### 7 WORK

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In her research on Silicon Valley families, Heather Horst writes about the Smith family, who "view digital media as a tool for their children's personal and professional life." One of the two daughters is a budding musician who writes her own music and performs at local venues. Her older sister is an accomplished dancer and writer who uses the skills learned while attending the Girls Technology Academy to help her father digitally record, edit, burn, and distribute CDs of her sister's performances. For the Smith family, digital media production is a creative hobby that they engage in together as well as an activity that is intimately tied to future career aspirations for the children (Horst 2007). Another Silicon Valley teen, a nineteen-year-old Filipino and Japanese American, has been a leader of a fansubbing group since high school. At the time of our interview, he was taking time off from college to help out in his family technology-related business. "If I didn't stop school and help out, we'd be in serious trouble now," he explained. At the same time, he was still continuing his unpaid work in fansubbing, managing a team of more than a dozen staff who churn out subtitled anime every week for eager fans. His technical expertise serves him across multiple domains of work, some paid, some unpaid (Ito, Anime Fans).

These examples of engagement with new media point to certain domains of practice that are not covered by the other chapters in this volume. The focus of our project has been on learning in relation to youth practices of play, socializing, and creative experimentation. As we have pursued this research, however, we have found that new media also have important implications for how young people engage in activities that they see as serious or productive work, or that have a role in preparing them for jobs in the future. The promotion of new media use among youth is often justified in terms of skills training for "competitiveness" in the

twenty-first-century workplace (Drucker 1994; Florida 2003); parents, educators, and kids often describe their relationship to learning and new media in these terms. In addition to this educative, future-oriented role of technology engagement, new media have an important influence on the here-and-now of at least some of the more digitally mobilized youth we have met through our research. One of the important roles that new media play in the lives of youth is in providing access to experiences of volunteerism and work that give them a greater sense of autonomy and efficacy than those avenues of work that previously have been available to U.S. teens.

This chapter describes these different dimensions of new media and work—how new media engagement operates as a site of training and preparatory work as well as how it becomes a vehicle for new forms of volunteerism, nonmarket labor, and new media ventures. The effort is to capture those new media activities characterized by a productive or seriousness of purpose, where play, socializing, and messing around begin to shade into what youth consider "work," "real responsibility," and economic gain. We draw primarily from studies that look at the everyday lives of youth in families (Martínez, High School Computer Club and Animation around the Block; Sims, Rural and Urban Youth; Tripp and Herr-Stephenson, Los Angeles Middle Schools), studies of gaming and fan production (Cody, Final Fantasy XI; Herr-Stephenson, Harry Potter Fandom; Horst and Robinson, Neopets; Ito, Anime Fans; Lange, YouTube and Video Bloggers), and studies of youth media production (Antin, Perkel, and Sims, The Social Dynamics of Media Production; Mahendran, Hip-Hop Music Production). After providing a conceptual framework for our understanding of the relationship between new media, youth, and work, the chapter describes three categories of work-related practice: training, entrepreneurship, and nonmarket work.

### Work, Youth, and New Media

Our understandings of what work or labor means in relation to children and youth are diverse and contested within different scholarly communities. Although it is not our intention here to fully review this body of work or to formulate our own definitions, we would like to take a moment to contextualize our descriptions and outline the boundaries of what we address in this chapter. In the United States, youth are largely shut out

from the primary labor market, but they still engage in a wide range of activities that could be recognized as work, varying from schoolwork to chores to part-time jobs in the service sector. Researchers have argued that we run the risk of erasing youth contributions to our economy and productive labor if we insist on categorically excluding certain forms of youth activity from our definitions of work (Orellana 2001; Qvortrup 2001). Activities such as "helping" at home or in class often are not counted as work, although they are clearly productive labor (Orellana 2001). Our definitions of work are further complicated by the fact that even play is often defined as "the work of childhood" (Seiter 1993), and "serious" extracurricular activities such as volunteer activities, music lessons, and sports also can be considered "work" by children and parents. Narrow definitions of work would limit the discussion to activity that has clear economic outcomes, while broader definitions could include activity that is more general to any productive or compulsory activity, such as the work of education (Qvortrup 2001). Educational, preparatory work is what Jens Qvortrup (2001) has argued is the most important kind of economically productive activity that children engage in—preparing themselves as future workers. While we might hesitate to call schooling and extracurricular activities "work" in the traditional sense, it is important to acknowledge the ways in which this "prep work" is part of the cultivation of skills and dispositions that will serve youth as they move into jobs and careers. These diverse accounts of what constitutes work are all important reference points in understanding the discourses and practices of work that we encountered in our case studies.

Children and youth represent a special case in discussions of labor and work. As with other industrialized countries, the United States has a well-established set of laws and social norms that limit children's and youth's access to certain categories of work. The shift toward education as defining the primary work of teens was a constitutive element of the definition of adolescence as a unique life stage (Hine 2000). Although teens may have the right to take jobs, they do not always have access to the jobs that they imagine for themselves in their future as adults. Jim McKechnie and Sandy Hobbs have argued that compulsory education did not force adolescents out of employment; rather "it has moved the main forms of employment from full-time to part-time and changed the nature of that employment" (2001, 10). They point out that the majority of youth in industrialized

countries works in a part-time capacity, often negotiating tensions with their "primary" occupation as students. Phillip Mizen, Christopher Pole, and Angela Bolton (2001, 19) describe the work available to adolescents today as "unskilled work around the edges of the formal labour market," typically retail, distribution, catering, and fast food. The United States is characterized by a dual track in terms of youth relationships with school and work. While more privileged youth typically engage in "low intensity" work and give priority to an academic pathway, lower-income youth more typically take a pathway that "leads directly from high intensity high school employment to full-time adult employment" (Hansen, Mortimer, and Krüger 2001, 133). These structural conditions of youth and labor are an important backdrop to kids' engagements with new media work.

New media add some unique wrinkles to our understandings of youth and work. For starters, in public debates surrounding education and new media, the issue of job preparation is often central to the discourse. These approaches are framed by the expectation that education should be the primary work of childhood, and new media learning is validated by the expectation that it will translate to job-relevant skills in the future. All the structured educational efforts around new media that we observed are justified, at least in part, by the argument that they are helping to develop job-relevant skills. Programs that have an equity agenda are often funded as efforts to provide disadvantaged children and youth with remedial access to high-tech skills. At the same time, there is a growing recognition that digital media skills are largely cultivated in the home and other more informal and social settings (Seiter 2007). Schools are not the dominant sites of access to these forms of preparatory training with new media and information technology. Privileged homes take new technology for granted, integrating computer use seamlessly into their everyday routines and domestic spaces. They see new media engagement as part of a more general stance of participation in public life, not necessarily those that are focused on job skills. By contrast, low-income families struggle to keep up with the rising bar for participation in an increasingly high-tech ecology of culture and knowledge. These ways in which new media play into practices that participants see as preparatory for jobs and careers is the first descriptive category for this chapter. This is a set of practices we call "training." This includes learning activities that are pursued in both formal and informal educational settings, though our focus is on the latter.

The second set of work practices we have encountered in our case studies are those that are directly tied to economic activity. This would include jobs that rely on digital media and small economic ventures that were started by youth. Because of our focus on informal learning, most of our cases are on the latter—youth-driven forms of economic activity that we call new media "entrepreneurism." Digital and networked media have opened up opportunities for economic activity for young people that are not part of the existing ghettoes of youth labor, but rather involve young people's mobilizing and hustling to market their new media skills in a more entrepreneurial vein. These new forms of accessibility to entrepreneurial opportunity are the second wrinkle that new media add to the landscape of youth and work. While some of these activities are tied to existing genres of youth labor—such as the marketing of youth talent or getting paid for helping in local and community settings, other enterprising youth are disrupting expectations about the categories of economic activity that youth should engage in. In all these cases, though, the substantial technology expertise of some young people challenges the assumption that youth labor is necessarily unskilled or preparatory, demonstrating that they can make contributions that exceed the capacity of many local adults.

Much of the productive labor of childhood is in the domain of what we call "nonmarket work"—volunteerism, helping in the home, noncommercial production, labor in virtual economies, and hobbies. Although not tied to economic gain, these activities involve commitments that participants consider in the vein of "jobs" and "serious responsibilities" to produce work and contribute labor. For kids in lower-income and immigrant households, nonmarket work is often dominated by domestic labor, and girls shoulder a disproportionate amount of these forms of work (Orellana 2001). For more privileged youth, it tends to have a more preparatory dimension. Many of the in-school and organized extracurricular activities that young people engage in are not directly tied to job and career aspirations but are part of what Annette Lareau (2003) has described as "concerted cultivation," as described in chapter 4. These are activities that immerse children and youth in cultures of competition, achievement, and public participation that are key to certain modes of social success. Although this chapter does not deal substantively with school-based work or practices of concerted cultivation, these preparatory activities are a backdrop for and often a trajectory into nonmarket work.

This last set of practices introduces what is perhaps the most intriguing and significant wrinkle that new media bring to young people's experience of work. In digital-culture studies, theorists have been describing the growth of various types of unpaid digital work, including open-source software development (Weber 2003), "nonmarket peer production" (Benkler 2006), "crowdsourcing" (Howe 2006), virtual economies (Castronova 2001; Dibbell 2006), and other forms of noncommercial free culture (Lessig 2004). In many of these kinds of new media work practices, the unpaid labor of youth is a significant factor. Our case studies describe how these practices are being driven forward by the interests and social practices of youth from wired households. The opportunities that youth have to participate in new forms of creative work is discussed in chapter 6.

