Laura Robinson

A TASTE FOR THE NECESSARY A Bourdieuian approach to digital inequality

While American teenagers are often presumed to be uniformly 'wired', in reality, segments of the youth population lack high-quality, high-autonomy internet access. Taking a uniquely holistic approach that situates new media use within respondents' larger lifeworlds, this study examines the effects of digital inequality on economically disadvantaged American youth. Analyzing primary survey and interview data, findings reveal the roles played by spatial-temporal constraints and emotional costs in creating disparities in usage and skills among differently situated respondents. A close examination of the interview material discloses a dramatic divergence in the informational orientation or habitus internalized by respondents with more- and less-constrained internet access. Drawing on Bourdieu's concept of skholè, the work outlines the differences between the playful or exploratory stance adopted by those with high-quality internet access and the task-oriented stance assumed by those with low-quality internet access. Analysis reveals that those with low-autonomy, low-quality access enact a 'taste for the necessary' in their rationing of internet use to avoid what they perceive as 'wasteful' activities with no immediate payoff. The article closes with an eye to developing a theory of information habitus, a potentially invaluable concept in future research on digital inequality.

Keywords digital inequality; information habitus; skholè; web searches; web surfing; time

The internet continues to engender new forms of communication that alter the contours of the social landscape significantly for individuals with plentiful access to information resources (Castells 2000). Much attention has been paid to the ways in which offline hierarchies of knowledge production and dissemination are being challenged and transformed, thanks to participatory opportunities engendered by new media. However, the utopian discourse prevalent in much internet scholarship often fails to acknowledge that these benefits are not diffused equally to all.



In his work on deepening digital inequality, Van Dijk (2005, pp. 178–179) surmises that 20–35 percent of individuals in developed societies are still 'excluded' from new media resources. This is certainly true in the United States where a significant percentage of the American population does not yet have even 'occasional' access to internet technologies (Pew Internet and American Life Project 2008). According to the Pew Internet and American Life Project's 2008 report on the demographics of American internet users, there are still significant variations in basic access to the internet. Only 53 percent of individuals from households with less than \$30K annual income, 63 percent of rural populations, 44 percent of individuals with the lowest levels of educational attainment, and 35 percent of those 65 and over use the internet 'at least occasionally'.

However, despite such persistent disparities, the gravity of digital inequality remains largely understudied (DiMaggio et al. 2004). Although researchers have recognized that digital inequality is not a simple dichotomy of 'access' versus 'no access', there are still but a handful of studies that examine how digital inequality is related to larger social inequalities (DiMaggio et al. 2004; Hargittai 2008; Hargittai & Walejko 2008; Mossberger et al. 2003; Robinson 2007a; Warschauer 2004). In fact, as a critical mass of the American population reports at least occasional exposure to the internet, some studies are moving towards emphasizing participation inequalities (Jenkins et al. 2006) rather than exploring the nuances of access inequalities. Further, other studies emphasize 'preference' as a significant determinant of new media engagement rather than economic disadvantage (Horrigan 2007).

While issues of preference and participation inequalities are important, they should not draw our attention away from the deleterious consequences of insufficient or low-quality access to the internet. Even more serious, almost no attention has been paid to teenagers lacking access to the most basic internet resources, due to the highly problematic assumption that almost all American youth enjoy internet access. Much research conceptualizes all youth as 'digital natives' (Prensky 2005) who enjoy full, unfettered, and continuous access to information technologies, overlooking the large populations of young Americans who lack adequate quality access to new media (Robinson 2007b). Glossing over the amalgamation of qualitatively different kinds of access encourages the erroneous conclusion that consistent quality access to information technology (IT) resources is no longer a salient problem for American teenagers (Lenhart et al. 2005, 2007). When generalized to all teenagers, such assumptions emphasize the experiences of economically privileged youth who enjoy unfettered access to a rich array of information technologies.

Unfortunately, such interpretations may be bolstered by otherwise valuable studies relying solely on quantitative measures of 'at least occasional' use of the internet as determining access. For example, Pew (2008) reports that 90 percent of all 18–29-year-olds use the internet 'at least occasionally'. Another survey

reports that 94 percent of 12–17-year-old Americans use the internet 'at least occasionally' for school research (Lenhart *et al.* 2008). Using such measures effaces the differences between youth with favorable and unfavorable conditions of access. Further, it homogenizes the experiences of the more and less advantaged segments of what is implicitly presumed to be a uniformly 'wired' population. This limited angle of vision ignores the serious implications of digital inequality for economically underprivileged young people, many of whom still must struggle to achieve the barest levels of access to digital resources.

Because so few researchers have unpacked what respondents mean when they report going online 'at least occasionally', it is easy to misinterpret this finding to mean that almost all youth have quality access to digital resources. Although teens are clearly the most wired segment of the population (Van Dijk 2005), many economically underprivileged teens have yet to enjoy regular, let alone equal, access to information technologies. Almost no work has explored the challenges to access still experienced by the most economically underprivileged American teenagers who are still able to report 'at least occasional' internet use. Failing to acknowledge the heavy opportunity costs levied on youth from economically underprivileged households who cannot afford either regular or quality internet access leads to an underestimation of the serious consequences of digital inequality among teens who suffer from access inequalities in tandem with spatial-temporal constraints.

