*Eszter Hargittai**

A framework for studying differences in people's digital media uses

Introduction

Information technologies have become a staple of adolescents' lives with young people among the most connected in countries that have seen high levels of Internet and cell phone diffusion by the first decade of the 21st century (Livingstone and Bober 2004; National Telecommunications and Information Administration 2004). However, merely knowing various digital media's rates of use says little about how young people are incorporating IT into their everyday lives. Ignoring nuanced measures of use, it is difficult to determine whether digital media are leveling the playing field for youth or whether they are raising new barriers for some while advantaging the societal positions of others. While many have suggested that we must move past the binary classification of haves and have-nots when it comes to information technology uses, few have offered a detailed conceptual framework for such an undertaking, one that can then inform empirical studies of usage differences. This chapter considers the various domains in which users of the Internet may possess different levels of know-how. In addition to presenting the conceptual framework, it also draws on unique data about a diverse group of young people's Internet uses to illustrate existing differences along the lines of the discussed dimensions.

Refined approaches to the digital divide

Initial work looking at differences in the Internet's diffusion looked at the so-called "digital divide" focusing on a binary classification of haves and have-nots regar-

* The author would like to thank Brigid Barron, Greg Duncan, Karen Mossberger and Connie Yowell for helpful conversations on this topic, Ann Feldman and Tom Moss for supporting the study at UIC, and Laurell Sims, Dan Li, Vanessa Pineda and Erika Priestley for assistance with data collection and data entry. The author is also grateful to the John D. and Catherine T. MacArthur Foundation, the Northwestern University Research Grants Committee, the Northwestern School of Communication Innovation Fund and the Northwestern Department of Communication Research Fund for their support.

ding digital technologies (for a review, see DiMaggio et al. 2004). Findings from the first investigations showed that while the Internet was diffusing to an increasing number of users, the spread of the medium happened at unequal rates depending on the population segment (Bimber 2000; Bucy 2000; Hargittai 2003; Hargittai 2004b; Loges and Jung 2001; NTIA 2000; 2004; Norris 2001; Wilhelm 2000). Moving the agenda forward, recent work has increasingly broadened the research program to focus on refined measures of access and use including quality of access, context and intensity of use, types of utilization and user abilities (Attewell 2001; Bonfadelli 2002; Bunz 2004; DiMaggio et al. 2004; Hargittai 2002; Hargittai 2004b; Howard, Rainie and Jones 2001; Katz and Rice 2002; Mossberger, Tolbert and Stansbury 2003; van Dijk 2005; Warschauer 2003; Wellman et al. 2002). In these investigations, the differences are no longer considered as a dichotomous property; rather, they exist on a spectrum. In fact, DiMaggio et al. (2004) advocate the use of the term "digital inequality" instead of "digital divide" to reflect more accurately the varying levels of use and their potential social implications. In this chapter, I continue the tradition of exploring refined measures of digital inequality. In particular, I focus on ways in which differences in users' understanding of online tools and services may encourage or hinder the extent to which people can optimally benefit from their use of digital media.

Refined data about average users' online behavior show that while some activities are nearly universal (e.g. the majority of users say they have sent or received email), many activities are a much less common practice (Madden 2003). Even activities in which a large proportion of users engages are not distributed equally among people depending on their background characteristics. For example, on the aggregate, one study found that eighty percent of American users have looked for some type of health-related information online (Fox 2005). However, once this activity is broken down by type of user, we find that 87 percent of those with a broadband connection at home sought some health information on the Web, while only 72 percent of those with a home dial-up connection did so. Also, Internet veterans (in the case of Fox's study people who have been online for six or more years) are considerably more likely to have engaged in such an activity (86%) compared to those who have 2-3 years of online experience (66%). These figures suggest that certain attributes of users' Internet-related experiences (i.e. quality of connection, history of Web use) influence the types of activities they pursue online.

Of course, more refined analyses are necessary to draw conclusions about the independent effect of any particular factor on people's online engagements. In the above case, those who started using the Internet later and who do not have high-speed connections at home may differ from others in various ways (e.g. lower income, lower education), which may then be related to their propensity to search for health information in the first place. Nonetheless, these relationships are important to note and suggest that growth in basic user statistics does not necessarily mean that everybody is taking advantage of the medium in similar ways. Since those who have become users in the recent past are not equivalent in demographics to early adopters, uses by veteran status may differ not only due to different levels of experience, but as a result of differences in user attributes as well.