Here we look more broadly at the range of ways young people work in virtual worlds and with new media, motivated by reputation, learning goals, a sharing ethic, and their own satisfaction rather than economic gain. Although the free time and online activities of youth are certainly not the only factors driving free culture and peer production online, it is one integral component of what theorists have identified as a trend toward exploiting free labor in digital economies (Terranova 2000). Andrew Ross notes how networked media have initiated a process "by which the burden of productive labour is increasingly transferred on to the user or consumer" (Ross 2007, 19). Our ethnographic material describes some of the specificities of these trends by describing the unique alchemy between the marginalized role of youth in the labor market and the development of nonmarket forms of collective work. The story cannot be reduced either to a simple equation of empowerment or exploitation as youth gain nonquantifiable social benefits, though they may not be reaping economic ones.

In many ways, the current practices of youth engaged in new mediarelated work complicate our existing assumptions about youth, labor, work, and the role of educational institutions to prepare youth for the workplace. First, the cases we describe challenge the assumptions that the appropriate role of youth work is in preparatory educational contexts or in unskilled labor. Youth media production and ventures, when combined with the distribution capacity of the Internet, means that the nonmarket work of childhood is channeled in broader networks that can challenge the authority of existing industry models. New media practices are becom-

ing a vehicle for *some* youth to exercise more agency in defining the terms of their own work practices. The new media skills and talents that these kids are exhibiting make the *productive* labor (as opposed to preparatory work) of childhood more visible (at least in the new media domain), and they challenge the status of educational institutions in defining the training of youth for high-tech work. This in turn is tied to structural changes in certain forms of economic exchange activities, in which the business models of creative industries are being undermined by user-generated content and peer-to-peer (P2P) file sharing. Domains of creative work that were considered almost exclusively the province of commercial efforts are being partially displaced by the work of creative hobbyists who are not necessarily seeking monetary rewards. While we do not see evidence that new media practices are leading to any fundamental reordering of the conditions of economic inequity, we are seeing some indicators that the interfaces between the productive and preparatory work of childhood are being renegotiated through these practices.

### Training

Although our work has focused on learning in informal settings, a number of our case studies did examine media-education programs in schools and after-school centers, and we had many opportunities to speak to kids and parents about how they thought computers contributed to their schoolwork and their future careers. Computers and media-related expertise intersect in complicated and sometimes contradictory ways with how parents, educators, and kids believe young people should be prepared for schooling and jobs. In her analysis of how computer-based pedagogy relates to young people's school performance and future careers, Ellen Seiter argues that educators and technology boosters often fail to take into account the contexts of structural inequity that usually overwhelm the benefits of technology access that educational programs might provide. She points out "the barriers that make the dream of winning something like a 'cool job' in new media a very distant one for working class students" (Seiter 2007, 28). At the same time, she describes how technology-based educational programs are justified by exactly this promise of social mobility. In Seiter's view, the resources that middle-class and elite children have at home, in contexts of concerted cultivation, are what determine cultural and social capital in

relation to digital media and the ability to parlay fun engagement with digital media into careers in the "new economy." Educators who are fighting for social-equity agendas have always faced an uphill battle against the entrenched structures of social and cultural distinction that extend well beyond the classroom walls; we have no reason to believe that simply introducing technology to this equation is going to transform these structural conditions. In fact, since some of the most cutting-edge technology practices are learned outside schools, in the private contexts of peer interaction and family life, the equity agenda is made even more challenging from a public-policy perspective.

As we describe in chapter 1, it is difficult to clearly map differences in socioeconomic status to new media fluency. At the same time, we see some patterns in the degree to which computer use is framed in terms of an education-oriented or vocational tool for social mobility, versus one that is an unremarkable and taken-for-granted component of everyday social, recreational, and academic pursuits. "Training" as a genre of computer use tends to be associated with aspirations of upward mobility by less financially privileged families rather than by families who see computers as already deeply embedded in the fabric of the children's everyday lives. In the earlier chapters of this book, we describe some of the informal settings of peer groups, interest groups, and family where much of the basic learning and literacy about new media is supported. In these contexts, parents and youth generally are not mobilizing a discourse of vocational training but rather a discourse of enrichment and creativity.

The day-to-day struggles of educators, parents, and kids to chart trajectories through educational institutions and on to jobs and careers need to be contextualized by these structural conditions and by our cultural imaginings and values around technology, achievement, and work. Even before a consideration of whether kids might get a creative-class job, parents and educators hope that computers will give kids a leg up in their educational performance. This often translates to a parental concern that computers should be used for serious educational purposes and not for socializing or play. We observed this tendency most strongly in less privileged families that saw schooling as their primary hope for upward mobility. One parent in Lisa Tripp and Becky Herr-Stephenson's study (Teaching and Learning with Multimedia) explained how she tries to encourage certain forms of computer use in the home for her thirteen-year-old daughter, Nina, the

third of four children. Anita emigrated from Mexico eighteen years ago, and her husband is from El Salvador.

**Anita**: [Mi hija] se pone en la computadora y le digo que la computadora es para hacer tarea, no es para estar buscando cosas en la computadora. Y a veces [mis hijas] se me enojan por eso. Y les digo: "No, la computadora yo se las tengo para que hagan tarea." A veces les pregunto: "¿tienen tarea?" O: "estás haciendo tarea." Pero a veces tengo que estar lista a ver qué es lo que están haciendo. Se meten a la Internet y tantas cosas que sale ahí. Y se ponen a mirar sus amigas y eso.... Entonces, es lo que no le gusta a ella que yo le diga: "; sabes qué? La computadora no es para que andes buscando; es para lo de la escuela." ([My daughter] sits in front of the computer and I tell her that the computer is for doing homework, not for looking around. And sometimes [my daughters] get mad at me because of that. And then I say, "I got this computer so you could do your homework." Sometimes I ask, "Do you have homework?" Or, "Are you actually doing your homework." I have to keep a close eye on them to see what is going on. They get on the Internet, and with so many things there. They look for their girlfriends and all.... They don't like me saying, "You know what? The computer is not for you to be looking around. It is for schoolwork.")

**Lisa:** ¿Qué es lo que más le preocupa a usted acerca de la Internet y sus hijas? (What is your main concern with the Internet and your daughters?)

Anita: Lo que me preocupa... ya ve... es que salen muchas cosas ahí que se meten con niños, y a veces platican con ellos, y a veces no saben ni qué gente es. Es lo que me preocupa, porque digo "no." Y a ver qué es lo que están mirando ellos y uno tiene que estar siempre listo con ellos. A veces estoy que les quiero quitar la Internet, pero a veces me dice él: "por su tarea está bien. Porque después van a andar que 'me voy a hacer tarea,' 'que no tengo computadora,' 'que no tengo esto.'" Pero es por lo que más peleo ahorita con ellos.

(My main concern is . . . you see . . . you hear all the time that people try to reach kids and talk to them. Sometimes [kids] don't even know who they are talking to . . . . That is my concern. That is why I say, "No." I need to keep an eye on what they are looking at. I always need to be attentive. Sometimes I feel like canceling the Internet, but my husband says, "It is good to keep it because of their homework. You don't want them saying 'I need to go somewhere else to do my homework,' or 'I don't have a computer,' or 'I don't have this.' But this is mostly what I fight about with them these days.") (Translation by Lisa Tripp)

A father who is raising his two daughters on his own also voices a commitment to educational goals, though he does support his daughters' use of the Internet for personal communication. Juan has been in the United States for almost thirty years, and he is raising his two younger daughters (eleven and twelve years old) on his own while working in a restaurant. They have an older computer at home that they acquired secondhand, but it is not connected to the Internet (though it once was) because of the cost.

**Lisa:** ¿Usted que cree que la Internet es una buena manera para los niños comunicarse entre ellos, o le preocupa esto?

(Do you think that the Internet is a good way for your kids to communicate with their friends or are you worried about that?)

Juan: No, es mejor que se comuniquen de esa forma porque les ayuda más a salir adelante. Y también cómo lo tomen ellos. Si lo van a tomar como un juego, esto y lo otro, no. La cosa es que vayan a la cosa seria, que vayan aprendiendo. Con ánimos de seguir adelante en sus estudios, de salir adelante. Sabes que ahorita sin estudios uno no es nada. No es nada. A trabajar, andar limpiando y haciendo acá, sufriendo más si un día no te necesitan. Salir adelante.

(No, it is better for them to communicate that way because it is going to help them get ahead. And it also depends how they treat it. If they are going to treat it like a game, then no. But if they take it seriously, they will be learning from it, and it will help them with their studies, and help them get ahead. You know that now without an education you are nothing, nothing. You have to work, clean places, do odd jobs, suffering if one day they don't need you anymore. [It's important to try] to get ahead.) (Translation by Lisa Tripp)

In their work in Los Angeles, Tripp, Herr-Stephenson, and Martínez interacted with parents, teachers, and kids in both the classroom and at home, affording a rare opportunity to look across multiple contexts of media use for particular kids. In the multimedia course that the kids were engaged in, teachers occasionally spoke of the possibility of careers in media, but their goals were generally more immediate and less ambitious. They saw new media production as a way of keeping kids engaged in the classroom, which could in turn keep them from dropping out. They also thought that one side effect of this engagement was that kids would pick up basic reading and writing skills. One teacher describes his first year with the multimedia curriculum: "I think this year, in terms of behavior

and classroom management, was one of my best years because I didn't have to force the kids to be in the classroom." While at a local classroom level, these educators are doing their best to make the most of the opportunities put forward to their students; the risk, as Renee Hobbs (1998) points out, is that media production can be constructed as a curriculum geared for low-achieving students, who "are allowed to 'play' with videobased and computer technologies, while high-ability students get more traditional print-based education." While higher-achieving students are engaged with computers and media production as part of a more general media ecology they inhabit, the classroom becomes a place for a more remedial form of media education for students who do not have this cultural capital.