To begin to fill these lacunae, this study takes a mixed-method approach to tease apart how differently situated youth report their experiences in accessing the internet. The analysis draws on survey data and in-depth interviews among economically underprivileged teens in an agricultural belt of California. The study situates new media practices within the constellation of respondents' everyday practices and constraints. The research reveals that going online 'at least occasionally' has vastly different meanings and ramifications for differently situated American high school respondents. In uncovering how economically underprivileged youth experience the costs and benefits of using the internet, the study situates information-use practices within their everyday contexts. Shedding light on the ramifications of spatial-temporal constraints and attendant emotional costs, the work reveals linkages between digital inequality and larger social inequalities.

My findings reveal how youth with no or low-quality home access must surmount significant spatial-temporal barriers and bear emotional costs in order to gain nominal internet use. These costs are non-existent for their counterparts who enjoy high-quality home access. Consequently, the study explores how different qualities of access and associated opportunity costs result in opposing orientations towards appropriate internet use. Respondents with high-quality home access take a positive view of investing time in web surfing, confident that their investment will be rewarded by global knowledge acquisition. By contrast, due to constraints and opportunity costs, no and low-quality access

respondents take a more task-oriented view of internet use. In sum, those with high-quality home access have different experiences, attitudes, and skills than their counterparts with no or low-quality home access.

My examination of access-rich and access-poor 'strategies of action' (Swidler 2001) reveals how constraints, opportunity costs, and social pressures concerning access shape respondents' attitudes towards appropriate use of IT. Further, analysis shows that the link between access and skill development is mediated by these orientations. The interplay between constrained access and associated orientations creates a feedback loop, which has a deleterious effect on skill development. In sum, those respondents with high-autonomy and high-quality access enjoy the temporal and material resources to web surf at will. While gathering information for their school assignments, they report being positively disposed towards investing time in unstructured information seeking because they perceive that surfing enables them to acquire a greater body of global knowledge that further enhances learning. Free of temporal and material constraints related to access, they spend greater amounts of time surfing. This greater temporal investment then enables them to hone their information-seeking skills.

By contrast, the heavy constraints on access and the limited spatial-temporal resources that burden the most economically disadvantaged respondents negatively impact skill acquisition. To meet their most pressing needs, these teens are constrained to undertake a task-oriented approach to internet use. For them, surfing is a dispensable luxury due to its costs. However, spending less time seeking information ultimately hinders them from developing more sophisticated skills. Because they lack the resources necessary to improve their skills, they are unable to extract maximal benefit from the limited resources at their disposal. As a result, these respondents find information-seeking operations more challenging and suffer more emotional costs than do their more privileged counterparts. Ultimately, for them, access to the internet does not provide the same benefits per unit of time as it does for their more economically privileged counterparts.

Thus, although disparities in the level of internet skills between more and less advantaged youth do originate in inequalities of access, they are mediated by orientations that can only be understood in relation to total life contexts. Making sense of the relationship between life context and the informational orientation or habitus necessitates Bourdieu's concepts of skholè (1994) and habitus (1980). In the concluding section, I draw on these concepts to analyze the dramatic divergence in informational habitus internalized by respondents with varied access to primary resources. As my analysis will show, in order to grasp how individuals relate to IT resources, we need to first understand how their informational habitus emerges from their experiences of scarcity and abundance with respect to other primary goods. As will also become evident, the enactment of these dispositions creates distinctive patterns of usage that are best understood as outcomes of the different forms of habitus that correspond to Bourdieu's opposed categories of 'playing seriously' and 'the taste for the

necessary'. More specifically, my findings show how high-access, high-autonomy respondents adopt a playful or exploratory stance towards online information seeking, a stance intimately related to skholè. Significantly, this playful information habitus allows these individuals to derive the benefits that accompany open-ended roaming and browsing. By contrast, respondents without plentiful resources are doubly constrained in terms of both access and autonomy; as a result, these individuals develop a task-oriented information habitus in which they enact a 'taste for the necessary' in their rationing of internet use. Experiencing temporal and emotional pressures, they eschew any activities that are not directly related to their schoolwork and the other online tasks that occupy their attention. Yet, the enactment of this disposition is ultimately counterproductive. For, in working hard and avoiding what they perceive to be 'wasteful' activities with no immediate payoff, these respondents are denied the benefits that accompany open-ended roaming and browsing. In this feedback loop, 'playing seriously' and developing a 'taste for the necessary' create opposing forms of information habitus that engender further disadvantage. By drawing attention to the mediating influence of these dispositional patterns, this article develops a theory of information habitus, a concept indispensable to understanding digital inequality.

Data and methods

The project employs multiple-method analysis of digital inequality among economically disadvantaged youth in an agricultural belt in California. Respondents are ethnically and economically diverse. Latinos, African-Americans, Filipino-Americans, and whites comprise 82 percent, 2 percent, 3 percent, and 9 percent of the population, respectively. Sixty-four percent of respondents qualify for free lunch, indicating that the most economically disadvantaged come from families with incomes falling below federal poverty measures. The students' lives are marked by a pronounced lack of temporal and spatial flexibility and autonomy. Students attend a public high school that largely depends on a single formal lab facility open regularly to students and a limited number of mini-banks of computers, many cobbled together from older equipment in scattered locations across campus. Despite living in a typical California car town (see American Graffiti (Lucas 1973), or more recently, Drag Race High (Christensen 2007)), many students do not own a car or have consistent use of a vehicle. They must rely on the school bus for transportation to and from home. If these students miss the school bus or need to go to the public library, many must pay to take public transportation. Even so, as in so many other car towns, traveling by public transportation rather than by car is extremely time consuming.