As the amount of information online has grown exponentially over the years, the need for tools to sift through the material and keep track of updates has gotten larger. Search engines and portal sites have evolved to meet some of the needs of users in this more complex environment (Hargittai 2004a), nonetheless, they still require a certain level of understanding and skill for efficient uses (Hargittai 2002). Although, the Internet offers information on every imaginable topic, it is easy to get lost in the vastness of resources and not always trivial to find that special nugget of material of particular interest to the user. If those in need of certain types of material are unable to find it, the mere availability of the content will not aide them. Moreover, increases in volume have also meant the rising presence of incorrect information (whether inaccurate intentionally or not) and scams. Evaluating the credibility of online content itself poses a challenge to the utility one might be able to derive from time spent online.

Thus, people's ability to find desired types of information and their capacity to evaluate the credibility of the material they come across compose an important part of the medium's potential to contribute to people's everyday needs and well-being, and ultimately improve their life chances. Conversely, the lack of ability in these domains may disadvantage others. A nuanced approach to digital inequality takes a critical look at how people are able to benefit from digital media once they have gained access to them. The following section breaks down the realms in which advanced know-how is necessary for informed participation in the digital world.

Informed User Participation

Differential know-how and practices have the potential to fragment users and perpetuate existing social inequalities. As discussed above, nuanced measures of use are necessary to delineate exactly how different people may benefit to varying degrees from their engagement with digital media. In order to know what differences to observe and track empirically, it is important to have a conceptual framework for the types of ways in which digital media uses may diverge across users.

This section presents an eleven-item list that encompasses numerous ways in which people's online activities and know-how may differ. All of these aspects of use may contribute to differences in online abilities and thereby hinder those who lack them and advantage those who possess them.

The following items contribute to users' ability to make the most of their time spent online. While these categories are not mutually exclusive, they fall into various substantively distinct domains that are worthy of investigation on their own. Studies can focus on just one or two of these dimensions, or they may attempt to encompass most or all of them. The latter approach allows for comparisons across the domains. The focus on just a few enables more in-depth investigations, however, so both may lead to valuable insights.

The description of each point below is not meant to be an exhaustive elaboration of what types of activities fall under the respective headings. The examples are just meant as illustrations to guide the reader in understanding the various domains of know-how. Moreover, while cases mainly focus on use of the Internet on a personal computer, they also apply to the use of other digital media such as PDAs and cell phones, platforms that are becoming increasingly common for communicating with others as well as accessing and sharing content. Finally, while many of these factors are relevant with respect to the use of other media as well, the focus here is on developments of the last decade in the digital landscape.

1. Effective and safe ways of communicating with others

While basic email communication may seem simple, a sophisticated approach to exchanging messages with others involves more than simply knowing how to compose and send a note to another user. Rather, issues from professionalism to privacy all have to be taken into consideration when managing one's email exchanges. Potential concerns range from writing a clear subject line that maximizes chances of receiving a response to not divulging too much information in certain types of interactions.

One particular feature of email that is unknown to many is the option to copy multiple recipients blindly – or "bccing" a list of people – when sending out a note. There are occasions when one might want to send out the same message to several people, but it is not advisable for everyone to see all other people's names on the list. An example of such a situation may concern applicants to a job who are being emailed in bulk. It is not possible to maintain confidentiality in such a case if all recipients are included in the "cc" line, the one that makes all addresses visible to all others on the list. Nonetheless, such mistakes are common and lead to embarrassment on behalf of both the sender and some of the recipients.

2. Knowledge of how to contribute to group conversations and share content

One of the unique aspects of online communication as compared to more traditional media is that users can contribute their own opinions and content much more easily than in many other domains. Such contributions can best be grouped into two relatively distinct although not necessarily mutually exclusive categories: (1) commenting in response to material created and shared by others; and (2) posting one's own content for others to access. While the Internet makes such contributions much more straight forward than other media, effective communication and participation still presupposes some skills.

Some recent developments in Internet services are good examples of this point. Users may read blogs, but it is an additional step to know that leaving a comment is an option. Also, users may consult sites that are compiled by numerous people (e.g. wikis like Wikipedia), but knowing how to edit a page on such a site is a whole other step in the process with which many are not familiar.