In contrast to the orientation of classroom teachers, educators in youth media programs had a different view of the potential of media education. Educators in the hip-hop program that Mahendran (Hip-Hop Music Production) observed and the video-production program at the Center where Dan Perkel, Christo Sims, and Judd Antin (The Social Dynamics of Media Production) observed saw their roles more in terms of vocational training than in general or remedial education. Media production is tied explicitly to the hope of employment in creative-class jobs, though educators at the Center struggle daily to instill this ethic of professionalism in the media-production process. At times, the goal of producing work in a vocational vein conflicts with the goal of empowerment and the development of youth voice. Hobbs (1998) describes this as a tension between more expressive and vocational forms of media education. Although youth were encouraged to take charge of their own projects, adults would intervene to focus them and orient them toward the goal of creating a polished work. In contrast to the hip-hop program, where youth were motivated by their existing engagements and knowledge of popular culture, youth in the Center's program had to rely more on the adult educators to set the agenda and provide the cultural capital for their work.

Among youth engaged in youth media programs, we also found some who were deeply pessimistic about what opportunities formal education afforded them, and who saw a more vocational orientation toward digital media as an alternative to a middle-class school-to-work trajectory. One of the participants in Dilan Mahendran's hip-hop music production study, Louis, an eighteen-year-old African-American, describes a moment during

his first day of high school, referencing a famous scene in the book and the movie *The Paper Chase*, in which a Harvard Law School dean warns first-year students that most of them will not make it through the program.

**Louis:** Yeah. When you're a senior, 80 percent of the people you see right now are going to drop out . . . look to the left and look to the right, because they're not going to be here.

Dilan: That's what the teacher said to you?

**Louis:** Yeah. They set you up for failure. You know what I'm saying? We look to the left and we look to the right, and we laugh about it at that time. We're like...ha, ha, ha. I had my best friend Jerell and my best friend Rob. Sure enough...

Dilan: You were fourteen?

Louis: We were fourteen, fifteen at the time. Sure enough, Jerell drops out in eleventh grade and Rob drops out somewhere I think in eleventh grade. I dropped out somewhere in the twelfth grade. And it's kind of like they was fucking right. We all dropped out. It was kind of like [inaudible] . . . fuck, they were right. How the fuck did you know? It's a psych trip. First day of school, of course you're going to sit with your friends. Of course you're going to sit with somebody that you identify with. All right, look to your left and look to your right; they ain't going to be here. Then you go to school every day and it's like this—fuck up, fuck up, fuck up. . . . That's how school is.

This same teen is deeply involved in the production of hip-hop in a youth media program. His awareness of certain social structural conditions reflect what Hansen, Mortimer, and Krüger (2001, 133) have described as the differential pathways between school and work that are characteristic of the United States. Rather than focusing on an academic pathway, Louis sees the apprenticeship and mentorship of the media-production program as a compelling alternative. Hansen, Mortiner, and Krüger also note that the United States is distinctive, in comparison to many European countries, in having very few vocational and apprenticeship programs for teens, so they often turn directly toward employment to receive career training. Mahendran notes that the after-school setting is opening the horizon for explicit vocational training in the digital economy, contrasted with high school, which is oriented toward preparation for college. In this way, digital-media training and youth efforts can be compared to

traditional vocational training such as auto mechanics or HVAC schooling. The programs are a kind of introduction to vocations associated with creative labor.

All these examples that we encountered in our fieldwork illustrate the ways in which different forms of media and technology engagement are tied to different trajectories of school-to-work for youth. Youth media programs navigate a complicated balance, using media production as a form of remedial classroom work as well as at times framing the programs as vocational training. In both of these stances, it can be a challenge to develop programs that support the development of expressive capacity and voice rather than skills development. In the most promising cases of youth media programs we have observed, these programs can fill a vacuum in apprenticeship and vocational training that is largely absent in the United States. We need to keep in mind, however, that these conditions of engaging with new media differ quite markedly from the opportunities afforded to youth from more highly educated families, who grow up in contexts where high-end technology is within easy reach, and where the adults with whom they regularly interact at home provide expertise and role models for careers in the high-tech workforce. Heather Horst's study of middleclass families in Silicon Valley describes settings where parents are intimately involved in structuring high-tech environments for informal learning in the home; they are not focused on specific vocational outcomes as we see with youth media programs.

### Entrepreneurism

Contemporary childhood in the United States is characterized by a primary focus on play and education rather than on economic activity. At the same time, even after child-labor laws were in full effect in the early twentieth century, there has been a role for working children, particularly as they enter their teenage years (Zelizer 1994). In the latter half of the 1900s, it became common for youth to combine part-time work with their schooling, and studies through the 1990s indicate that approximately 70 percent of teens ages sixteen to eighteen have part-time jobs (Hansen, Mortimer, and Krüger 2001). As described earlier, the jobs available to teens are usually part of the unskilled service sector. Historically, paper routes and fast-food jobs are stereotypical forms of teen labor. The high-tech and

creative jobs that young people are being prepared for in digital-production programs and through middle-class high-tech cultivation in the home are largely reserved for credentialed adults. This is in line with broader indicators that show that employment in skilled labor is generally unavailable for children and youth (Mizen, Pole, and Bolton 2001). Although our study included many youth with high degrees of technology expertise, we saw only three cases in which they were actually employed in jobs that made use of their technology skills during their teenage years. Technology was more commonly where they spent money; many teens in our study did engage in part-time work, often with the goal of funding their new media habits. The adults in our study who did have new media jobs did not have these jobs in their teenage years; as teens new media was a domain of hobbies and not salaried work.

Our focus for this section follows from this observed reality. We do not delve into the jobs that teens have or the domestic labor that they perform in the home, since this work has at best a tangential relationship to new media practices. It is beyond the scope of this effort to do justice to the complex realities of young people's economic lives. The issues surrounding how young people gain and spend money, particularly on media and communications, is a crucial topic that deserves an even more sustained treatment than we can give in this book. In this section we focus on somewhat more exceptional cases that illustrate the avenues that young people are finding to mobilize new media for economic gain. While the majority of youth in our study did not engage in these innovative new forms of economic activity, the cases that we do have are compelling: they illustrate the emerging potential for activating youth entrepreneurism and real-life learning through online networks of peer-based commerce and media sharing. Unlike training-oriented genres of participation, these entrepreneurial practices involved youth from a variety of socioeconomic backgrounds (though overall these cases were rare). They also involve kids engaged in productive labor in the here and now rather than as a model of preparatory work or training.

Youth with expertise and interests surrounding media and computers often understand that they have skills that can translate to economic gain. At the same time, their avenues for earning money from these abilities and interests are limited. Until they finish with their schooling, they do not have the option of fully entering the competitive marketplace for high-

tech and media jobs. Among youth whose primary occupation is schooling, and who are interested in capitalizing on their new media skills, we have found three modes of economic activity: publishing and distribution of creative work, freelancing, and the pursuit of enterprises.

### **Publishing and Distribution**

In our discussion of creative production, in chapter 6, we describe the ways in which young creators are using online venues as a way of publishing and disseminating their work. While the vast majority of these efforts are not oriented toward immediate economic gain, some of the more entrepreneurial young creators are reaping economic benefits from their creative work. Even if they are not receiving actual revenue, they see online sites such as MySpace, deviantART, and YouTube as spaces where they can promote their careers as musicians, artists, or video makers.

A small number of creators we encountered were successfully making money off their work, either by selling the actual work or by acquiring ad revenue online. As described in chapter 6, Patricia Lange's study (YouTube and Video Bloggers) is peppered with cases in which youth were aspiring to make it big through YouTube and were at times successful in monetizing their participation or gaining mainstream attention for their work. Perhaps one of the most visible examples is Caitlin Hill,<sup>2</sup> a nineteen-year-old Australian woman who is ranked thirty-first among most-subscribed-to YouTubers of all time. Coming from a modest economic background, she used her grandmother's digital camera to make videos. Her grandmother now comes to her when she has computer problems. As her channel page indicates that she is a YouTube partner, she is presumably receiving a share of ad revenue from ads placed on her YouTube videos. Another youth in Lange's study, Max (a white fourteen-year-old), was contacted by ABC about getting his video shown on television. Although he did not ask to get paid for this, after the ABC appearance other requests started to come in. He explained that now "I've gotten pretty good. . . . I'd say 'Oh. I want to get paid if you're gonna . . . for my video.' And they'd be like, 'Oh. Yeah, we are expecting to pay you,' and then, we would negotiate about price and stuff like that." While these cases represent the much-sought-after goal for youth who aspire to media careers, most will acknowledge that it is quite difficult to achieve this level of success on one's own as a purely garage operation.

In Dilan Mahendran's study of young hip-hop musicians (Hip-Hop Music Production), he found a strong entrepreneurial spirit among many of the youth he spoke to. Some of the beat makers sold their creations to rappers who would use them for their own song production. Others produced mix tapes of their own work or that of other artists and sold them on public transportation or in other pedestrian areas. Artists can often feel conflicting loyalties over whether they are pursuing their craft for the love of the work or for economic goals, and this is tied into widely recognized tensions between hip-hop culture and the commercial rap industry (Mahiri et al. 2008). Louis gave voice to this ambivalence:

It shouldn't be about a meal ticket. It's not always about money. I mean, it's two ways to do it. It's either you make music to make music, or you make music to make money. Me? I do both.... I know that the music I make, it's not necessarily going to be accepted by all, because not everybody is going to be able to identify and agree with it. But the thing is, is that in order for that to survive, I have to make music that people can identify with, that people are going to listen to.

Although hip-hop may be an example of a form of media in which practitioners have an unusual amount of self-reflexivity regarding the problems of commercialization, many young creators struggle with this boundary between a creative pastime and a more work-oriented commercial stance.

