books, television, and radio are intersecting with digital media, specifically interactive media, online networks, and media for social communication. We use the metaphor of *ecology* to emphasize that the everyday practices of youth, existing structural conditions, infrastructures of place, and technologies are all dynamically interrelated; the meanings, uses, functions, flows, and interconnections in young people's everyday lives located in particular settings are also situated within young people's wider media ecologies.

Networked Publics The term *networked publics* describes participation in public culture (Appadurai and Breckenridge 1988) that is supported by Internet and mobile networks. The growing availability of digital media-production tools and infrastructure, combined with the traffic in media across social connections and networks, is creating convergence between mass media and online communication (Benkler 2006; Ito 2009; Jenkins 2006; Shirky 2008; Varnelis 2009). Rather than conceptualize 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.

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 focus on 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. While adults often view the influence of peers negatively, as characterized by the term *peer pressure*, we approach these informal spaces for peer interactions as spaces of opportunity for learning.

New Media Literacy We examine the current practices of youth and query what kinds of literacies and social competencies they are defining as a particular generational cohort, experimenting with a new set of media technologies. 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 in order to inform these broader debates.

Alongside the conceptual framework that structured our study, throughout this report we frame youth engagements with new media in terms of emerging practices, or *genres of participation*. This framework does not rely solely on distinctions based on given categories such as gender, class, or ethnic identity. Rather, we identified distinct, but interrelated, genres based on what we saw in our ethnographic material on youth practice and culture. Genres of participation help us interpret how media intersect with learning and participation. The first two

genres focus upon the activities and perspectives that *motivate*, or drive, young people's use of new media.

Friendship-Driven Genres of Participation A friendship-driven genre of participation characterizes the dominant and mainstream practices of youth as they go about their day-to-day negotiations with friends and peers in given, local contexts that center on relationships fostered in school and other local community institutions.

Interest-Driven Genres of Participation An interest-driven genre of participation characterizes engagement with specialized activities, interests, or niche and marginalized identities. In contrast to friendship-driven participation, kids establish relationships that center on their interests, hobbies, and career aspirations rather than friendship per se.

In addition to the broad distinctions between friendship-driven and interest-driven genres of participation, we have identified three genres that correspond to differing *levels of commitment and intensity* in new media practices.

- *Hanging out* is primarily a friendship-driven genre of participation in which young people spend their casual social time with one another. In interest-driven groups that result in friendships, we also see hanging out activity, but most youth hanging out is with local friendship-driven networks. Sites such as MySpace and Facebook, and communications technologies such as instant messaging (IM) and text messaging, provide a light-

weight means for youth to stay in ongoing social contact and to arrange real-life gatherings. Furthermore, new media provide a topic for conversation, in the form of forwarding and linking to interesting pieces of online media, as well as a focus for activity, such as when youth play social games together or share music. As we will illustrate, hanging out may also take place within the context of home and family life.

- *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 including looking around and searching for information online as well as experimentation and play using a range of media, such as digital and video cameras, music and photo editing software, and other new media. Messing around is often a transitional genre, in which kids move between hanging out and friendship-driven forms of participation to more interest-driven genres of participation.
- *Geeking out* involves the more expertise-centered forms of interest-driven participation surrounding new media that we found among some of the gamers, fans, and media producers we encountered in our study. Geeking out involves intensive and frequent use of new and, at times, relatively obscure media, high levels of specialized knowledge, alternative models of status and credibility, and a willingness to bend and/or break social and technological rules.

Our practice-focused analysis of young people in the new media ecology enabled the documentation of the everyday lives of youth in the United States. It also structured the development of an empirically based paradigm for understanding learning and participation in contemporary networked publics. From this work, we suggest the following implications of our findings for the dynamics of youth-adult negotiations over literacy, learning, and authoritative knowledge:

Robust participation in networked publics requires a social, cultural, and technical ecology grounded in social and recreational practices.

Ongoing, lightweight, and relatively unrestricted access to digital-production tools and the Internet was a precondition for participation in most of the networked public spaces that are the focus of attention for U.S. teens. Further, much of this engagement is centered on access to social and commercial entertainment content that is generally frowned upon in formal educational settings.

Networked publics provide a context for youth to develop social norms in the context of public participation.