The data is analyzed using a mixed-method approach combining two years of ethnographic fieldwork, interviews, and a survey. From 2006 to 2008, I conducted

participant observation in the classrooms, computer lab facility, and campus of a high school serving a significant number of students from low-income households. In addition to ethnographic engagement encompassing informal interviews with respondents and educators over the two-year period, I also conducted formal interviews and small focus groups with 67 respondents. Complementing these qualitative approaches, I also designed and implemented a survey administered through the English Department. Because all respondents must take four years of English courses, this strategy resulted in the survey being administered to the universe of respondents enrolled in regular classes in the English Department in the spring of 2007 (N=850). As the data is drawn from a single case study, the goal is to provide rich analytic description of understudied phenomena rather than claiming to generalize the findings to any larger population.

Findings

Despite a host of spatial-temporal constraints, respondents report a keen awareness of the importance of the internet for their schoolwork: 66 percent report that the internet is highly or very important. Another 25 percent rate the internet as important; only 9 percent report that the internet is less or not important to their educational success. However, many also report low-quality material access to digital resources. Despite limited or poor-quality access, many respondents remain motivated information seekers. Analysis of the data draws on Van Dijk's (2005) representation of access as a spectrum in part defined in terms of material and temporal resources. The examination compares permutations in access to digital resources in terms of quality of material resources in the home and the opportunity costs of seeking internet access outside the home. In so doing, it substantiates Van Dijk's (2005, p. 32) claim that 'many people assumed to be included are in fact nonusers' and indicates why studies reporting 'at least occasional' internet use may obfuscate enormous variation in quality of access.

The figures below indicate the range of access to the internet. Figure 1 shows that 42 percent of respondents report using the internet in some capacity for at least five years, and 34 percent report using the internet between two and four years. However, the remaining 24 percent of respondents report having little exposure to the internet in terms of temporal duration: 3 percent of respondents had never used the internet, 14 percent had used it under one year, and 7 percent report using it for just one year.

In addition, although the vast majority (97 percent) of respondents report being exposed to the internet in some context, Figure 2 shows that only 31 percent of respondents report having high-quality home access. Another 35 percent of respondents report low-quality access, and 34 percent had no home access.

Figure 3 shows that almost 50 percent of respondents report relatively infrequent internet use measured in hours per week. Just under one-half report fewer

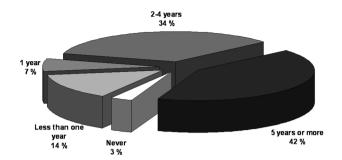


FIGURE 1 Duration of exposure to internet.

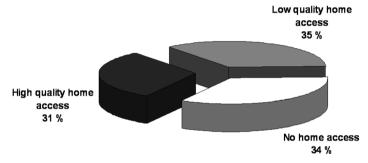


FIGURE 2 Home access.

than two hours per week of internet use: 23 percent report using the internet under one hour per week, and 24 percent report using the internet between one and two hours per week. Just under one-third of respondents (30 percent) claim to go online 3–6 hours per week, with less than one quarter (23 percent) reporting over seven hours of use per week. There is significant clustering: 81 percent of high-quality home access respondents report using the internet seven or more hours per week, compared with only 6 percent of respondents without any home access.

Material resources, opportunity costs, and temporal constraints

When asked where and how often they used the internet, the 34 percent of respondents without home access qualify their access to the internet outside the home as sporadic or limited by spatial-temporal constraints. Angie reports, 'I don't have a computer at home and sometimes I really need it and can't get access to one for one reason or another' (Note: all names are pseudonyms, and, when necessary, grammatical errors have been corrected for clarity).

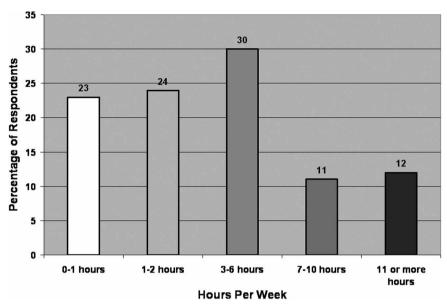


FIGURE 3 Hours per week online.

These respondents explain that although it is often difficult, they attempt to obtain access either in public venues or by using social networks: 'I have to go to my cousin's, friend's house, or school library to get access to the internet'. Regarding public venues, almost no respondents report using free WiFi, such as that offered by the nearby Starbucks, because they do not own laptops. As such, they rely on obtaining public access either in the school or in the public library. When asked about going online in such venues, they describe their experiences as lacking the most basic autonomy of access due to opportunity costs associated with significant spatial-temporal constraints.

Most often, these individuals frame their experiences in terms of opportunity costs. This is particularly clear in the case of school access. Only 31 percent of the respondents report being able to use the school computer lab facility at least once every few weeks because of the scarcity of resources. Vladimir reports: 'There are a limited number of computers available in school and sometimes there are not any computers available'. They report having to make choices because the school's single formal lab facility provides insufficient connectivity for the sheer numbers of students eager to use the terminals during breaks, lunch, and the one hour that the facility is open after school. Respondents without home access describe their experiences jockeying to get computer access at school as carrying significant opportunity costs. Alejandra explains, 'It is about choices. I mean if I want a computer I know that I have to be there first. So sometimes I can't buy or even eat lunch — that's it: eat or get a computer'. Josh relates, 'I have only an hour to check for college stuff online because the

school computer lab closes early. That means sometimes that I have to decide between going to the lab and doing something else I need to do'. Susanna confirms, 'Yeah. I don't have a computer at home, so if I have somethin' for school, I have to find a way. If I can't get a place at lunch, I have to stay after school since my chemistry teacher makes us email all of our assignments ... and if I stay after school that means that I won't have a ride home 'cause I will miss the bus'. In sum, these students must choose to access some resources and forgo others.