Among the case studies of anime and Harry Potter fans, we have also encountered examples of youth who have successfully capitalized on their creative talents. Although intellectual-property regimes make it difficult for fans to make money off fan-related creative production, there are some niches where economic gain is possible. Becky Herr-Stephenson's study of Harry Potter fans focused in part on podcasters who comment on the franchise. Although most podcasters are hobbyists, a small number have become celebrities in the fandom who go on tours, perform Wizard Rock music, and in some cases, have gained financial rewards. Mizuko Ito, as part of her study on anime fans, spoke to Ian Oji<sup>3</sup>, an artist who draws comics as part of a comic writers' collective. Once a year the group selfpublishes a comic anthology that it sells at local anime conventions. All the large anime conventions have an "artist's alley" that will feature young aspiring artists selling their artwork, stickers, T-shirts, pins, and bookmarks for a small fee. These same artists generally will also have online sites that promote their work. The peer-based spaces of the convention floor and

online sites are closely linked; they are spaces for artists to both promote and sell their work in an informal economy.

These kinds of ventures are examples of ways in which youth can make money from some of their creative talents, even if for relatively small economic gains. Youth recognize that it is highly competitive to make a living off their creative talents, but digital media and distribution provide avenues into online distribution and advertising that enable new possibilities for marketing their talents. As described in chapter 6, most of these ventures stay in the domain of hobbies, but a small number, such as SnafuDave, described in box 7.1, are able to parlay these efforts into successful commercial careers. In many ways, these ventures are examples that are very much in line with the historical position of the work of youth, conducted largely "around the edges of the formal labour market" (Mizen, Pole, and Bolton 2001, 38) and often involving gray zones outside of officially sanctioned forms of work (McKechnie and Hobbs 2001). At the same time, digital distribution is opening a wider range of venues for circulating and monetizing skilled forms of creative work, which have been largely limited to specific professions such as child acting (Zelizer 1994).

### Box 7.1 "I'm Just a Nerd. It's Not Like I'm a Rock Star or Anything" Mizuko Ito

The online world is home to a growing number of successful web comics ventures, including well-established names such as Penny Arcade and xkcd, as well as thousands of others that cater to niche and small audiences. Just as blogs have reinvented the medium of news, web comics are reinventing the comic strip, using digital authoring tools and online publishing to connect to different publics. Although most web comics artists are amateurs who spend more on their hobby than they bring in, there are a handful of artists who bring in significant amounts of revenue through online publishing.

SnafuDave, whom I interviewed as part of my study of anime fans, is one such successful web comics artist. In addition to creating his own web comics, SnafuDave, who is in his early twenties, manages a web comics site, Snafu Comics (snafu-comics.com), which features comics by twelve other artists in addition to his own. The styles and genres of the comics that SnafuDave hosts on his site are diverse, but many reference Japanese popular culture. SnafuDave is a regular in the anime convention circuit. We first learned of SnafuDave's work in a talk that he gave at an anime convention, where he gave his audience tips on how to launch a successful website.

In our interview, SnafuDave explained how he got started with web comics in his first year of college. He went to school in what he described as a "super, super, super tiny town," and he had been planning to major in math. The summer of his freshman year, he decided to stay for summer school when none of his friends did and was "bored out my mind in this little town." This was when he ran across Penny Arcade, the first web comic that he had read. "I just got obsessed with it. It took me three or four days to go through all of their comics. And I just absolutely loved it." He described how he went on to find other web comics that he liked and then decided to take the plunge himself. He went to the library and checked out *HTML for Dummies*, got a copy of Photoshop from a friend, and got started. After much trial and error, and learning through a variety of online tutorials, he began to hone his craft. "About three years later, I actually started getting semigood at it" (see figure 7.1).

Along the way SnafuDave tried changing majors to suit his new interests, first enrolling in a computer science major and then eventually switching to digital media. He thinks, however, that he learned few of his current skills in the formal educational context. "This whole time, school's more valuable for me to have basically a time frame where I could learn on my own and practice." College also gave him the time to learn how to market his work online and to develop an online network of fellow creators and readers. When he was getting started, he engaged in a wide range of strategies to get his comics noticed. These included asking fans to vote for his comics for top web comics lists, doing link exchanges with other comics sites, doing guest comics for other sites, and posting material to sites such as deviantART and video- and animation-hosting sites. Eventually he began offering to host for other web comics creators, and now, he said, "Literally every day I'll have at least five or six people begging me to put a web comic on my site."

He attributed a large part of his success to the fact that he has good friends in the web comics world and close ties to his fans through his web forums. In addition, he has made full use of the viral properties of the web in driving traffic to his site. This included a "tampon tag" game that he designed in which people could tag each other's forum posts. After seeing the popularity of the game on his own forums, he made a version for MySpace and "it spread like wildfire. . . . Totally, just this viral content the people are spreading around. Yeah. That's kind of how Snafu made it to the top."

Snafu Comics makes a substantial amount of money through online ads, but SnafuDave explained that he uses this revenue to pay for the costs of maintaining and improving the site. Since the site aggregates the work of multiple artists, he does not lay claim to the site revenue for his personal income. Instead, he makes his living as a freelance web designer. The other artists on his site also have day jobs, mostly in graphic design. When I spoke



**Figure 7.1** SnafuDave comics. Reprinted from www.snafu-comics.com with permission from David Stanworth. 2006.

to him, SnafuDave had recently launched merchandising ventures such as T-shirts, prints, and buttons to sell at conventions. Now his site hosts a web store where fans can order these items. At the time of our interview, he was not making a living off web comics. "I would really like it to be paying for all of our lifestyles someday. And definitely, right now, I believe it could." I asked if his family and local friends were supportive of these aspirations.

Well, my mom actually thinks I'm a complete waste to society, no matter what. She's all, "Get a real job." Even though, I... yeah. Whatever. My dad thinks it's pretty cool. About a third of my friends are really supportive of it. I'd say about two thirds... actually, about one third doesn't care at all. And then another third actually despises me for it. Like they hate that I get all this attention online when I'm just a kid from a small town.

I am curious about whether there is a stigma attached to being so involved in comics and anime, and SnafuDave explained that the issue is more personal. "I design websites once or twice a month for clients and then I play online all day. And it drives people crazy. It really does. . . . But I don't think it's *that* envious. I'm sure it is a really cool job, but I'm just a nerd. It's not like I'm a rock star or anything." In a follow-up email, almost two years after the initial interview in 2006, he gave me an update. His merchandising business had started paying off enough that he quit his day job to devote himself full time to web comics. He may not be a rock star, but he is one of a handful of artists who have parlayed their web comics hobby into a professional career.

### Freelancing

Another category of paid work that young people can gain access to through new media is different forms of freelance and contract labor. Technically sophisticated youth recognize that they have marketable skills that are in demand from their peers and adults in their vicinity. Most of these kids do not try to profit from this and engage in informal help and sharing with family and friends. This is in the vein of chores and child care, for which youth may receive small financial rewards, but the work also often is framed as household obligation. Altimit, an eighteen-year-old Filipino American told Mac Man, a seventeen-year-old Filipino American in Katynka Martínez's study (High School Computer Club), that his father often asks him to help out fixing his family's and friend's computers:

**Altimit:** Yeah, and like my friend's house, usually my family friend, they would say, "Oh, something's broken." So, rather than him coming, he sends me. So, like, "I'm trying to play World of Warcraft." "I don't care.

Go. You're not doing anything anyway." I'm like, "I'm trying to level." "I don't care. Go."

Mac Man: Do you get paid to do it?

Altimit: No.

Mac Man: Hey, that's sad.

Altimit: I wish I did. Make a lot of money.

The challenge for many youth is to move their labor from a category of unpaid helping to a category of valued labor, which might be potentially monetized. Marjorie Faulstich Orellana (2001) describes how adults often resist describing the children as "workers" and prefer to describe what the kids are doing as "helping," activities that are good for kids' social development but not part of the monetized labor economy. This exchange with Mac Man and Altimit is evidence of how kids may see this dynamic differently. Altimit understands the economic value of his technical labor even though his father may not recognize it. We have seen some cases of a few entrepreneurial kids overcoming these challenges and making real money off their technology skills. The case of SnafuDave in box 7.1 is one example of a youth's transitioning into a successful career as a freelance web designer and later into one that centers on his own creative work.

One fifteen-year-old white participant in Patricia Lange's YouTube and video bloggers study described how he has started a small design company. "I have a couple clients that I do web hosting for. And then, I've done some programming, but I'm not that good at it. But I've pretty much done some of every geeky thing that there is out there." He built his client base from personal connections, beginning with family and then branching out to friends at school and people he met online.

I have pretty good customer services. Since I have a very small client base, I can afford to help them make websites and [with] any problems that they have, so a lot of it is just helping them make websites, fix websites, change things, and basic things like that.

In a similar vein, as described in box 7.2, sixteen-year-old Zelan built up a career as a freelance technical expert.

In the gaming world, the most-skilled players can gain sponsorship or win financial awards through tournaments, and a number of game titles have a professional gaming scene. The top players can make a living playing the games on the marketing value they gain as a result. Hundreds,

thousands, and even millions of dollars in prize money are turned out each year for competitors in these tournaments. The most popular tournaments are those run by the Cyberathlete Professional League, the World Cyber Games, the World eSports Games, the Electronic Sports World Cup, the Championship Gaming Series, and Major League Gaming. It was rare to encounter youths in our study who were actually able to make money off their gaming. Even among those who did, none saw gaming as a primary occupation. For example, Altimit described making small amounts of money off his Warcraft play. Scottanime (a white thirty-one-year-old), one of the interviewees in Mizuko Ito's study of anime fans, described how when he was younger he used to be a card-game expert. He would be hired by gaming companies to demonstrate the games at conventions. He did not see this as a sustainable or secure career option, however, and he went on to take a job as a mail carrier. Similarly, MercyKillings,<sup>4</sup> a white thirtyfive-year-old in Ito's anime fans study, was also a professional gamer after college, but he maintained a day job working in construction. These stories parallel the kinds of involvements that youth have historically had with sports; gaming is an activity most children and youths participate in regularly, but very rarely does it translate into a career. Although we saw many instances of youth who admired pro gamers, we did not have examples of kids who actually were pursuing pro gaming as a career.