Networked publics have altered many of the conditions of hanging out and publicity for youth, even as they build on existing youth practices of socializing, flirting, and pursuing hobbies and interests. Contrary to fears that social norms are eroding online, we saw almost no evidence that participation in networked publics resulted in riskier behavior than teens

engaged in offline, and their online communication is conducted in a context of public scrutiny and structured by well-developed norms of social appropriateness, a sense of reciprocity, and collective ethics.

Youth are developing new forms of media literacy that are keyed to new media and youth-centered social and cultural worlds.

Youth are developing a wide range of new literacy forms through their informal new media practices, including deliberately casual forms of online speech, formats for displaying public connections, and new forms of appropriative literacies such as customizing MySpace profiles, mashups, and remixes. Efforts to address new media literacy need to take into account the specific social and cultural contexts that are meaningful to youth.

Peer-based learning has unique properties that drive engagement in ways that differ fundamentally from formal instruction.

In both the friendship-driven and interest-driven sides peers help to drive learning. Peer-based learning is characterized by a context of reciprocity, in which participants believe they can both produce and evaluate knowledge and culture, and in which they can develop reputation and receive recognition from respected peers. In these settings, the focus of learning and engagement is not defined by institutional accountabilities but rather emerges from kids' interests and everyday social communication.

Living and Learning with New Media

Living and Learning with New Media: Summary of Findings from the Digital Youth Project

Digital media and online communication have become a pervasive part of the everyday lives of youth in the United States. Social network sites, online games, video-sharing sites, and gadgets such as iPods and mobile phones are now well-established fixtures of youth culture; it can be hard to believe that just a decade ago these technologies were barely present in the lives of U.S. children and teens. Today's youth may be engaging in negotiations over developing knowledge and identity, coming of age, and struggling for autonomy as did their predecessors, but they are doing this while the contexts for communication, friendship, play, and self-expression are being reconfigured through their engagement with new media. We are wary of the claims that there is a digital generation that overthrows culture and knowledge as we know it and that its members' practices are radically different from older generations' new media engagements. At the same time, we also believe that current youth adoption of digital media production and social media

are occurring in a unique historical moment, tied to long-term and systemic changes in sociability and culture. While the pace of technological change may seem dizzying, the underlying practices of sociability, learning, play, and self-expression are undergoing a slower evolution, growing out of resilient social structural conditions and cultural categories that youth inhabit in diverse ways in their everyday lives. The goal of the digital youth study was to document a point in this changing ecology by looking carefully at how both the commonalities and diversity in youth new media practice are part of a broader social and cultural ecology.

Our values and norms surrounding education, literacy, and public participation are being challenged by a shifting landscape of media and communications where youth are central actors. Although questions about “kids these days” have a familiar ring to them, the contemporary version is somewhat unusual in how strongly it equates generational identity with technology identity, an equation that is reinforced by telecommunications and digital media corporations that hope to capitalize on this close identification. There is a growing public discourse (both hopeful and fearful) declaring that young people’s use of digital media and communication technologies defines a generational identity distinct from that of their elders. In addition to this generational divide, these new-technology practices are also tied to what David Buckingham (2007, 96) has described as a “‘digital divide’ between in-school and out-of-school use.” He sees this as “symptomatic of a much broader phenomenon—a

widening gap between children's everyday 'life worlds' outside of school and the emphases of many educational systems." Both the generational divide and the divide between in-school and out-of-school learning are part of a resilient set of questions about adult authority in the education and socialization of youth. The discourse of digital generations and digital youth posits that new media empower youth to challenge the social norms and educational agendas of their elders in unique ways. This report, and the corresponding book (see Ito et al., forthcoming), questions and investigates these claims. How are new media being taken up by youth practices and agendas? And how do these practices change the dynamics of youth-adult negotiations over literacy, learning, and authoritative knowledge?