Using the internet at the public library also carries significant opportunity costs, especially in terms of time spent on public transportation and time 'wasted' waiting in line. Only 22 percent of respondents without home access report attempting to use the internet at the public library because their attempts to use computers at the library carry consequential temporal burdens. Claudia explains: '[there are] people are on the internet in the public library and so you have to wait in line. It takes up too much time'. Paul details his experience waiting in line, 'Yeah you have to wait in line forever. You can't even go to the bathroom. One time I had waited and waited and I really had to go. So I finally went even though I was next in line because right at that moment there was no one behind me. When I came back there were five people! I had to wait all over again. I was so frustrated'. Ivan elucidates, 'I don't have a computer at home and to stay or go to the library is hard. Then I won't have transportation home and I'll be late to my house'. Lucia offers, 'Yeah most of the time I waste way more time just going to library and then getting home than I get to use the computer'.

Repeatedly, these respondents report a domino effect caused by a lack of autonomy associated with physical movement, which is part of a larger scarcity of spatial-temporal resources. Because they do not have home access, they must invest time in transit to public access and in waiting to use public terminals once they are there. Here we see that respondents' lack of both a private computer and a private vehicle exacts multiple temporal tolls, making their remaining time even more valuable and leading them to avoid time 'wasting' activities. Further, these respondents explain that because their time is in short supply, many cannot often afford the temporal cost of going to the library since they have to work after-school jobs to help their families.

Respondents explain that their lack of spatial-temporal autonomy is caused by their lack of economic resources. According to Sergio, 'I don't have time to go to the library because of work'. Jamie recounts that, after his father died, he became responsible for paying the family's utility bills from his after-school job: 'After school I just go either straight home to help out, or go straight to work to help out ... So yeah, it makes it very hard ... that's very hard ... time restrictions ...' Faced with hard choices between pressing economic and familial needs, these respondents frame themselves as not really having a choice. Jenny explains: 'I don't have it at home and don't have time to go places like the library ... my mom needs me at home to watch my brothers and to help out while she is at work, so that's what I gotta do'.

Spatial-temporal constraints and emotional costs

Even when respondents are able to surmount these barriers and obtain physical access to the internet, they report feeling pressured and stressed, which they attribute to temporal scarcity. Feeling pressed for time, they experience emotional angst because they are routinely unable to get adequate time online necessary for their schoolwork. Even when respondents are able to put in the time waiting in the library, they caution that public access has emotional costs on top of temporal costs. Respondents explain that even after long wait times in line, the library limits terminal use to thirty minutes, a situation that they state is extremely stressful for them. According to Manuel, 'I don't have a computer any more . . . it broke down, and it's stressful to go to the public library because a lot of people are using the internet there and you have to wait in line for a long time'. Kim relates: 'You only get thirty minutes and that's it. If you want more you have to wait in line again ... so you'll try to be working but the whole time you'll just be stressin' that you won't finish in time'. Even worse, Maria says that she is always in danger of losing her work: 'If you lose track of time, you lose all of your work because they don't give you any warning. The computer just goes beep beeeep and like it's gone. All of it. And you can't get it back'. On several occasions during interviews, respondents spontaneously mimicked the beep beeping sound of the library computers and discussed the anxiety that it and other temporal constraints induced because they could not save their work fast enough. Stephanie offers: 'I can't even really concentrate on what I am doing because I am so stressed that I will run out of time'.

When those without home access are unable to invest the time required to travel to and use public resources during business hours, they try to obtain access through family and friends. However, they state that using social networks also carries emotional costs. Amanda elucidates feeling conflicted between her need to get access and the emotional burden this carries, 'When you have to research a paper, you have to go online and you have to be bugging your relatives'. George confirms, 'Like I don't have a computer no more. It broke. But it's stressing always asking people to use their computers'. Jorge describes, 'So I can go to her house to use it, but I feel bad when she wants to talk to me and I think to myself, "Can't she just leave me alone so that I can do my work?" ' As these situations indicate, these respondents state that they are often 'stressed' when they need to do online research for school because they have to spend temporal resources and emotional energies to obtain basic access to the internet. Finally, respondents also describe feeling stress because they know that despite their best efforts and intentions, sometimes these strategies will fail and leave them unable to do their work. As Stephano reports: 'Sometimes I can't find a ride to a friend or family member's house to use their computer . . . it's stressful ... not having it at home is hard'.

Using the Internet at least occasionally

The dilemmas caused by spatial-temporal constraints and the attendant emotional costs common to the 34 percent of respondents without home access are also shared to varying degrees by those respondents who have low-quality home access. Of the 66 percent of respondents reporting home access, over one-half (35 percent) report constraints that limit the quality and/or duration of their home access. These include insufficient financial resources to pay for uninterrupted home internet service, 'old' and 'slow' hardware or software, sharing access with family, and dial-up connections. For these reasons, many of these respondents experience similar temporal constraints and associated emotional costs as experienced by those without any home access.