### Box 7.2 Technological Prospecting in Rural Landscapes Christo Sims

About an hour's drive east of Sacramento, the Great Central Valley of California meets the Sierra Nevada range. The valley's end loosely binds one edge of Sacramento's suburbs. As one climbs into the mountains, roads and rivers narrow, towns and neighborhoods become smaller and more far-flung. About 150 years ago these hills were the epicenter of the California Gold Rush. Evidence of this historical prospecting can still be read on the land-scape. Ashen ruptures in otherwise pine-green panoramas continue to mark sites where hydraulic mining sluiced ore from the mountainsides. Locals call these barren desertlike patches "diggins." It was in one of these diggins that Zelan was first introduced to video games:

When we lived in Sacramento my parents got me a Game Boy to go out there in the diggins. 'Cause we'd come here on the weekends and go dig for gold. And I never really liked it, so I'd sit in the corner and, you know, play with Batman or whatever I was into.

And so one day they got me a Game Boy for my birthday, and I sat in the corner and played games all day.

As his parents prospected for gold, Zelan began his trajectory of engagement with digital media, one that would lead him far beyond gaming as only a way to kill time. As Zelan recalled it, this incident occurred when he was four or five years old. He was sixteen at the time of our interview, and for the past eleven years his family has lived in a secluded rural town near where they used to go digging for gold. In pursuing his passion for games he has developed pragmatic strategies for making and managing money, he has acquired unique technical skills and knowledge, and, lately, he has configured these resources into his own form of prospecting, one that enacts and imagines modes of work that defy local tendencies and expectations.

This pragmatic sensibility partially stems from, and continues to mix with, his passion for video games and digital media. After immersing himself 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.

Soon he started devising ways of making money to support his hobby. He learned that the technical knowledge he was developing could be applied as employable labor. When he was in middle school a teacher asked him to help run the audiovisual equipment. He soon transferred this knowledge into a DJ business. In another case he made two hundred dollars fixing a teacher's computer. More recently, the high school has hired him to help maintain "the empire" of more than two hundred computers on the school's network. In addition to selling his labor, Zelan has begun to realize that he can be a valuable broker in markets for used technology goods. In several instances he has acquired broken computer equipment or game consoles, fixed them, and then sold them for a profit (see figure 7.2).

Since these opportunities have built up, he now imagines starting a technology-centric business after he graduates high school:

I wanna start a business about, you know, just like computer repair, gaming, just anything computerwise. So I can get it all started and hopefully start another business and get two businesses going and, or two chains going or whatever, and hopefully just be able to sit back when I'm older. Not to just sit there and do nothing. Have the businesses going around me.

This vision of work differs considerably from the manual labor practiced by his parents and many others in his local community. His town is one of the most remote and blue-collar of those feeding his regional high school. Both of Zelan's parents make money by performing manual labor; his mom cleans houses and his dad is a freelance handyman. Zelan seems to understand that



**Figure 7.2** Attic workbench where Zelan and his dad tinker with remote control aircraft and other electronics. Photo by Christo Sims, 2006.

many of his peers will end up in similar careers as his parents and neighbors. In describing his "nerd" identity, Zelan differentiated his work trajectory from the one he imagines for his peers:

But the jocks, they're more into construction. And my group's into the computers, and the computer jobs where you have to do little to nothing to make your money. Everybody else is into hard labor and mechanics. That's what the metalheads are in . . . they're the mechanics. And, you know, the computer nerds, I think they've got the best side of it. 'Cause computers are spreading, if you can see, they're everywhere in this room. You know, everybody's houses are turning into that, and they're just everywhere. And they're gonna be here. Before long houses are gonna be computers.

For Zelan, being a "nerd" is a purposely unconventional path, one deeply entangled with practical economic concerns. In embracing a nerd identity, he imagines an alternative life of work, one that sidesteps the expectation of a career in manual labor. By entwining technology with an entrepreneurial trajectory, Zelan echoes those who brought sluices and shovels, and then hoses and hydraulics, to his region of California nearly 150 years before. With them, technology is implicated in an effort to bypass the gridlock of social mobility, a partner for creatively prospecting the economic landscape.

The examples of entrepreneurism that we present involve young people working to break into established models of publication, distribution, and freelance labor. These practices involve a kind of modeling of adult careers in what might be called creative-class labor (Florida 2003). Young people are developing skills and talents that they can market and contract out to others. The last category of entrepreneurism that we would like to discuss is one that is more closely tied to genres of practice that we associate with the street smarts of a small-business person.

### **Enterprises**

The classic model of a childhood enterprise is the lemonade stand. New media, online distribution, and auction sites such as eBay have expanded the potential for entrepreneurial activity that relies on digital media for the buying and selling of goods.

For example, Gerar, a fifteen-year-old from a mixed Mexican and Salvadorian background, in Katynka Martínez's "Animation Around the Block" study, found a market niche where he could establish his own smallbusiness enterprise. He explained how many of the youth in his neighborhood own an iPod but not a computer. "They pay me to upload some songs for them and depending on how many songs I have to download or upload into their iPod that depends how much I get paid. If I have to download a hundred songs I charge them four bucks or something." He has a corner on the local market, because there is only one other person in his peer group who has a computer. The other person he has heard of who does have a computer, however, "does not have an Internet connection so there's no way he can download music and charge the others." Toni, a twenty-five-year-old who emigrated from the Dominican Republic as a teen (Ito, Anime Fans), described 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. The two cases of sixteen-year-old Zelan and of seventeenyear-old Mac Man, presented in boxes 7.2 and 7.3, provide an illustration of this small-business spirit animating youth digital ventures. 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 are able to translate their

technical knowledge and expertise into capitalist enterprises that have immediate financial outcomes.

None of these cases represents a major restructuring of the basic financial conditions that youth live under. They replace paid unskilled formalized labor with new financial arrangements in the informal economy, but they are not generating large amounts of new income. The larger impact on kids' lives is perhaps not a financial one but is more about kids being able to develop financial agency that is not fully determined by existing commercial models (such as online ads) or by the more formal school-to-work transitions envisioned by parents and educators. These practices resist the existing normalized pathways for youth labor. They are not part of a future-oriented vocational or preparatory orientation, the model of youth "talent," nor are they framed by the stance of "helping out" that underlies most freelance youth labor. The enterprise genre described in this section does not even appear as a category of youth labor in surveys of youth work (McKechnie and Hobbs 2001). While youth have had small spaces in which to begin their own enterprises, in at least a small number of cases we have found, youth have mobilized online media to expand this genre of participation in new directions.

## Box 7.3 Being More Than "Just a Banker": DIY Youth Culture and DIY Capitalism in a High-School Computer Club Katynka Z. Martínez

The lunch bell rings and a group of high-school boys make their way across campus. They meet at the computer lab, where they view anime on their laptops and play games on computers that they have networked to one another. Although the atmosphere is relaxed, the boys have posted rules for their computer club: "Don't talk loud," "When playing don't scream," and "Five deaths only." Breaking these rules is grounds for having one's computer privileges revoked for a week. The boys take their club quite seriously and hold fund-raisers to buy new equipment. Yet they still have a lot of fun joking around and teasing one another, and sometimes they eat their lunches too.

Mac Man, seventeen, is the president of the computer club, and Altimit, eighteen, is an officer. The boys met in middle school when the two were recent emigrants from the Philippines. Their fathers, who are both computer savvy, introduced the boys to computers. Based on the stories told by the boys, it seems that their fathers introduced computers as toys rather than as

educational tools or adult devices. One boy's father used to engage in computer-hacking activities and both men enjoyed using computers when they were younger. However, they are now employed as a banker and as a landlord overseeing apartments in the United States. Altimit and Mac Man romanticize the early days of computer programming and their fathers' participation in that world. The formation of the computer club may be their attempt to tap into some of the renegade spirit that their dads once possessed.

Altimit and Mac Man take on a sense of nostalgia when they remember the first computer games they played. For example, when Mac Man talked about playing an early version of The Sims in which "everything's all pixilated," Altimit sarcastically responded, "Don't remind me of those days." A lot has changed since "those days" and now the boys not only play computer games but they fix computers themselves. Altimit's dad taught him how to use and fix computers and now he expects Altimit to help friends and family members who have computer problems. Altimit recounted the ordeal he goes through when his father asks him to fix someone's computer while he is absorbed in his favorite MMORPG:

Yeah, and like my friend's house, right, usually my family friend, they would say, "Oh, something's broken." So, rather than him coming, he sends me. So, like [in child's voice], "I'm trying to play World of Warcraft." [In dad's voice] "I don't care. Go. You're not doing anything anyway!" [In child's voice] "I'm like, I'm trying to level." [In dad's voice] "I don't care. Go!"

When Mac Man heard Altimit tell this story he immediately asked if the boy gets paid for his service. (Altimit does not receive any monetary compensation.) Mac Man, a young entrepreneur, has found a way to develop multiple small businesses—even at school. He heats up water in the computer room during lunchtime and sells ramen to students for a dollar. Also, when he learned that a group of teachers was 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 that carries the tools 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 a hundred dollars' profit for every computer that he sells.

Mac Man's entrepreneurial spirit is very much influenced by his father's work ethic. When asked what his father thinks of his small business, Mac Man told a story about his father creating the chemical mixture needed to kill cockroaches when he saw that the apartments he managed needed this service. His father also buys beat-up classic Mustangs, refurbishes them with his son, and sells them. Mac Man showed off before-and-after photos of the cars they have worked on and then he said, "My dad and I—we're similar

because we're physical people. We like to get our hands dirty, you know? Pull things apart, put them together. See I do the computer things. My dad does the car things. We're very similar."