Despite the widespread assumption that new media are tied to fundamental changes in how young people are engaging with culture and knowledge, there is still relatively little research that investigates how these dynamics operate on the ground. This report summarizes a three-year ethnographic investigation of youth new media practices that aims to develop a grounded, qualitative evidence base to inform current debates over the future of learning and education in the digital age. Funded by the John D. and Catherine T. MacArthur Foundation as part of a broader initiative on digital media and learning, the study represents a \$3.3 million investment to contribute to basic knowledge in this emerging area of research. The project began in early 2005 and was completed in the summer of 2008, with the bulk of fieldwork taking place in 2006 and 2007. This report

represents a summary of a book reporting on the findings from this project, titled *Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media*. This effort is unique among qualitative studies in the field in the breadth of the research and the number of case studies that it encompasses. Spanning 23 different case studies conducted by 28 researchers and collaborators, this study sampled from a wide range of different youth practices, populations, and online sites, all centered on the United States. We drew from 20 of these case studies to write our collaborative book. This study has a broad descriptive goal of documenting youth practices of engagement with new media and a more targeted goal of analyzing how these practices are part of negotiations between adults and youth over learning and literacy.

References

- Anderson, Chris. 2006. *The Long Tail: Why the Future of Business Is Selling Less of More*. New York: Hyperion.
- Appadurai, Arjun. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis: University of Minnesota Press.
- Appadurai, Arjun, and Carol A. Breckenridge. 1988. "Why Public Culture." *Public Culture* 1, no. 1:5–9.
- Austin, Joe, and Michael Nevin Willard, eds. 1998. *Generations of Youth: Youth Cultures and History in Twentieth-Century America*. New York: New York University Press.
- Baron, Naomi S. 2008. *Always On: Language in an Online and Mobile World*. Oxford: Oxford University Press.
- Barron, Brigid. 2006. "Interest and Self-Sustained Learning as Catalysts of Development: A Learning Ecology Perspective." *Human Development* 49, no. 4:193–224.
- Basch, Linda, Nina Glick Schiller, and Christina Szanton-Blanc. 1994. *Nations Unbound: Transnational Projects, Postcolonial Predicaments, and Deterritorialized Nation-States*. London: Routledge.

- Bekerman, Zvi, Nicholas C. Burbules, and Diana Silberman-Keller, eds. 2006. *Learning in Places: The Informal Education Reader*. New York: Peter Lange.
- Benkler, Yochai. 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven, CT: Yale University Press.
- Bettie, Julie. 2003. *Women without Class: Girls, Race, and Identity*. Berkeley and Los Angeles: University of California Press.
- Bourdieu, Pierre. 1984. *Distinction: A Social Critique of the Judgment of Taste*. Cambridge, MA: Harvard University Press.
- boyd, danah. 2007. "Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life." In *Youth, Identity, and Digital Media*, ed. D. Buckingham, 119–142. Cambridge, MA: MIT Press.
- boyd, danah. Forthcoming. "Friendship." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.
- Buckingham, David. 2007. *Beyond Technology: Children's Learning in the Age of Digital Culture*. Malden, MA: Polity.
- Buckingham, David, ed. 2008. *Youth, Identity, and Digital Media*. Cambridge, MA: MIT Press.
- Cassell, Justine, and Henry Jenkins. 1998. *From Barbie to Mortal Kombat: Gender and Computer Games*. Cambridge, MA: MIT Press.
- Chávez, Vivian, and Elisabeth Soep. 2005. "Youth Radio and the Pedagogy of Collegiality." *Harvard Educational Review* 75, no. 4:409–34.
- Chin, Elizabeth. 2001. *Purchasing Power: Black Kids and American Consumer Culture*. Minneapolis: University of Minnesota Press.
- Cohen, Stanley. 1972. *Folk Devils and Moral Panics*. London: MacGibbon and Kee.