Respondents living in precarious financial situations cannot always afford internet service provider fees. When this occurs, their families are forced to shut off their service. Sergey explains: 'We had it, but it cost a lot. Maybe next week we'll have it again'. These respondents report never really knowing if they can count on access at home. For Bill, 'It was too expensive, but who knows we might get it again'. Christina describes her situation, 'We have a computer but we can't really afford internet right now'. Joaquin reveals similar circumstances, 'We didn't have the money to pay the bill this month so we don't have it right now'. Because these individuals cannot rely on having internet access at home, they report emotional anxiety. For Lucy, 'Well ... well ... ya just don't know if you're gonna have it. And if you don't ya have to scramble and ya get all stressed out'.

This precarious state of affairs is also true regarding the poor quality of their home equipment, which does not always work well or at all. Although they report having home access, respondents rely on low-quality and unreliable equipment that does not always function or eats up scarce temporal resources because it is so slow. Relying on old computers that had been cobbled together, respondents explain that their computers are old, second-hand acquisitions. Lisa reveals, 'I don't have an updated computer so it doesn't work so well'. Bob articulates, 'My computer is slow and old'. Max relates, 'It's old so sometimes the computer has connection problems'. These respondents cannot rely on their computers, as Josiah and Tim explain: 'The computer we are using is really slow, and it shuts down automatically sometimes' and 'It was slow, but then it just stopped working. Maybe it has a virus or something. But we still have it'.

Many with 'slow' or 'old' computers report temporal constraints and emotional costs associated with sharing access to a single computer with all immediate family members, as well as extended family or friends without home access. This situation creates a time bind, as Josiah explains, 'There is just one computer and four of us using it ... so I never get enough time'. Nicky expresses the emotional burden described by many similarly situated

respondents, 'Well I just need more internet at my home because it's hard for me to look for something because it's slow and it gets me frustrated. Also because I have to share with my sisters and brother'. Jose describes how these frustrations come together, 'I have to share with the rest of the family taking turns on the computer, and the internet connection such as dial-up is way too slow!!!'

As Jose's situation indicates, in addition to the temporal limitations and aggravation caused by older equipment and sharing with family members, 37 percent of those with home access are still on dial-up. Tina reveals that this imposes yet other temporal constraints: 'We have dial-up so if someone is on the phone I can't use the computer on the internet'. In these respondents' homes, a single phone line is a shared resource for all familial phone calls and internet access. Alex explains, 'At my house we have to disconnect the phone and put the cord that gives connection to the internet and sometimes it disconnects itself'. Further, 10 percent of respondents rely on dial-up with a limited number of hours because it is all that their families can afford: 'I sometimes have trouble getting on the internet because there are no signals at home - I have cheap internet service'. Repeatedly, respondents relying on low cost or free dial-up complain of slow or unreliable connectivity. Sonia reveals, 'The connection is real slow' ... 'sometimes the computer has connection problems'. Debbie emotes, 'So like I just look at it, and it is like just thinking, thinking and I'm just like go! go! ... probably wait for it more than I use it ... really pisses me off'.

Access and attitudes: web surfing as investment

Previous sections have detailed the spatial-temporal constraints and attendant emotional costs ensuing from lack of quality internet access. In this section we see that juggling a variety of temporal constraints, emotional burdens, and opportunity costs has very real consequences regarding how respondents define appropriate use of the internet. Differences arise between those who experience internet access as plentiful and those who experience it as a scarce resource. The temporal and emotional barriers to access experienced by those with no or low-quality home access result in very different attitudes towards different online activities than for those respondents with high-quality home access. When asked, 'Do you think that surfing or browsing makes your school work better?', opposing understandings are articulated by these two groups.

Respondents with high-quality home access do not have to 'waste' valuable temporal resources on slow public transportation, waiting in line, or waiting for slow equipment to function. Because the internet is always available to them at home, they do not report feeling the spatial-temporal constraints common to their counterparts with no or low-quality home access. As Julia states, 'There are no problems getting access to the internet because it's in my

room at home'. Joey concurs, 'My family has two computers available to me at home . . . I can use it whenever I want'. Free to go online whenever they want for however long they need, these respondents define web surfing as a pleasurable leisure activity. Margarita explains, 'Sometimes I just look things up for fun when I'm done looking things up for school work'. Rosanna confirms, 'Sometimes I search for school work and one of the search results catches my eye and I just wind up reading it instead'. Unlike those respondents who must struggle to obtain access, these respondents do not experience the emotional costs or stress associated with budgeting their internet time.

Further, high-quality home access respondents understand web surfing as a valuable activity in which to invest time. Even if surfing is not directly related to their task at hand, they understand the result of surfing as producing positive benefits more globally. Rosita explains, '[Web surfing] makes [your schoolwork] better because then you have more to write about or talk about. You never know when something is enough. It doesn't distract you because by looking around you will be encouraged to learn more about your subject.' Simon affirms, 'I think it helps in a way because you get more knowledge about other things and you can answer the questions more creatively by remembering what you read . . .' In sum, respondents enjoying high-quality home internet access see a positive relationship between web surfing and learning, 'You get to gather more information and at the same time you're learning something new you didn't know before'.

Access and attitudes: web surfing as luxury

By contrast, scarce access results in very different understandings of the benefit of web surfing. Respondents with no or low-quality home internet experience access as a scarce resource forcing them to carefully husband their use. Because they lack abundant access, they report having to make each minute of internet time count for what they frame as valuable activities. Where high-quality home access respondents frame surfing as being globally beneficial to the learning process, no and low-quality respondents do not see this connection as relevant to their immediate needs. Rather, they describe being goal-oriented agents who must focus on task-specific internet activities as appropriate use of resources.

