proofing education. Allow me to end this review with a short account of one argument the authors put forth in favor of play, an argument which illustrates the many elegant and convincing lines of reasoning in the book. They point to Jean Piaget's theory of child development, where play and imagination are the indispensable tools by which children adapt to change. They call attention to this fact and note that, in a world of constant change, play becomes an efficient strategy for everyone, not only for children, to respond to these constant changes. In fact, they argue that we will have difficulty coping with the constant flux of the world, no matter our age, if we are unable to play and use our imagination. One will have to look carefully to find a better argument for the importance of play these days than the one Thomas and Brown offer.

—Carsten Jessen, Aarhus University, Copenhagen, Denmark

Hanging Out, Messing Around, and Geeking Out: Kids Living and Learning with New Media

Mizuko Ito, Becky Herr-Stephenson, Dan Perkel, and Christo Sims Cambridge, MA: MIT Press, 2009. Contents, appendix, bibliography, index. 432 pp. \$35.00. ISBN: 978026201336-9

Recently, I received an invitation to participate in a small group consultation for an arts-oriented foundation. The program officer wanted to hear how digital media creates new opportunities to support interest-driven learning amongst today's

youth. It was a diverse group: museum educators, academic researchers, youth media educators, and even a magazine publisher. At the start of the day, someone asked if we could clarify our terms. What did we mean, exactly, when we used the phrase "interest-driven" learning? In response, the facilitator asked, to establish a common frame, who had read Mimi Ito's book, *Hanging Out, Messing Around, Geeking Out: Kids Living and Learning with New Media.*

Everyone raised a hand.

I share this not to suggest the book has become ubiquitous. Far from it. But it is hard to ignore that the framework promoted by the book, often condensed to HO-MA-GO (rhymes with the egg sushi "tomago"), was a point of reference among those gathered at a conference on learning.

As Ito would be the first to clarify, although she was the lead writer, the book is based on the work of more than two dozen researchers who produced twenty-three related research studies. It is written in a collective voice integrating vast ethnographic material collected during a three-year period and offering analytic insights by the project's researchers. So while we might call it "Ito's book" as shorthand, we more often, and more correctly, refer to it as "Ito, et al."

But enough of the semantics. What is the book about? It was one of the first projects funded about five years ago by the MacArthur Foundation's then-new Digital Media and Learning Initiative (Global Kids, where I work, was also a recipient of Initiative funds). At the time, the media was full of fears regarding young people's use of digital media—of video games and violence, of social networks and sexual

predators. Even as constraints were placed on the young, depriving them access to some digital media to limit their exposure to violence, the foundation wanted to learn about the actual impact of such media. Ito, et al. spent years doing exactly what we needed someone to do: spend time with youth and observe the role digital media plays in their lives.

What emerged should surprise no one working with youth and digital media. The young are not zoning out when their attention shifts from people to screen. They are connecting with their friends. They are exploring new identities and interests. They are developing valuable skills and competencies that can improve their abilities to participate in the digital age and to master highly desired (from an educator's perspective), life-long, learning skills.

The book, however, is not actually a printed version of these studies. In a brilliant decision, all of the studies were made available years in advance, for free, online (and so would be the book itself). Instead, the book—at more than four hundred pages—is essentially an executive summary of the studies. It is a literature review of their own literature, digesting the academic material and turning it into something deeply engaging and readable by lay people. More importantly, it introduces two crucial frameworks for understanding youth's engagement in digital media and where it overlaps with learning.

The book's introduction, among other things, sets up not just the book but a crucial distinction, the one raised at that meeting I attended: friendship-driven learning versus interest-driven learning. Friendship-driven engagements with digi-

tal media are youthful practices that allow kids to extend online their daily interactions with those they already know through social networks, text messaging, and the like. Interest-driven practices, however, are more about the young finding new social contexts and communities to explore. Friendships might develop through these activities, but they are organized through special-interest groups, fan-fiction communities, or game players. The researchers call these practices "genres" or "modes" of engagement, and each engenders its own type of learning.

The book's first section, "Media Ecologies," describes the context within which the authors describe youth practices. Then the book introduces the HO-MA-GO framework. In brief, the chapter entitled "Hanging Out" refers to youth practices in which youth do what the term describes, just not in person but using digital tools to interact with other people. "Messing around" refers to a mode of engagement in which youth begin to dig deeper, tinkering and experimenting, as kids first begin to get serious about something. "Geeking out" refers to activities in which youth go deep, developing areas of expertise and meaningful roles within existing communities organized around topics of shared interests. Finally, this chapter situates HO-MA-GO within the two earlier chapters describing learning practices: "Hanging out tends to correspond with more friendship-driven practices," writes Ito, et al., "and geeking out to the more interest-driven ones. . . . Messing around is a genre of participation in its own right, but it is also a transition zone along a continuum between geeking out and hanging out and between interest-driven and friendship-driven participation" (pp. 75–76).

The remainder of the book takes these two core ideas—of friendship-driven versus interest-driven learning and HO-MA-GO—and explores them within the diverse contexts of young people's lives in chapters entitled, respectively: "Friendship," "Intimacy," "Families," "Gaming," "The Creative Process," and "Work." While each has much to offer, the gaming chapter is particularly strong and can stand on its own as an exceptional introduction to anyone new to games-based learning: "Much of the public debate has ignored or overlooked contexts and practices of game play. The focus has been almost exclusively on what people hope or fear kids will get from their play, rather than on what they actually do on an ongoing, everyday basis. It is only recently that researchers have been moving beyond a conceptual focus on gaming representation to look at gaming practice and the broader structural contexts of gaming activity" (p. 197).

This chapter, they write, is an effort to fill in some of those gaps by "positioning game play within a broader ecology of media practices and identities" (p. 197). After exploring the topic from many angles, such as through the lens of gender and class, in the end they argue that just such an ecological framework might shift public discussions from its obsession (dare I even suggest addiction?) with game content and design towards what the authors see as the important benefits of gaming.

And HO-MA-GO might just be coming to a community near you. Learning Networks are sprouting up around the country, first in New York City, then Chicago, and soon in Pittsburgh, bringing

together museums, libraries, after-school programs, schools and more, framed, in part, by HO-MA-GO and how it helps us understand how youth learn through digital media. New institutions are developing as well. The Chicago Public Library worked closely with an afterschool program to transform its main branch into YOUmedia, a library designed to offer digital-media tools, activities, and a community to support the wide variety of engagements outlined in HO-MA-GO; this Spring a federal RFP was announced to spread dozens of YOUmedia-style centers all around the country.

Certainly one can raise concerns about HO-MA-GO. It might describe youth practices, but it does not offer a blueprint for building an educational program that addresses them. At times it threatens to romanticize the ability of the young to access their power as self-directed learners and down plays the roles of adults to mentor and scaffold children's learning. But these concerns say less about the book and more about how its lessons have been applied in the field. At its core, the book offers an invaluable description of what youth are doing with digital media. In the end, what it might mean for formal and informal educators, for parents, for policy makers, for those concerned with games-based learning, and perhaps most importantly for youth, all of that—and this is perhaps the most exciting part—is up to us to decide. So pick up your own copy—or download the free version—and join in the work of applying its lessons to build new learning spaces, tools, and institutions for our digital age.

[—]Barry Joseph, Global Kids, New York, NY