- Corsaro, William A. 1985. *Friendship and Peer Culture in the Early Years*. Norwood, NJ: Ablex.
- Corsaro, William A. 1997. *The Sociology of Childhood*. Thousand Oaks, CA: Pine Forge Press.
- Eagleton, Maya B., and Elizabeth Dobler. 2007. *Reading the Web: Strategies for Internet Inquiry*. New York: Guilford.
- Eckert, Penelope. 1989. *Jocks and Burnouts: Social Categories and Identity in the High School*. New York: Teachers College.
- Eckert, Penelope. 1996. "Vowels and Nail Polish: The Emergence of Linguistic Style in the Preadolescent Heterosexual Marketplace." In *Gender and Belief Systems*, ed. N. Warner, J. Ahlers, L. Bilmes, M. Olver, S. Wertheim, and M. Chen, 183–190. Berkeley, CA: Berkeley Women and Language Group.
- Entertainment Software Association. 2007. *Facts and Research: Top Ten Facts 2007*. <http://www.theesa.com/facts/index.asp> (retrieved June 28, 2007).
- Epstein, Jonathon S., ed. 1998. *Youth Culture: Identity in a Postmodern World*. Malden, MA: Blackwell.
- Escobar, Arturo. 1994. "Welcome to Cyberia: Notes on the Anthropology of Cyberculture." *Current Anthropology* 35, no. 3:211–31.
- Fine, Gary Alan. 2004. "Adolescence as Cultural Toolkit: High School Debate and the Repertoires of Childhood and Adulthood." *The Sociological Quarterly* 24, no. 1:1–20.
- Frank, Thomas. 1997. *The Conquest of Cool: Business Culture, Counterculture, and the Rise of Hip Consumerism*. Chicago: University of Chicago Press.
- Gilbert, James Burkhart. 1986. *A Cycle of Outrage: America's Reaction to the Juvenile Delinquent in the 1950s*. New York: Oxford University Press.

- Gilroy, Paul. 1987. *"There Ain't No Black in the Union Jack": The Cultural Politics of Race and Nation*. Chicago: University of Chicago Press.
- Griffith, Maggie, and Susannah Fox. 2007. "Hobbyists Online." *Pew Internet & American Life Project*. Washington, DC: Pew.
- Gupta, Akhil, and James Ferguson. 1997. *Culture Power Place: Explorations in Critical Anthropology*. Durham, NC: Duke University Press.
- Hall, Stuart, and Tony Jefferson, eds. 1976. *Resistance through Rituals: Youth Subcultures in Post-War Britain*. London: Hutchinson.
- Hargittai, Eszter. 2004. "Do You 'Google'? Understanding Search Engine Popularity beyond the Hype." *First Monday* 9, no. 3. http://firstmonday.org/issues/issue9_3/hargittai/index.html (retrieved June 28, 2008).
- Hargittai, Eszter. 2007. "The Social, Political, Economic, and Cultural Dimensions of Search Engines: An Introduction." *Journal of Computer-Mediated Communication* 12, no. 3. <http://jcmc.indiana.edu/vol12/issue3/hargittai.html> (retrieved June 28, 2008).
- Hargittai, Eszter, and Amanda Hinnant. 2006. "Toward a Social Framework for Information Seeking." In *New Directions in Human Information Behavior*, ed. A. Spink and C. Cole, 55–70. New York: Springer.
- Hebdige, Dick. 1979. *Subculture: The Meaning of Style*. London: Routledge.
- Hebdige, Dick. 1987. *Cut 'n Mix: Culture, Identity and Caribbean Music*. London: Routledge.
- Hine, Thomas. 1999. *The Rise and Fall of the American Teenager*. New York: Perennial.
- Holloway, Sarah L., and Gill Valentine. 2003. *Cyberkids: Children in the Information Age*. London: RoutledgeFalmer.

Horst, Heather A. Forthcoming-a. "Families." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Horst, Heather A. Forthcoming-b. "The Miller Family: A Portrait of a Silicon Valley Family." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Horst, Heather A., Becky Herr-Stephenson, and Laura Robinson. Forthcoming. "Media Ecologies." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Hull, Glynda. 2003. "At Last Youth Culture and Digital Media: New Literacies for New Times." *Research in the Teaching of English* 38, no. 2:229–233.

Ito, Mizuko. 2003. "Engineering Play: Children's Software and the Productions of Everyday Life." PhD diss., Anthropology, Stanford University, Palo Alto, CA.

Ito, Mizuko. 2008a. "Mobilizing the Imagination in Everyday Play: The Case of Japanese Media Mixes." In *The International Handbook of Children, Media, and Culture*, ed. K. Drotner and S. Livingstone, 397–412. Thousand Oaks, CA: Sage.

Ito, Mizuko. 2008b. "Introduction." In *Networked Publics*, ed. K. Varnealis. Cambridge, MA: MIT Press.