It is also possible to take a more active role in this realm, but only for those who possess certain necessary skills. For example, users may create mailing lists or entire Web sites with adjoining forums dedicated to a topic of interest. There are lots of opportunities for this online (whether within a particular site such as the photo-sharing site Flickr or less structured out on the open Web through, for example, Yahoo! Groups or Google Groups), but different users are not equally aware of them nor would they necessarily know how to navigate such services.

3. Knowledge about and use of tools

In addition to services such as blogs and wikis that all have their own particular systems, there are additional tools available to users nowadays that allow more efficient navigation of online content (and beyond). From feed readers (e.g. Bloglines) to social bookmarking sites (e.g. del.icio.us), new tools are allowing sophisticated users to employ a multitude of approaches to finding and following online content. Similarly, additions to software (in some cases free software, e.g. Firefox) also improve considerably upon certain navigational practices. For example, extensions to the Firefox browser program make all sorts of functionalities accessible at the click of a button. For example, a user can create an image snapshot of the entire Web page on the screen for archiving purposes – as opposed to an image of simply what is viewable in the browser window –, or a user can render Web pages differently from their original layout, but many of these functionalities do not come bundled with the software and so users need to know how they can find extensions of interest and what they have to do to the program to implement them.

4. Knowledge of what is available online

When encountering a question in everyday life, how likely is a user to realize that answers to the question are likely available online? While some users may automatically turn to the Web no matter the type of information, others may only think to look for answers online in particular instances. These queries can range from factual information to opinion pieces, from contact information to free tools and services. For example, would it occur to all users that sophisticated photo-editing programs exist online that can be obtained free legally (e.g. Gimp)? Do users know about alternate licensing schemes for content that allows non-commercial use of material for free (e.g. Creative Commons licenses)? Would all users think to look online for legally free copies of entire books (e.g. Alice in Wonderland) before proceeding to purchase a copy in a store (whether online or not)? These questions all concern a user's know-how about what is even possible before taking the next step of searching for it.

5. Ability to find content

Once a user recognizes that it is worth looking online for a particular type of content, the next step concerns finding this content in the chaos of billions and billions of Web pages. Although search engines have improved over the years tremendously, they are far from being able to guess the exact intentions of a user and therefore particular skills are required on the part of the user to find the sought after content, especially on topics that are less mainstream. For example, finding the email address of a person is not always trivial, especially if it is for a person whose name is fairly common and the person is less prominent online.

6. Efficiency in Web navigation

Being able to find material on the Web is one thing, doing so efficiently is another. Many people lead busy lives that do not allow for much time in front of the computer. When that is the case, a user cannot spend too much time on any one query. If relevant results do not start showing up in response to various initial clicks and queries, the user might abandon the task and may seek the desired information using another method altogether (e.g. going and talking to someone) that may or may not result in a satisfactory outcome and may take even longer to achieve. Refined information-seeking skills are necessary to find content quickly. For example, knowing how to exclude terms from a search can be important in the case of ambiguous queries (i.e. where the term may have multiple meanings), but few people know that typing a hyphen right before a word (no spaces) will yield such a result.

7. Ability to assess source and message credibility

With the growing potential to make money online, more and more content providers – and in some cases outright scammers – have flooded the network. On occasion intentionally, in others by accident, the content a user encounters is not necessarily correct. There are several steps involved in dealing with such a situation. First, users have to recognize that cases of misinformation exist online and they should not take for granted material they see on the Web. After recognizing that online content may not always reflect quality content, users need to know how to collect information about the source of material to determine whether it is legitimate. This is not always a trivial undertaking.

These skills are important not only while users are out on the open Web, but also while they are checking their email. Lots of scams come through on email and people must recognize that email messages cannot be trusted inherently either. From requests for help originating across the globe to notifications about a necessary password change on the user's account, users are often bombarded with deceitful messages. One indication of many users' inability to stop and consider email content is the prevalence of people forwarding chain messages that contain nothing but hoaxes and often unnecessary and unsubstantiated rumors about situations supposedly in need of assistance. Both the belief that these are real crises and the assumption that forwarding an email will help such a situation suggest a lack of critical approach to messages on behalf of users.

8. Understanding of privacy issues

Online services have become increasingly sophisticated in tracking the actions of their users. But to what extent do people realize these practices and are they aware of the particular types of technologies that are making their actions ever-more trackable? Do people consciously think about not divulging too much information while they surf the Web? This issue raises concerns not only in the realms of financial life (e.g. the loss of one's credit card information), but also in the realm of political and religious expression and the domain of health, just to name a few.