While Mac Man recognizes that he and his father share a tinkering mentality, Altimit is frustrated by his father's current career. Altimit's father was once a computer hacker and even was friends with one of the people who created the "I Love You" virus. Knowing this history, Altimit finds it hard to understand why his dad does not enjoy using computers anymore. He said that now his dad is "just a banker." Altimit cannot look to his father to learn how to make a living from his interest in computers. However, he has been able to find role models in the world of professional gaming. Altimit is an avid gamer and claims that strangers pay for his World of Warcraft (WoW) subscription just so they can play against him. This interview was conducted during his school's winter break and it was no surprise that he had been spending most of his vacation watching anime and playing WoW. In a discussion of the South Park episode that features WoW, Altimit began talking about the fact that the "best gamer in the world" makes his living playing games. Mac Man, the pragmatic one, explained that this gamer is "one in a million."

**Altimit:** He got a job for it though. **Mac Man:** Only a few people get a job.

Altimit: No. Yeah, but he's rich. I mean, come on, just for playing games,

he's rich.

Mac Man: There are exceptions.

Altimit: That's just kick ass...

Katynka: Is he a pro gamer or...

**Altimit:** He's the best gamer in the world, at shooter games. He can kill anyone and he will not die. And I think some guy picked him up to play for tournaments. He would win all the tournaments, and then he got paid to play games, pretty much. And like make shows, so . . .

**Katynka:** And does this guy seem like a nerdy guy from *South Park* or . . .? **Altimit:** No. He's normal. He's, what he did, it's like, what he's doing is before he played games right, he would wake up, eat, jog, like exercise. Play games for three hours. Play console games for four hours, and then play PC games, eat again, just take a break, three hours again. I do three, four, three.

Mac Man: Is that what you do?

Altimit: Yes.

Mac Man: Why are you not getting paid for it?

Both Altimit and Mac Man are high-end users of new technology. However, they have very different personalities and approach media in different ways.

Altimit said that he is the "software guy" while Mac Man is the "hardware guy." Altimit spends hours playing video games and drawing manga while Mac Man occasionally plays games but does not have aspirations of making a living from this leisure-time activity. He was asked what his ideal job would be and was told that he could make up a profession or job if it did not already exist. He said that his ideal job would "be either in biomedical engineering or in business." He added, "In both of these career choices, I would definitely be using computers."

The boys imagine that computers will continue to be a central part of their lives. Now they are engaging in this technology on their own terms. By starting up a computer club at their high school, they are establishing their own community in a hierarchical environment that can often be hostile for kids who do not conform to mainstream interests and activities. Both boys bring a DIY (do-it-yourself) ethos to the construction of their identities. Altimit participates in a DIY youth culture by drawing his own manga while Mac Man engages in a type of DIY capitalism by selling ramen and refurbished computers. An initial childhood interest in gaming led them to deeper explorations of computer technology. It is unknown whether, as adults, they will be able to find employment opportunities and continue to establish new forms of social organization that hold on to the same inquisitive spirit that drew them to games and computers in the first place.

### Nonmarket Work

Although most young people in our study were not engaged in paid work related to digital media, there was a substantial number of kids who were engaged in nonmarket work with new media. Amateur and nonmarket activities historically have been a place for middle-class and elite kids to "practice" work, develop creative talents, and gain experience in self-actualization and responsible work. While formal education can impart knowledge and skills, nonmarket work provides domains where youth can put these to practice in a context of accountability and publicity. Whether that context is a piano recital, helping out at a church, or being part of a soccer team, these activities are domains where young people can develop their identities as productive individuals engaged in serious and consequential work, in contexts where they can build reputations and gain public acknowledgments of their accomplishments. Lareau's argument (2003) is that these activities of concerted cultivation, which are pursued

vigorously in privileged families, are a site for the production of class distinction.

Children in working-class and poor families engage in fewer of these kinds of activities, and they are often expected to perform much more domestic work. The domestic work of cooking, cleaning, and child care contributes directly to the household economy but is invisible outside the home. These forms of nonmarket domestic work, while instilling a sense of responsibility and self-efficacy, do not build the broader networks of human relations and skills for navigating various contexts of publicity as you see in activities of concerted cultivation outside the home. While these forms of helping and domestic work can have many benefits to youth who engage with them (Orellana 2001), they are not directly tied to immediate participation in contexts of publicity with new media, with the exception of some of the categories of practice described in the previous section.

The relation between concerted cultivation and vocation is not straightforward, however. The same families who encourage sports, arts, and music as childhood activities also push their children toward traditional highstatus careers with more stable and guaranteed financial rewards. Uppermiddle-class youth who are avid fan producers, for example, are still pursuing traditional career paths through elite universities. One accomplished fan producer seemed puzzled by Mizuko Ito's question as to whether he might consider a career related to anime. "Well, first off, [my parents] would kill me. Secondly, I could probably make more as a biomedical engineer than anything in that neighborhood" (Ito, Anime Fans). By contrast, less privileged families might see creative-class careers as one of their few chances at upward social mobility, what one of Ito's interviewees described as a "pipe dream for a fancy job." In the previous section, we discuss some of the ways in which new media might provide broadened access to new forms of economic networks. We see how youth from a wide range of class backgrounds exploited these networks for economic gain. In the case of nonmarket work, household economic status is a stronger determinant of forms of participation. Here we see youth who choose to engage in unpaid labor in far-flung networks that makes no contribution to their household economy. While they are arguably gaining experience that will help them in their longer-term career aspirations, immersive participation in these activities is predicated on the fact that they do not feel pressures to engage in domestic work or paid work outside the home.

### **Nonmarket Peer Production**

Within the field of digital-culture studies, theorists are debating how to understand the "free" nonmarket labor that supports activities such as open-source software development, citizen science, game modding, fansubbing, and Wikipedia authoring. For example, Yochai Benkler (2006) sees "nonmarket peer production" as part of a fundamental shift from the market mechanisms that characterized cultural production in high capitalism. Other theorists see these processes as exploitation of users and consumers for the commercial gain of media industries (Ross 2007; Terranova 2000). These kinds of practices differ in important ways from traditional forms of volunteerism and community service, yet they may provide some of the same social benefits for youth. When examining youth practice in this domain, we need to negotiate a complicated tension. On one hand, it is important to value these activities as spaces where youth can engage in active forms of social organization and develop a sense of efficacy and leadership. Further, these activities are part of a "free culture" sharing economy that has a unique ethic of civic participation aimed at developing public rather than proprietary goods (Lessig 2004). On the other hand, widespread youth participation in unpaid digital cultural production is part of a resilient structural dynamic in which many constructive activities of youth are not "counted" as a contribution to economic productivity (Qvortrup 2001). The enthusiasm that media-savvy youth are bringing to nonmarket digital production represents a unique twist to these existing dynamics.

As part of Mizuko Ito's case study on anime fans, she has researched the practices of amateur subtitlers, or "fansubbers," who translate and subtitle anime and release it through Internet distribution. Chapter 6 describes 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. Although the quality of fansubs differ, most fans think that a high-quality fansub is better than the professional counterpart. 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. Fansubbing, like much of digital-media production, is hard, grinding work—translating dialogue with the highest degree of accuracy, timing how long dialogue appears on the screen down to the split second, fiddling with the minutiae of video encoding to make the highest-quality video files that are small enough to be distributed over the

Internet. They often work on tight deadlines, and the fastest groups will turn around an episode within twenty-four 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.

Similarly, fan conventions are organized entirely by volunteers, who at best might get a free hotel room for months of work in organizing an event for thousands of fans. Some of the most dedicated of convention organizers Ito interviewed described spending almost all of their vacation time and a substantial amount of their own financial resources to act as volunteer organizers. Gamers also pour tremendous amounts of time and energy into organizing online guilds and developing their own content to enhance the gaming experience for others, such as game reviews, walk-throughs, mods, and machinima. Because these activities are constructed as fan or player activities, and there are legal constraints on their monetization, participants are doubly hampered in translating these activities into personal financial gain. The nonmarket ethic of fan-based production is that this work is done "for fellow fans" and not for financial gain. This stance represents a kind of accommodation between fans and commercial media industries, in which the latter tolerates some degree of fan distribution and derivative works, provided they are not framed as commercial work.

## Box 7.4 Final Fantasy XI: Trouncing Tiamat Rachel Cody

According to Wurlpin,<sup>5</sup> a twenty-six-year-old white male in San Diego, "Final Fantasy XI is like a chat room with action in the background." The game is about the people. It is the peer groups—from friends to linkshells<sup>6</sup>—that provide motivation for many to log in to the game and make the game meaningful. The communities and relationships developed within the game extend beyond it into websites, forums, instant messenger programs, and email. The players chat with one another across servers or linkshells in these common spaces, sharing their strategies, advice, and questions. Working collectively allows a level of success in the game that would be impossible to attain individually. One of the most impressive acts of coordination and collaboration during my fieldwork was the slaying of the dragon Tiamat by the linkshell KirinTheDestroyers (KtD).

At the time of our fieldwork, Tiamat was one of the most difficult dragons in Final Fantasy XI. When linkshells were first attempting to kill her, Tiamat would often require more than two alliances<sup>7</sup> (thirty-six players) and four

hours of coordinated teamwork to defeat. Strategies to kill Tiamat had to deal with a variety of the dragon's special moves and abilities as well as an increase in difficulty for the last ten percent of her health.

Despite how daunting the fight seemed, KirinTheDestroyers<sup>8</sup> had spent the first half of 2005 taking on progressively harder areas and monsters in the game and wanted a new challenge. As Wurlpin told me, new activities "keep the game interesting" and "keep the challenge on." A successful defeat of Tiamat would demonstrate how far KtD had advanced in the game and the capabilities of its members. When KtD began discussing a linkshell attempt on Tiamat in June 2005, none of the linkshell members had experience fighting anything like Tiamat. KtD members had grown up together in the game as a linkshell, and nearly all the experience the players had with the game had been acquired through linkshell activities. And none of the linkshell activities had been dragons like Tiamat. It took the linkshell two months of effort, frustration, heartache, and brainstorming to be able to conquer the dragon.