Because they struggle to obtain access, these respondents frame surfing the net as a luxury. They believe that they cannot afford to engage in surfing because it does not garner them results directly related to tasks they need to complete in a timely manner. Instead, these respondents report needing to have an on-task attitude in order to gain the maximum benefit from every precious minute of time online. When asked about surfing, overwhelmingly, respondents with no or low-quality access articulate that every minute of internet time must be used for school assignments. Rosaria explains, 'Surfing takes away time

because since I have to be concentrated on school it would distract me from doing my school work'. Because they must cobble together shorter periods of access, they frame surfing as a negative use of time. For Ben and Joe, surfing is an opportunity cost they cannot afford, 'Surfing makes me distracted and takes my time away' and 'Surfing takes time away from school work'. Rather, they must take a utilitarian view towards appropriate internet use. Yolanda articulates: 'Surfing takes away time that I don't have, so I don't do it'.

Repeatedly, these respondents employ this logic to any use of the internet that is not task oriented. Jamie describes his frustration at having to wait to use the internet at the library for schoolwork when others are using it for 'wasteful' activities:

The line. The line's like long to get on — and when I went I didn't even want to stay. I didn't want to . . . Because it's like you want to get things done and it's like you have the time limit and everything . . . It's like — yeah, there are people that are on the computer on their MySpace forever . . . it's just like it's a waste of time really because you could be doing other things that are like, you know, like more valuable to be doing other than writing people on MySpace . . . It's just like a big waste of time for me.

Ana relates, 'So I'll be waiting in the library to do my report and I'll see all of these people wasting time just messing around. And all I can think is that I have to get my report done and these people are wasting their time — my time — on this stuff that doesn't matter'. Pinched by spatial-temporal constraints and attendant emotional costs, these respondents express negative judgments towards themselves and others for 'frittering away' resources on unimportant activities. For them, the costs associated with obtaining access result in differences in attitudes towards appropriate or valuable use of the internet as a resource.

Searches, skills, and satisfaction

Further, differences in access and accompanying attitudes also have positive and negative outcomes in terms of information-seeking skills. To examine this phenomenon, respondents undertook an information seeking and evaluation exercise using Google. They were asked what search terms they would use if asked to 'Trace the sources of Shakespeare's plays from previous writers'.

Respondents with high-quality access to the internet display better information seeking and evaluation skills. Those with high levels of quality access perform sophisticated internet searches for research queries using multiple search engines, Boolean search terms, and paraphrasing. The majority of these respondents report using multiple searches with targeted terms such as

'sources of Shakespeare's plays', 'sources of Shakespeare's plays by previous writers,' and 'what sources by previous writers did Shakespeare use in his plays'.

As Orlando explains, 'I'll type in both Shakespeare's plays and Shakespeare's plays from other writers'. These respondents also are adept at using Boolean searches as Leticia and Janine articulate, 'I'd use trace the sources of Shakespeare's plays from previous writers without the quotation marks' and 'I'd use sources of Shakespeare plays + previous writers'. They also paraphrase their search terms including 'what inspired Shakespeare plays' or 'Shakespeare's inspirations'. Significantly, they perform multiple searches even if they have already found answers. Ken details, 'I can't agree with the information on one website. It MIGHT be correct, but I will have to cross reference it'.

These respondents report positive outcomes for both their searches and their experiences. As Angelina describes, 'The researching was fast and I didn't have trouble with anything . . . also the information was given in the first website'. Roberto reports a similar result, 'I believe that the search was quick. There were easy ways to find the results I was looking for'. Tommy confirms, 'The second link took me to a site where the question was answered concisely and completely'. By and large, these respondents report the activity as easy for them, 'I found the answer on the first try'.

Searches, skills, and compounded emotional costs

By contrast, no and low-quality access respondents largely lack these same sophisticated search skills. They also report far less satisfaction. Given the same prompt, these respondents repeatedly perform single searches using vague or broad search terms. The most common include 'Shakespeare', 'Shakespeare's plays', 'Shakespeare online', 'writers plays', and 'plays'. Where high-quality access respondents open multiple windows and run different search engines simultaneously, these respondents take a much more linear approach. They exhaust each search before moving on to another.

They work just as hard, but do not enjoy the same outcomes because they lack the skills to perform targeted searches. Less-skilled searching results in statements such as, 'I cannot find anything' and 'It won't give me a specific answer'. Instead, these respondents must wade through results often unrelated to their desired query. Bobbie articulates, 'I was frustrated. I could not find an answer'. Katrina confirms, 'It did not give me the information that I wanted'. Doing the exercise, many of these respondents are not able to move on to a second or third search because they become mired down. Due to search strategies that have not been honed through plentiful access, their searches are far less effective and potentially require even more time.

Being less able to search for information for their school work effectively forms yet another negative feedback loop. These respondents have the least online time at their disposal, yet are less able to use time effectively. Jamie explains, 'I haven't really found a lot of information that I needed, or either that it was too confusing for me to look at, I guess. Like I was only — I was just trying to skim it just to see if I can get some information quick, but I wasn't used to it'. When this occurs, the emotional burdens of temporal constraints become further compounded. Geared towards on-task engagement, these respondents express frustration when they are confronted with off-topic information. As Linda emotes, 'There was just so much information'. Joanna describes, 'It gives me many options and I really didn't like it'. Geraldine details, 'There were so many different websites to choose and I do not have enough time to look at all of them'.