Options certainly exist for restricting the amount of information that sites and companies collect about users, but one has to possess a certain level of know-how to (1) recognize that there is an issue that needs to be addressed; and (2) know where to turn – what tools or actions – to protect oneself. While there are a myriad of ways in which unwanted junk mail may end up in users' mailboxes, some of the reasons can be traced back to users' actions easily. However, not being aware of how these things happen, users continue to engage in actions that do not serve their best interests.

In another example, many users seem to have a false sense of anonymity while online. People have been known to lose jobs over divulging too much information in settings where anonymity was assumed incorrectly. While users can take steps to minimize the traceability of their online actions, how many are aware of the necessary steps to do this well and how many realize that being completely anonymous is nearly impossible?

9. Understanding of security issues

Related to the previous point is the question of security. Not divulging too much information is essential to maintaining the security of sensitive information. Do users stop to think about the context of, for example, a message that requests confidential information from them? If everyone was aware of these issues and careful as a consequence then phishing emails – messages that pretend to be from a reputable source to extract confidential information from users – would not lead to people giving up their passwords to Web sites that contain private information such as bank accounts.

10. Knowledge of where and how to seek assistance with questions

No matter one's level of user sophistication, it is unlikely that users exist who do not, at least on occasion, require some assistance with an online service, a search, or a tool to contribute to conversations. Lots of options exist on the Web to seek assistance from other users, however, these opportunities are not always obvious. From the serious to the trivial, communities have come together to offer insights on each others' queries. Some of these are more reliable than others. But many provide valuable information often for free. Examples include Yahoo! Answers for any topic imaginable to a very specialized site solely focusing on the use of one spreadsheet application, MrExcel.com. But in order to benefit from others' know-how, users have to either know about these options or have the ability to realize such communities exist (see #4 above) and know how to find them (as per #5 above).

11. Customization

More and more services are allowing customization by users. This feature has been around since the early days of the Web with one prominent example the personalized home pages that big portals provided to their users. One could get weather, stock, sports, movie information plus quick access to one's email account on just one page. These services have continued to expand and many others nowadays give users the option of creating customized rules to meet their particular needs. For example, mail applications allow users to configure spam filters or filters to organize incoming email messages upon their arrival. Feed readers are another example, giving users the opportunity to follow numerous sources of information through just one interface. While available to all users, many of these services have not seen mass diffusion. As with every other dimension mentioned here, certain levels of skill are necessary to take advantage of these services so those who lack them are much less likely to adopt them and benefit from their assistance.

Some of the above areas have seen considerable investigation by scholars (e.g. on information seeking) while others remain largely unexplored. Moreover, many related studies limit their scope to convenience samples of college students leading to results with limited generalizability. Additionally, many such projects do not collect detailed data on users' background characteristics making it impossible to consider how observed variation about online abilities relates to users' attributes. These shortcomings of the existing corpus of work in this realm limit our understanding of how skill factors relate to questions of social inequality, which is why gathering data on these dimensions in conjunction with user background characteristics is essential. The next section draws on precisely such data to illustrate briefly the types of differences by user attributes that we find regarding some online abilities.

Differences in Young People's Internet Uses

To illustrate that users do, in fact, differ on the usage dimensions discussed above, this section provides empirical evidence from a unique data set. Findings presented here are based on data collected by the author in February-March, 2006. A survey was administered to a diverse group of students at the University of Illinois, Chicago, an urban public research university in the United States. Participating students were all enrolled in the one required class on campus: the First-Year Writing Program. Given that this course is required of all students, surveying this group poses no selection bias concerning the university's student population.

College students offer the ideal population to study differential IT uses given their high – often 100 percent – connectivity levels and frequent uses of the medium. Does ubiquitous connectivity mean ever-increasing skills and intense participation or do differences in abilities and contributions remain even when we control for access to the medium? This data set allows us to address these questions and

illustrate differential know-how regarding some of the skill dimensions discussed in the previous section.