The first attempt at Tiamat relied on the advice of a new KtD member, Bokchoi, 9 who joined the linkshell only a few days before the first attempt. Bokchoi, a twenty-two-year-old white male in Florida, came from the only English-speaking linkshell on the server that had successfully killed Tiamat, and brought with him a wealth of knowledge about the fight. Using the linkshell's website forums, Bokchoi provided the strategy that his former linkshell had used in its Tiamat fight. He used a screen shot of the fight, with arrows pointing where people should stand during the fight. Through text and the screen shot, Bokchoi explained where the fight would take place, where people would stand depending on their jobs, where the dragon would be kept throughout the fight, and what each job should do during the fight. Bokchoi warned the linkshell, however, that the strategy would need to be tailored to KtD's strengths and weaknesses:

I would like to say this is by no means the only way to defeat Tiamat and during the course of the fight the strategy can be altered to benefit from the linkshell's strengths and overcome any weaknesses. I would also like to say even going in with a proven strategy it is no easy fight, and in all honesty do not expect to walk away with a win. This fight takes a bit of practice and some reworking of strategies to enhance this basic strat to work for KtD. I think KtD has the numbers and the skill, just needs a bit of practice to get a fight like this down.

After reading Bokchoi's strategy, KtD members used the forums to form groups and discuss their individual moves for the fight. One officer debated between different moves that players could perform in the fight: "Spinning Slash is better for Tiamat. Spiral hell will do more Damage at 300% TP, but it's more efficient to do 3 Spinning Slash in the same amount of time." Other players used the forum thread to organize parties and coordinate their moves with one another. Coordinating with one another before the fight allowed KtD members to discuss ways to maximize their damage and efficiency.

The first Tiamat attempt was not successful. After several hours, the dragon was down to nine percent health before KtD was forced to leave because of sheer exhaustion. Tiamat had become much more difficult in the last ten percent of her health and KtD would need to modify its strategy to be successful. Despite not killing Tiamat, KtD's attempt became part of a larger conversation as many in the server's community watched and discussed the fight. As the linkshell left the fight with heavy hearts, a KtD member logged in and said, "I heard the news, it's all over the server. Lol everyone's talking about us." The mood in the linkshell brightened at this collective support and it started a battle cry of "TIAMAT!"

KtD didn't attempt Tiamat again for another month, using the time to discuss the first attempt, difficulties they had, possible solutions, and new strategies on their forums. More than fifteen players contributed to these brainstorming sessions. Once the main problem was identified—the tanks<sup>11</sup> were dying too fast—players relied on their experiences within the game to suggest solutions. As Fyrie,<sup>12</sup> a seventeen-year-old Asian-American in New York, suggested, "Next time we fight him, we definately need more NINs<sup>13</sup> to tank his last 10% left when he spams mighty strikes.<sup>14</sup> It was doing about 580~ to our PLD<sup>15</sup> and they fell in 2 hits." Some of these suggestions required minor changes, such as using different players for different roles or modifying the spells they would use. Other changes, such as using different subjobs, <sup>16</sup> required some players to spend hours or days leveling a new subjob. For example, Ghostfaced,<sup>17</sup> a nineteen-year-old white male in Oregon, offered to level his white mage subjob so that he could be more versatile in the fight.

Another major contributor to the strategy for the second fight was a new KtD member, Tacoguy. <sup>18</sup> He posted in the brainstorming thread, "Alright well i have a friend on a different server and him and his ls have taken down tiamat many many times and i asked him how do they do it so quick cause it takes them about 1:30 [one hour and thirty] minutes." Tacoguy served as a messenger between KtD and his friends on the other server, asking questions about the fight and posting their strategies onto the KtD forums.

KtD tried Tiamat again in August, armed with their previous experiences with Tiamat, the adaptations to Bokchoi's and Tacoguy's strategies, and their own brainstorming and hard work. The new strategies proved successful for the first half of the fight, but a minor mistake by one player had major consequences and the linkshell lost claim, or ownership, over the dragon, and KtD chose to withdraw rather than start over. Many in the linkshell were frustrated and angry that their hard work had not met with success, but a few remained positive. One member posted on the forums, "One way or another we should all be proud for doing what we have the past two attempts. Grats and a pat on the back to everyone."

In September 2005, KtD attempted Tiamat for the third time using the same strategy as in the second attempt. KtD members were confident that despite the mistake in the second attempt, the strategy would work. Members used the time between the second and third attempts to relax, better their gear, and increase their playing abilities through other activities. Quite experienced with the fight by this point, KtD's third Tiamat fight resembled a choreographed dance. The tanks were rotated out of the fight as they became exhausted; players moved in a cycle of positions as they fought, healed, were attacked, or rested; and the black mages had an elaborately ordered system in which they took turns casting special spells against the dragon. After four hours of this extremely coordinated and intense teamwork, KtD successfully killed Tiamat.

The conquering of Tiamat was a collective success; it was the work of more than fifty players who diligently combed through their experiences, outside videos and screen shots, and the experiences of their friends to create a successful strategy. They brought years of collective experience and ideas to the battles and brainstorming sessions, and their deaths in the dragon pit taught them even more. Screen shots and videos were researched by some members to suggest other successful ideas. Bokchoi became a mentor, and Tacoguy became a resource and messenger of questions for his friends, who had more experience with Tiamat. Throughout their journey, KtD members combined all that they knew or thought, laid it bare, disassembled it, analyzed it from every direction, demolished some parts and polished others, and then reassembled it to be a work of art. It was a strategy that took two months to perfect, but the success was worth the effort.

Another version of nonmarket work is the kind of involvements that youth have with online gaming economies that exhibit many of the same features as real-life economies, but that are quite separate from them. These involvements are most evident in multiplayer online gaming worlds (Castronova 2001; Dibbell 2006), but they also are an important part of sites such as Neopets or games such as Pokémon and Yu-Gi-Oh! that involve the buying and selling of game items. The grind of nonmarket work is familiar to any player in a massively multiplayer online role-playing game (MMORPG). Rachel Cody's case study of a linkshell's defeat of a high-level monster (see box 7.4) documents a culminating moment for players who have poured months of their time into the repetitive labor of "leveling" their characters by battling monsters and engaging in menial craftwork. Laura Robinson's study of Neopets (see section 7.5) illustrates

some of the energies that young people bring to these online economies, even though they do not translate to real-life capital.

Fan production and gaming production are not the only examples of practices youth engage in that involve many of the same disciplines of professional media production but that bring none of the financial rewards. Even an activity such as the creation of YouTube videos, which often seems playful and off-the-cuff, involves this kind of grinding labor to create good work. One of the youths Patricia Lange interviewed, Jack, a seventeen-year-old white male (YouTube and Video Bloggers), described a video shoot with a group of fellow homeschooled teens.

The environment was just, you know, torturous. And tempers were flaring 'cause we were all... we would be shooting day in and day out for, you know, sometimes for two or three days in a row, and we would just be sitting there and we'd get really mad at one another. And then looking back, we just always laugh at it because it's just so ridiculous that we're all sitting here in this hundred-degree weather with all this stuff around us, and we're just absolutely dying. Reshooting the same scene over and over again, and, you know, and it never just progressed anywhere.

Youth pour their energies into producing videos, writing fan fiction, making music, or recording podcasts, and they most commonly release their work on the Internet for free. At the time of Google's purchase in 2006, YouTube was valued at more than a billion dollars, capitalizing on the economy of freely shared amateur media production, for which creators did not earn a penny from the distribution of their work online. Although business models and terms of service for online sharing sites are changing, and there are more opportunities for amateur creators to gain revenue from online distribution, most amateurs, youth, and fan producers do not see any economic gain from their work.

These practices add a new twist to our existing understanding of volunteerism and civic engagement. Just as with more long-standing forms of youth volunteer work and internships, this nonmarket work is a space for young people to experiment with different work practices before they make commitments to jobs and careers. For example, in Ito's study of fansubbers, some described how poeple "retire" because "it wasn't fun anymore" or it was becoming too much like a "real job." Although the practices resemble market-based labor in many ways, they are still a form of volunteer practice that youth can drop out of with little material consequence. Still, relationships they foster with their peers in these groups provide opportunities for mentorship and for youth to take on identities as leaders and media pro-

ducers. Further, these activities are often animated by a civic spirit of sharing that takes "free culture" as a rallying point in working toward a cultural commons that is not dominated by commercial interests. At the same time, it is important to keep in mind the broader political economic conditions in which these kinds of engagements occur. Most of these more sophisticated forms of nonmarket online production are the province of relatively privileged youth who are pursuing these activities during college or other times in their lives when they are not under financial and time pressures to engage in domestic or paid work.

While we should look to these youth practices as examples of highly engaged forms of youth mobilization and creativity, we must also recognize how they remain embedded in existing structural conditions of inequity and in a robust set of commercial practices that define the contours of Web 2.0 industry. In many ways, the free-culture movement and industry attention to user-generated content are part of a cultural logic that is growing in salience and that defines a particular historic moment in the evolution of media and communications. We see youth innovation as central to defining these new genres of cultural participation, even as they are very much under flux, through a complicated set of struggles between different media industries and sectors as well as the everyday activity of youth and adults.