Not only are these students at a comparative disadvantage because they lack resources in terms of access and time, but they also experience far greater emotional costs. Because they have less time to engage in surfing as informal learning, their skills are not as developed. They do not spend time in 'idle' searching because they must be goal-oriented social agents. In consequence, they do not reap the same benefits that produce more sophisticated search skills that come from repeatedly seeking and comparing information. Ultimately, lack of access is related to temporal constraints and emotional costs such that these respondents are not able to garner the maximum benefit from the limited resources to which they have access.

Conclusions and implications

While earlier diagnoses of the digital divide highlighted the fault line between those with and those without physical access to information technology, it has become ever clearer that users who enjoy unconstrained access are in a qualitatively different position than their counterparts who must deal with constraints on their access to such technology. Disparities in access between more privileged and less privileged users are every bit as consequential as the gap between users and non-users in terms of the benefits accruing to internet usage (The UCLA Internet Report 2004). Such disparities have yet to be adequately examined, particularly among the youth population that is often supposed to be the most wired segment of the population. To fill these gaps, my research examines the effects of disparities in access within this understudied population and situates their internet practices in the contexts of their everyday lives.

My findings detail the complex relationship between different levels and forms of constrained physical access, attitudes towards the appropriate use of information resources, and information-seeking skills. In elucidating these relationships and processes, the research discloses the complicated interplay between digital inequality and other forms of disadvantage. In doing so, it demonstrates the insights that can be achieved when new media practices are

examined in the context of respondents' lifeworlds. Only in this way can we move towards a complete account of digital inequalities.

This research adds a new dimension to the study of digital inequality by tracing the connection between quality and autonomy of internet access and particular orientations to internet use. Bringing to bear Bourdieu's conception of habitus as a set of interconnected dispositions, the analysis uncovers the emergence of two contrasting stances towards internet use. Divergences between how more and less disadvantaged respondents conceptualize appropriate internet use indicates the internalization of different senses of the 'possible' and 'impossible' in relation to information technology. Drawing upon Bourdieu's concepts of *skholè* (1994) and *habitus* (1980), my analysis shows how 'playing seriously' and developing a 'taste for the necessary' create opposing forms of information habitus that engender further disadvantage.

More specifically, respondents with high-quality home access value the potential benefits of internet use quite differently than their less privileged peers. They enjoy the leisure and the 'distance from necessity' (Bourdieu 1979) that make it possible for them to treat their online sessions like a form of 'serious play', a kind of enriching recreation. Their surfing sessions fall into the category of 'gratuitous game' or skholè, a category of activity that Bourdieu (1994) analyzes in terms of Plato's idea of spoudaiôs paizein, 'to play seriously'. According to Bourdieu, skholè is the disposition to invest oneself in activities that may seem wasteful to those who have not been liberated from urgency and necessity. Experiencing the luxury of access as normative, high-quality home access respondents are indeed removed from immediate temporal urgencies. Because members of this relatively privileged group are liberated from spatial, temporal, and access constraints, they are able to approach the internet as a space of 'playing seriously' in which they engage in 'studious leisure'. Developing a playful or exploratory information habitus leads them to have positive dispositions towards global information seeking, which results in more sophisticated information seeking skills and more positive emotional experiences in seeking information.

By contrast, as my analysis illuminates, no and low-quality access respondents develop a task-oriented information habitus stemming from their experiences of deprivation and urgency. The youth most constrained in their access must also cope with a global shortage of resources engendered by economic necessity. Foremost among these constraints is temporal urgency or lack of free time, which Bourdieu (1994) reminds us emerges from access to accumulated economic resources. Thus, constrained respondents appraise the opportunity costs of their online activities very highly. Propelled by spatial-temporal exigencies, they must ration their time and energies. They do so by avoiding unstructured online activities and seeking to minimize what appears to them as 'time-wasting' diversions. They approach their involvement with information technology as a practice that must yield tangible dividends that meet their immediate needs and circumstances. At the mercy of spatial-temporal urgencies that do not encumber their more

advantaged peers, these youth develop an attitude antithetical to skholè in which efficiency is their primary goal. Buffeted by the winds of their life circumstances, they develop a task-oriented information habitus that frames appropriate internet use in terms of waste avoidance. Looking for unambiguous payoffs, they enact the 'taste for the necessary' that Bourdieu attributes to people socialized in conditions of scarcity and want. Because they are so determined to stay on task while online, they avoid the exploratory forays on which their more privileged counterparts embark. However, this 'strategy of action' (Swidler 2001) ultimately does them a disservice, making it harder for them to develop more sophisticated information-seeking skills.

As these findings indicate, use of the internet may not only replicate offline inequalities but can also accentuate the impacts of disadvantage. This research enriches the study of digital inequality by examining the processes that translate spatial-temporal constraints related to material access into orientations, a process that further perpetuates skill inequalities for those enacting a 'taste for the necessary'. In applying the concept of information habitus, my analysis reveals how the link between access and skill development is mediated by orientations. In view of these findings, future research should capitalize on this analytical framework in order to further explore the link between life chances, access disparities, and the development of capital enhancing information skills. For in a society where information is becoming a more and more valuable 'primary good' (Van Dijk 2005) central to the acquisition of human capital, lack of adequate information-seeking skills disadvantages individuals in their educational and labor market careers. Therefore, casting light on the origins of such skills disparities yields insights into one of the most consequential forms of social stratification in our post-industrial society.

Acknowledgements

I would like to thank the editors — Christena Nippert-Eng, Barry Wellman, Jessica Collins, and Julie Amoroso — and the reviewers for their valuable recommendations. I would also like to thank Jeremy Schulz for his theoretical insights, as well as David Cort and Michael Johnston for their thoughtful commentary. Finally, I would also like to express my sincere appreciation both to the MacArthur Foundation for funding and to the dedicated educators and students in my fieldsite who generously shared their time and experiences with me.