The data presented here represent 1,160 first-year students who took the survey. Table 1 includes some descriptive statistics about the demographics of the group suggesting considerable diversity in socio-economic background and academic achievements while largely controlling for age. Table 2 includes some information about the sample's IT access and uses. The figures in Table 2 clearly suggest that this is very much a wired generation given the number of years the average user has been online, how frequently students use the Internet, the number of locations of access and high levels of computer and cell phone ownership. Consequently, nuanced measures of use are especially relevant since basic measures of use may obfuscate very real differences in actual usage and skill and do not allow us to distinguish too much among sample respondents. Looking at such a wired group of users allows us to control for basic access to digital media and focus on details of use and know-how instead.

Previous work has shown that measures of a respondent's self-perceived online ability is not an optimal proxy for actual skills (Hargittai 2005) with particular concerns about the gender bias in such measures (Hargittai and Shafer 2006). Therefore, in addition to presenting figures about self-perceived skill, we also look at other variables that indicate various levels of online know-how.

When asked what level of expertise they consider themselves to possess, 6.4 percent of the sample indicated to be not at all or not very skilled, 52.2 percent claimed to be fairly skilled, 33.0 percent believed themselves to be very skilled and the remaining 8.5 percent thought of themselves as experts. While not an optimal proxy for actual skills, these measures do give us an idea of how college students think about their online abilities. Insofar as attitude influences activity, this measure is worthy of note since it suggests that some people approach their online activities with much more confidence than others. Self-perceived Internet skill is positively correlated, at a statistically significant level, with parental education and performance on the college entrance exam (as measured by the American College Testing score).

Attitudinal differences may translate into variations in online behavior especially regarding what types of activities a user may attempt. In that sense, it is valuable to note that there is considerable variance in how students perceive their Internet user skills and that this perception is not randomly distributed among study participants. In particular, those from less privileged backgrounds and with lower academic aptitude are more skeptical about their online abilities potentially disadvantaging them with respect to how they embrace digital media and the extent to which they derive benefits from them.

Next, let us consider students' level of understanding regarding various Internet-related items. It is valuable to split these terms into two categories signifying different types of familiarity with the Internet: (1) terms about basic Internet use; (2) terms describing more recent Web developments. By considering these two constructs separately, we can disaggregate a more general type of familiarity with the Internet from a higher-level understanding that concerns recent developments. Both are measured here using an index variable that was constructed from several items. These items ask respondents to rank their level of understanding of various terms on a 5-point scale from no understanding to full understanding. These measures were derived from methods developed in earlier work on proxies for actual skill measures (Hargittai 2005).

The index measure of basic Internet terms contains the following items: frames, preference settings, pdf, spam, jpg, bookmark, newsgroup, mp3, and browser. Cronbach's alpha for this construct is .88. Not surprisingly, the resulting index is somewhat skewed with the majority of people scoring high. This is expected since the terms making up this variable will be familiar to many long-time users, which is characteristic of this sample's majority. The value of this index ranges from 9-48. Its mean is 32 with 75 percent of respondents scoring a 26 or above. Nonetheless, some differences are apparent. Moreover, these differences are statistically significantly related to some user attributes. In particular, students with lower reported grades, with lower reported college entrance exam scores and with lower parental educational backgrounds indicate lower levels of understanding even regarding the understanding of very basic Internet terms. This suggests that even at the level of basic Internet use, a one hundred percent wired group is not on the same footing when it comes to basic know-how.

The second construct includes terms focusing on more recent Web developments: bookmarklet, feed reader, malware, mashup, phishing, podcasting, RSS (real simple syndication), social bookmarking, tabbed browsing, torrent, tagging, Web feeds, widget, and wiki. Cronbach's alpha for this index is .91. This index is also skewed, although this time in the other direction with the majority of users claiming low levels of understanding. This measure ranges from 14-70 with a mean of 28. In this case, more than 75 percent of respondents got less than half the maximum score with a value of 34 at the 75th percentile. Similarly to the other variable, we find a statistically significant positive relationship between this score and some background variables, namely: parents' educational background and college admissions test score. Students whose parents have higher educational degrees and students who score higher on the ACT exam report a higher level of familiarity with recent Web developments. Similarly to observations presented in the previous

paragraph, these findings again suggest a better position with respect to the Internet for those who are already more privileged.