Ito, Mizuko. Forthcoming. "Work." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Ito, Mizuko, Sonja Baumer, Matteo Bittanti, danah boyd, Rachel Cody, Becky Herr-Stephenson, Heather A. Horst, Patricia G. Lange, Dilan Mahendran, Katynka Z. Martínez, C. J. Pascoe, Dan Perkel, Laura Robin-

son, Christo Sims, and Lisa Tripp. Forthcoming. *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Ito, Mizuko, and Matteo Bittanti. Forthcoming. "Gaming." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Ito, Mizuko, and Heather Horst. 2006. "Neopoints and Neo Economies: Emergent Regimes of Value in Kids Peer-to-Peer Networks." American Anthropological Association Meetings, November 16, San Jose, CA. <http://www.itofisher.com/mito/itohorst.neopets.pdf> (retrieved September 18, 2008).

Ito, Mizuko, and Daisuke Okabe. 2005. "Intimate Connections: Contextualizing Japanese Youth and Mobile Messaging." In *Inside the Text: Social, Cultural and Design Perspectives on SMS*, ed. R. Harper, L. Palen, and A. Taylor, 127–143. New York: Springer.

Ito, Mizuko, Daisuke Okabe, and Misa Matsuda, eds. 2005. *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*. Cambridge, MA: MIT Press.

James, Allison, and Alan Prout, eds. 1997. *Constructing and Reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood*. Philadelphia, PA: RoutledgeFarmer.

Jenkins, Henry. 1992. *Textual Poachers: Television Fans and Participatory Culture*. New York: Routledge.

Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.

Karaganis, Joe. 2007. "Presentation." In *Structures of Participation in Digital Culture*, ed. J. Karaganis, 8–16. New York: Social Science Research Council.

- Kendall, Lori. 2002. *Hanging Out in the Virtual Pub*. Berkeley and Los Angeles: University of California Press.
- Lange, Patricia G. 2008. "Terminological Obfuscation in Online Research." In *Handbook of Research on Computer Mediated Communication*, ed. S. Kelsey and K. St. Amant, 436–450. Hershey, PA: IGI Global.
- Lange, Patricia G., and Mizuko Ito. Forthcoming. "Creative Production." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.
- Lave, Jean, and Etienne Wenger. 1991. *Situated Learning: Legitimate Peripheral Participation*. Cambridge, UK: Cambridge University Press.
- Lenhart, Amanda, Mary Madden, Alexandra Rankin Macgill, and Aaron Smith. 2007. "Teens and Social Media: The Use of Social Media Gains a Greater Foothold in Teen Life as They Embrace the Conversational Nature of Interactive Online Media." *Pew Internet & American Life Project*. Washington, DC: Pew. http://www.pewInternet.org/pdfs/PIP_Teens_Social_Media_Final.pdf (retrieved June 6, 2008).
- Ling, Rich. 2004. *The Mobile Connection: The Cell Phone's Impact on Society*. San Francisco: Morgan Kaufmann.
- Livingstone, Sonia. 2002. *Young People and New Media*. London: Sage.
- Livingstone, Sonia. 2008. "Taking Risky Opportunities in Youthful Content Creation: Teenagers' Use of Social Networking Sites for Intimacy, Privacy, and Self-Expression." *New Media & Society* 10, no. 3:393-411.
- Mahiri, Jabari, ed. 2004. *What They Don't Learn in School: Literacy in the Lives of Urban Youth*. New York: Peter Lang.
- Martínez, Katynka Z. Forthcoming. "Being More Than 'Just a Banker': DIY Youth Culture and DIY Capitalism in a High-School Computer Club." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Matsuda, Misa. 2005. "Mobile Communication and Selective Sociality." In *Personal, Portable, Pedestrian: Mobile Phones in Japanese Life*, ed. M. Ito, D. Okabe, and M. Matsuda, 123–142. Cambridge, MA: MIT Press.

Mazzarella, Sharon, ed. 2005. *Girl Wide Web: Girls, the Internet, and the Negotiation of Identity*. New York: Peter Lang.

McRobbie, Angela, and Jenny Garber. 2000 [1978]. "Girls and Subcultures." in *Feminism and Youth Subcultures*, ed. A. McRobbie, 12–25. 2nd ed. London: Routledge.