References

Bourdieu, P. (1979) La distinction: critique sociale du jugement, Les Éditions de Minuit, Paris.

- Bourdieu, P. (1980) Le sens pratique, Les Éditions de Minuit, Paris.
- Bourdieu, P. (1994) Raisons pratiques: Sur la théorie de l'action, Editions du Seuil, Paris.
- Castells, M. (2000) The Rise of the Network Society: Economy, Society and Culture, Blackwell, Malden, MA.
- Christensen, R. (2007) Drag Race High, High Five Entertainment, Nashville, TN.
- DiMaggio, P., Hargittai, E., Celeste, C. & Shafer, S. (2004) 'Digital inequality: from unequal access to differentiated use', in *Social Inequality*, ed. K. Neckerman, Russell Sage Foundation, New York, pp. 355–400.
- Hargittai, E. (2008) 'The digital reproduction of inequality', in *Social Stratification*, ed. D. Grusky, Westview Press, Boulder, pp. 936–944.
- Hargittai, E. & Walejko, G. (2008) 'The participation divide: content creation and sharing in the digital age', *Information, Communication and Society*, vol. 11, no. 2, pp. 239–256.
- Horrigan, J. (2007) A Typology of Information and Communication Technology Users, Pew Internet and American Life Project, Washington, DC, [Online] Available at: http://www.pewinternet.org/PPF/r/213/report_display.asp (31 October 2008).
- Jenkins, H. with Clinton, K., Purushotma, R., Robison, A. J. & Weigel, M. (2006) Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. Building the Field of Digital media and Learning, The John D. and Catherine T. MacArthur Foundation, Chicago, pp. 1–68. [Online] Available at: http://www.nwp.org/cs/public/download/nwp_file/10932/Confronting_the_ Challenges_of_Participatory_Culture.pdf?x-r=pcfile_d (1 March 2009).
- Lenhart, A., Madden, M. & Hitlin, P. (2005) *Teens and Technology, Youth are Leading the Transition to a Fully Wired and Mobile Nation*, Pew Internet and American Life Project, Washington, DC, [Online] Available at: http://www.pewinternet.org/PPF/r/162/report_display.asp (22 January 2009).
- Lenhart, A., Madden, M., Macgill, A. R. & Smith, A. (2007) Teens and Social Media the Use of Social Media Gains a Greater Foothold in Teen Life as they Embrace the Conversational Nature of Interactive Online Media, Pew Internet and American Life Project, Washington, DC, [Online] Available at: http://www.pewinternet.org/PPF/r/230/report_display.asp (22 January 2009).
- Lenhart, A., Sousan, A., Smith, A. & Macgill, A. R. (2008) Writing, Technology and Teens, Pew Internet and American Life Project, Washington, DC, [Online] Available at: http://www.pewinternet.org/pdfs/PIP_ Writing_Report_FINAL3.pdf (31 October 2008).
- Lucas, G. (1973) American Graffiti, Universal Pictures, Hollywood.
- Mossberger, K., Tolbert, J. C. & Stansbury, M. (2003) Virtual Inequality: Beyond the Digital Divide, Georgetown University Press, Washington, DC.
- Pew Internet and American Life Project (2008) Pew Internet and American Life Project, Tracking Survey 2008, Pew Internet and American Life Project, Washington, DC, 8 April 11 May 2008, [Online] Available at: http://www.pewinternet.org/trends/User_Demo_7.22.08.htm (31 October 2008).

- Prensky, M. (2005) 'Listen to the natives', Educational Leadership, vol. 63, no. 4, pp. 8–13, [Online] Available at: http://www.ascd.org/authors/ed_lead/el200512_prensky.html (1 March 2009).
- Robinson, L. (2007a) 'Information the Wiki way: cognitive processes of information evaluation in collaborative online venues', International Communication Association Conference, San Francisco.
- Robinson, L. (2007b) 'Virtual structure vs. digital agency: revolution, mediation, or replication?' *Re-public Re-imagining Democracy*, [Online] Available at: http://www.re-public.gr/en/?p=162 (31 October 2008).
- Swidler, A. (2001) *Talk of Love: How Americans use their Culture*, University of Chicago Press, Chicago.
- The UCLA Internet Report (2004) The Digital Future Report Surveying the Digital Future Year Four, USC Annenberg School Center for the Digital Future, Los Angeles, [Online] Available at: http://www.digitalcenter.org/downloads/DigitalFutureReport-Year4—2004.pdf (31 October 2005).
- Van Dijk, J. (2005) The Deepening Divide: Inequality in the Information Society, Sage, Thousand Oaks.
- Warschauer, M. (2004) Technology and Social Inclusion: Rethinking the Digital Divide, MIT Press, Cambridge.

Laura Robinson is Assistant Professor in the Sociology Department of Santa Clara University. She studies the impact of new media on different kinds of social relationships, groups, and processes, including economic relationships and political communities. Robinson's current research studies digital inequality in the United States. She is also doing comparative work on the culturally situated use of new media in Brazil, Argentina, and the United States. Previous publications explore online interaction and norm building, national and collective identities, and cultural discourse in Brazilian, French, and American contexts. Her website is www.laurarobinson.org. *Address*: Department of Sociology, Santa Clara University, 500 El Camino Real, Santa Clara, CA 95053, USA. [email: Irobinson@scu.edu]