Conclusion

The goal of this chapter has been to offer a framework for thinking about and studying user abilities in our digital world. There are multiple dimensions along which users may differ and studying each is imperative for a more holistic picture of where inequalities may lie with respect to the new opportunities offered by information technologies. The following are the dimensions described in detail in this piece, all pertaining to actions performed online:

1. Effective and safe ways of communicating with others
2. Knowledge of how to contribute to group discussions and share content
3. Knowledge about and use of tools
4. Knowledge of what is available
5. Ability to find content
6. Efficiency in Web navigation
7. Ability to assess source and message credibility
8. Understanding of privacy issues
9. Understanding of security issues
10. Knowledge of where and how to seek assistance with questions
11. Customization

These eleven areas all pose both challenges and opportunities to users. Those who possess a high level of familiarity and understanding of each dimension of use described here will be in a considerably better position to derive benefits from digital media than those who lack expertise in these domains. In fact, depending on the extent to which certain users may not appreciate some of the nuances of usage, they may even suffer negative consequences due to scams and fraud.

As the Internet has matured and has made way for an increasing number of opportunities, it has also opened up possibilities for deception. The options are limitless; both in the realm of the good and in the realm of the bad especially while traditional institutions such as legal systems take time to catch up with many new developments. While technical improvements and government policy may address

some of the above issues, those interventions take time necessitating the need for an informed user base. Whether "Cyberworld Unlimited" turns out to be beneficial for all people, and all youth in particular, will depend on more than mere usage. Different dimensions of skill will influence the outcome. And since skill seems to mirror a student's existing societal position, it is unlikely that benefits will be distributed equally on their own. Rather, training intervention may be necessary to provide an equal playing field so all youth have a chance to avoid the pitfalls of the digital terrain, and instead, have a chance to reap its benefits.

Table 1. Descriptive statistics about the sample

	Percentage
Female (N=1,157)	59.9
Age (N=1,160)	
18	67.2
19	30.1
20 and older	2.7
Parental education (N=1,145)	
Neither parent has high school degree	7.7
Both parents have no more than high school degree	25.1
One parent has college degree, other does not	23.5
Both parents have at least a college degree	27.1
Grades (N=1,138)	
Mostly As	20.1
As and Bs	33.3
Mostly Bs	18.2
Bs and Cs or lower	28.4
ACT scores (N=930) – analyzed as a continuous variable	
16-19	11.2
20-23	39.1
24-27	40.4
28 and higher	9.3

Table 2. Basic IT access & use statistics for sample participants

	Percentage
Number of years online (N = 1,156)	
1-4	10.1
5	22.8
6 or more	67.0
Number of Internet access locations (N = 1,160)	
1-2	13.4
3-4	37.8
5 or more	48.9
Number of Internet use locations (N = 1,160)	
1	20.0
2	42.2
3 or more	37.8
Regular access location has high-speed connection (N = 1,093)	95.2
Uses chat (N = 1,152)	82.3
Uses VoIP (N = 1,160)	17.2
Goes online more than once a day (N = 1,158)	83.7
Owns a computer (laptop or desktop or both) (N = 1,160)	98.0
Has cell phone (N = 1,158)	96.6

References

Attewell, P. 2001. "The first and second digital divides." Sociology of education 74:252-259.

Bimber, B. 2000. "The Gender Gap on the Internet." Social Science Quarterly 81:868-876.

Bonfadelli, Heinz. 2002. "The Internet and Knowledge Gaps. A Theoretical and Empirical Investigation." European Journal of Communication 17:65-84.

Bucy, E. 2000. "Social Access to the Internet." Harvard International Journal of Press/Politics 5:50-61.

Bunz, Ulla. 2004. "The Computer-Email-Web Fluency Scale: Development and Validation." International Journal of Human-Computer Interaction 17:477-504.

DiMaggio, Paul, Eszter Hargittai, Coral Celeste, and Steven Shafer. 2004. "Digital Inequality: From Unequal Access to Differentiated Use." Pp. 355-400 in Social Inequality, edited by Kathryn Neckerman. New York: Russell Sage Foundation.

Fox, Susannah. 2005. "Health Information Online." Washington, D.C.: Pew Internet and American Life Project.

Hargittai, Eszter. 2002. "Second-Level Digital Divide: Differences in People's Online Skills." First Monday 7.

–. 2003. "The Digital Divide and What To Do About It." in The New Economy Handbook, edited by Derek C. Jones. San Diego, Calif: Academic Press.

–. 2004a. "The Changing Online Landscape: From Free-for-All to Commercial Gatekeeping." in Community Practice in the Network Society: Local Action/Global Interaction, edited by Peter and Doug Schuler Day: Routledge.

–. 2004b. "Internet Access and Use in Context." New Media & Society 6.