Miller, Daniel, and Don Slater. 2000. *The Internet: An Ethnographic Approach*. New York: Berg.

Okabe, Daisuke, and Mizuko Ito. 2006. "Everyday Contexts of Camera Phone Use: Steps toward Techno-Social Ethnographic Frameworks." In *Mobile Communications in Everyday Life: Ethnographic Views, Observations, and Reflections*, ed. J. Höfllich and M. Hartmann, 79–102. Berlin: Frank & Timme.

Pascoe, C. J. 2007. *"Dude, You're a Fag": Masculinity and Sexuality in High School*. Berkeley and Los Angeles: University of California Press.

Pascoe, C. J. Forthcoming-a. "Intimacy." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Pascoe, C. J. Forthcoming-b. "'You Have Another World to Create': Teens and Online Hangouts." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.

Perkel, Dan. 2008. "Copy and Paste Literacy? Literacy Practices in the Production of a MySpace Profile." In *Informal Learning and Digital Media: Constructions, Contexts, Consequences*, ed. K. Drotner, H. S. Jensen, and K. Schroeder, 203–224. Newcastle, UK: Cambridge Scholars Press.

- Perry, Pamela. 2002. *Shades of White: White Kids and Racial Identities in High School*. Durham, NC: Duke University Press.
- Rainie, Lee. 2008. "Video Sharing Websites." *Pew Internet & American Life Project*. Washington, DC: Pew.
- Roberts, Donald F., Ulla G. Foehr, and Victoria Rideout. 2005. *Generation M: Media in the Lives of 8–18 Year-Olds*. Menlo Park, CA: Kaiser Family Foundation.
- Robinson, Laura. 2007. "Information the Wiki Way: Cognitive Processes of Information Evaluation in Collaborative Online Venues." International Communication Association Conference, May 24–28, San Francisco, CA.
- Seiter, Ellen. 1993. *Sold Separately: Parents and Children in Consumer Culture*. New Brunswick, NJ: Rutgers University Press.
- Seiter, Ellen. 2005. *The Internet Playground: Children's Access, Entertainment and Mis-Education*. New York: Peter Lang.
- Shirky, Clay. 2008. *Here Comes Everybody: The Power of Organizing without Organizations*. New York: Penguin.
- Silverstone, Roger, and Eric Hirsch. 1992. *Consuming Technologies: Media and Information in Domestic Spaces*. London: Routledge.
- Sims, Christo. Forthcoming. "Technological Prospecting in Rural Landscapes." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.
- Snow, Robert. 1987. "Youth, Rock 'n' Roll and Electronic Media." *Youth & Society* 18, no. 4:326–343.
- Stevens, Reed, Tom Satwicz, and Laurie McCarthy. 2007. "In-Game, In-Room, In-World: Reconnecting Video Game Play to the Rest of Kids' Lives." In *The Ecology of Games: Connecting Youth, Games, and Learning*, ed. K. Salen, 41–66. Cambridge, MA: MIT Press.

- Thorne, Barrie. 1993. *Gender Play: Girls and Boys in School*. New Brunswick, NJ: Rutgers University Press.
- Thorne, Barrie. 2008. "'The Chinese Girls' and 'The Pokémon Kids': Children Negotiating Differences in Urban California." In *Global Comings of Age: Youth and the Crisis of Representation*, ed. J. Cole and D. Durham. Santa Fe: School for American Research.
- Tripp, Lisa. Forthcoming. "Michelle." In M. Ito et al., *Hanging Out, Messing Around, and Geeking Out: Living and Learning with New Media*. Cambridge, MA: MIT Press.
- USC Center for the Digital Future. 2004. *Ten Years, Ten Trends: The Digital Future Report Surveying the Digital Future, Year Four*. Los Angeles: USC Annenberg School Center for the Digital Future. <http://www.digitalcenter.org/downloads/DigitalFutureReport-Year4-2004.pdf> (retrieved June 28, 2008).
- Varnelis, Kazys, ed. 2008. *Networked Publics*. Cambridge, MA: MIT Press.
- Wyness, Michael. 2006. *Childhood and Society: An Introduction to the Sociology of Childhood*. Basingstoke, UK: Palgrave.