### Box 7.5 Eddie: Neopets, Neocapital, and Making a Virtual Buck Laura Robinson

Eddie is a precocious teen from California who is a self-described former Neopets addict. In his words, "I loved the economic stimulation!" Significantly, while some players talk about the social aspects of the site, for Eddie, Neopets was a solitary activity. He explained that while it was okay to play while he was in junior high, by the time he got to high school the younger players would tell the older players that they were too old. So Eddie continued to play, alone, in secret, long after it was "cool" for someone his age to play the game. For Eddie, the excitement of Neopets was rooted in the potential for economic activity; the interest in Neopets was almost solely for its economic ventures. When asked about his relationship with his pet, he said with a laugh, "I think mine all died! I never checked on them." For Eddie, the Neopets connection took place on the site's simulated financial sector through bank accounts and a stock market that absorbed all his attention. He elaborated, "I just wanted to hoard my cash to make more. I wouldn't waste my

points feeding my pets. I didn't want to buy them anything—just to play the market."

What is most interesting about this player is that all his activities essentially computed into the following equation: time = money. For him, time did not equal creative output, social relations, or fun. Rather, all activities were aimed toward the single overarching goal of amassing capital—neocapital. Eddie invested time in playing the games, not for the enjoyment of the games but for the economic points to add to his bank account. He relished checking his bank balances on Neopets and reported experiencing great satisfaction in doing so: "I would log in just to see my balances. It was really satisfying." When Eddie engaged in other site activities, it was always with an eye to capital acquisition. He explained that when he built a home or opened a store, he had the same goal in mind: time = labor = points = money. "It was simple; if it made me money, I did it." Unlike most of the other players who were interviewed, he stated that all the community-building activities on the site or the informal offline player communities were of little or no interest to him because they served no monetary purpose.

This interview is also interesting in that this player very self-reflectively stated that he "knew" Neopets was teaching an extreme capitalist agenda because all activities—regardless of the players' skills—would likely result in some kind of neopoint financial yield. In Eddie's opinion, the normative environment fostered by Neopets teaches an unrealistic expectation that financial gain will be the "natural" outcome of the varied site activities, which are rooted in making money via stocks, playing for points, and opening stores as financial ventures. Eddie cautioned that the Neopets stock markets taught kids an unrealistic view of the market. In his words, "Yeah, you have to be careful because it creates unrealistic expectations. I mean no stock market has stocks that only go up in value." He further reported that no matter the stocks, all stocks increased in value through time; Neopets players could be sure that if they bought low they would eventually be able to sell high. His own strategy was to always buy low-priced stocks when they first came out because, unlike in the "real" stock market, all neostocks increase in value through time. When asked if the value of stocks on Neopets fluctuated wildly, simulating "real" market activity, he said that in his own experience this was not the case. Rather, Eddie explained that all engagement in capitalist activities on the site produced positive economic yield. "There were highs and lows in the market fluctuations but never any real crashes. No one ever got wiped out."

Eddie further explained his own rationale for investing time and energy in the site. He said that the site whetted his appetite for the kind of stimulusresponse created by financial risk. Eddie also believed that his playing was

rooted in this extreme interest in the financial aspect of Neopets, an interest that grew through time. While Eddie made these connections regarding his own activities on the site, he did not mention any of the advertising that takes place there. Rather, for Eddie, the relationship to the site was framed as preparation for future financial success. His play on Neopets taught him how to save money, spend wisely, and invest in the future. While his connection with the site became centered on his capital- /revenue- /monetary-seeking activities, he claimed that it was always as a training field for his imagined adult practices. "You know I want to make money someday and playing all the time like that made me feel that it was all real. That everything had real consequences."

#### Conclusion

An exploration of different forms of work that youth engage in through and with digital media illuminates some important dimensions of youth participation in labor and economic activity. Throughout this discussion we see the resilience of existing forms of class distinction in structuring young people's access to particular job trajectories and their orientations toward labor and work. Further, youth labor has tended to be ghettoized into unskilled labor or informal economies that are generally framed as "helping" rather than activity with clear financial motives. New media participate in the production of these familiar distinctions. While recognizing these conservative tendencies and existing structural divisions, in this chapter we try to highlight the potential of new media engagement in changing some of these conditions by describing somewhat exceptional and innovative cases. If these cases are any indication of broader shifts, we are beginning to see evidence that new media are helping to open new avenues for young people to exercise new forms of agency with regard to labor and work.

Although it is rare for teens to get real jobs that make use of their technical and media expertise, their knowledge of new media can support forms of economic activity and work that were not previously available to them. We discuss this in terms of ways that kids can earn money through distributing their work, freelancing, and entrepreneurism. These forms of grassroots economic mobilization are particularly evident among youth

from less privileged backgrounds. By contrast, elite youth, particularly those who spend many years in higher education financed by their parents, often parlay their new media skills into the nonmarket sector. Much like how different forms of volunteerism and internships have functioned historically, networked peer production provides opportunities for kids to experiment with different forms of work and public participation. These activities, varying from creative production to fansubbing to virtual currency trading, are training grounds for participation in the twenty-firstcentury economy. The difference, however, between these and structured educational and preparatory programs is that youth who participate in these activities engage in work that is immediately consequential; these are not training exercises but activities that provide them immediate gains in the context of a network of peers or a broader audience of viewers and readers. Particularly in the context of the United States, where there are comparatively few high-quality apprenticeship and vocational programs for teens not on an academic track (Hansen, Mortimer, and Krüger 2001), these opportunities fill a social vacuum.

In our discussion, we try to work against the assumption that digital media are opening up opportunities to tech-savvy kids in the same ways. Kids from a wide range of economic and social backgrounds are mobilized around diverse forms of new media work. Though we have seen a general opening up of opportunity for participation in various forms of new media work, the vast majority of these engagements do not translate to paying jobs and successful careers in the creative class. Elite kids have access to the real-world social and cultural capital where they may be able to translate these skills to jobs and paid work, and they have a leg up on kids who do not have this social and cultural capital. Even among privileged kids, we see a tendency for them to see these forms of work as serious hobbies that are separate from their real-life trajectories, which guarantee them a stable future career through standard and well-established forms of education. By contrast, less privileged youth may look toward creative-class careers for new kinds of opportunities, but they may not have the social and cultural capital to translate their talents into careers. In either case, we see a growing space of creative-class work that is not directly tied to the day jobs of the people participating in them. The economies of P2P trading that are flourishing online, and the venues for amateurs to showcase their

work, are creating a new media ecology that supports these more informal kinds of work and economic arrangements. Across the class spectrum, we see kids and young adults choosing to participate in creative and technical work because of the pleasure of productive activity that they engage in on their own terms, regardless of whether or not there is economic benefit.

Whether the work is economic activity or nonmarket work, many kids are looking online for sites for exercising autonomy and efficacy and making their labor visible in a public way. Digital-media ventures are more attractive than the unskilled labor usually available for kids. Many motivated kids are not satisfied with a purely preparatory role and look for real-life consequences and responsibilities in the here and now. Many are ready for these responsibilities and launch successful careers online. Youth appreciate the opportunity to be "taken seriously" by their coworkers in forms of work that have clear productive benefits to others and where there is public validation and visibility. For others these activities are a way to experiment in certain forms of work without highly consequential failure. While educators have long noted the importance of learning in situations of real-life work and apprenticeships, there are relatively few examples of these forms of learning in the United States. Studies of Girl Scout cookie sales (Rogoff et al. 2002) give one example that does come from the United States, but many of the most celebrated examples in the literature come from cultural contexts where kids are engaged more directly in economic activity (Lave and Wenger 1991; Nunes, Schliemann, and Carraher 1993). Aside from volunteerism and concerted cultivation, which are framed more as preparatory activities, kids in the United States have few contexts for this kind of learning. The cases we describe, by contrast, are about new media's providing access to high-stakes and real environments where learning has consequences on kids' and others' lives.

The ways in which new media intersect with youth's activities of work are indicative of the complicated role that youth labor has occupied in modern society. Although youth were largely shut out from the formal, high-status labor economy, they have continued to work in a wide variety of forms. New media are making some of these activities more visible and valued, in part because of young people's new media literacy, which can often exceed that of their elders. The examples of youth practice, in turn, are part of a broader restructuring of what counts as work and productive

labor, one that sees a greater role for the informal, peer-based economies that have unique affinities with the social positions and cultures of young people. While the relationships between these peer-based economies and existing commercial sectors is still very much under negotiation, we can expect that the activities of youth today will result in resilient changes to the relationships among public engagement, cultural exchange, and economic participation.

### **Notes**

- 1. "New economy" generally refers to a shift from an industrial and munfacturingbased economy to one centered on services and knowledge production. Information technologies are considered key elements of the infrastructure supporting the new economy.
- 2. "Crowdsourcing" describes the process in which work that used to be outsourced to a contractor is now performed by an undefined, large group of people in an open environment. Some examples of crowdsourcing are collective citizen-science projects, some of the work of MoveOn.org, or Wikipedia.
- 3. "Caitlin Hill" is her real-life name.
- 4. "Ian Oji" is a real pen name.
- 5. "Mercykillings" is a real screen name.
- 6. "Wurlpin" is a real character name.
- 7. "Linkshells" are in-game communities that require invitation, have dedicated chat channels, and often have their own organized activities. They are like the guilds of other MMORPGs.
- 8. An alliance is a group of three parties.
- 9. KirinTheDestroyers is the endgame linkshell in the MMORPG Final Fantasy XI with whom I did fieldwork.
- 10. "Bokchoi" is a real character name.
- 11. Spinning Slash and Spiral Hell are both moves within the game that can be done using a resource called TP.
- 12. "Tanks" are players whose role is to "take the hits" of a fight. Certain jobs are more beneficial for this role because of health, abilities, and gear.
- 13. "Fyrie" is a real character name.
- 14. "NINs" are ninjas, who have an ability that absorbs damage.

- 15. A "mighty strike" is a special move of Tiamat that does a lot of damage.
- 16. "PLDs" are paladins, another tanking job.
- 17. "Subjobs" are a secondary job that players can have to supplement their primary jobs.
- 18. "Ghostfaced" is a real character name.
- 19. "Tacoguy" is a real character name.

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# Hanging Out, Messing Around, and Geeking Out

Kids Living and Learning with New Media

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