–. 2005. "Survey Measures of Web-Oriented Digital Literacy." Social Science Computer Review 23.

Hargittai, Eszter, and Steven Shafer. 2006. "Differences in Actual and Perceived Online Skills: The Role of Gender." Social Science Quarterly.

Howard, Philip N., Lee Rainie, and Steve Jones. 2001. "Days and Nights on the Internet: The Impact of a Diffusing Technology." American Behavioral Scientist 45:383-404.

Katz, J.E., and R.E. Rice. 2002. Social Consequences of Internet Use: Access, Involvement and Interaction. Cambridge, MA: MIT Press.

Livingstone, Sonia., and Magdalena Bober. 2004. "UK Children Go Online." Pp. 1-61: Economic & Social Research Council.

Loges, William E., and Joo-Young Jung. 2001. "Exploring the Digital Divide: Internet Connectedness and Age." Communications Research 28:536-562.

Madden, Marry. 2003. "America's Online Pursuits." Washington, D.C.: Pew Internet and American Life Project.

Mossberger, Karen, Caroline J. Tolbert, and Mary Stansbury. 2003. Virtual Inequality: Beyond the Digital Divide. Washington, D.C.: Georgetown University Press.

National Telecommunications and Information Administration. 2000. "Falling Through the Net: Toward Digital Inclusion." Washington, DC: NTIA.

–. 2004. "A Nation Online: Entering the Broadband Age." Washington, D.C.: NTIA.

Norris, P. 2001. Digital Divide: Civic Engagement, Information Poverty and the Internet in Democratic Societies. New York: Cambridge University Press.

van Dijk, Jan A.G.M. 2005. The Deepening Divide. London: Sage Publications.

Warschauer, M. 2003. Technology and Social Inclusion. Cambridge, Mass: MIT Press.

Wellman, B, A.Q. Haase, J. Witte, and K Hampton. 2002. "Capitalizing on the Internet: Social Contact, Civic Engagement, and Sense of Community." Pp. 436-455 in The Internet in Everyday Life, edited by B. Wellman and H. Haythornthwaite. Oxford: Blackwell.

Wilhelm, Anthony G. 2000. Democracy in the Digital Age: Challenges to Political Life in Cyberspace. New York: Routledge.

Heinz Bonfadelli/Priska Bucher

Alte und neue Medien im Leben von Jugendlichen mit Migrationshintergrund

Im vorliegenden Beitrag werden der theoretische Hintergrund sowie empirische Befunde aus einer *quantitativen Studie* zum Stellenwert von alten und neuen Medien im Leben von Jugendlichen mit Migrationshintergrund, die am IPMZ – Institut für Publizistikwissenschaft und Medienforschung der Universität Zürich durchgeführt worden ist, präsentiert und diskutiert. Die Untersuchung ist Teil eines Schweizerischen Nationalfondsprojekts; sie umfasst zudem einen *qualitativen Teil*, der von der Pädagogischen Hochschule Zürich realisiert worden ist und auf Leitfadengesprächen und Beobachtungen türkischer Familien basiert.

1. Ausgangslage

1.1 Gesellschaftliche Ebene

Migration ist ein Phänomen, das für die meisten industrialisierten Länder Europas speziell seit dem Wirtschaftswachstum nach dem II. Weltkrieg charakteristisch ist. In der Schweiz gehört heute jeder dritte Einwohner zu einer Migrationsgruppe oder hat einen durch Immigration geprägten Familienhintergrund. Die Migrationsbewegungen und die daraus resultierende Koexistenz zwischen der sog. „einheimischen" Bevölkerung und den vielfach als „Fremden" betrachteten Migranten schaffen soziale Probleme wie Bildungsbenachteiligung, Wertkonflikte oder gar Rassismus. Und diese Konflikte wiederum haben in letzter Zeit in der Öffentlichkeit vermehrt zu Diskussionen über die Fähigkeit und den Willen zur Integration verschiedener Einwanderungsgruppen geführt. Jüngste Anlässe und Beispiele für solche Konflikte sind und waren etwa die Jugendunruhen in den Pariser Vorstädten, die Ermordung des Filmemachers Theo van Gogh in Holland, die Gewalt rechtsradikaler Gruppen gegen Ausländer oder das nicht automatisch an ausländische Jugendliche der zweiten und dritten Generation verliehene Bürgerrecht in der Schweiz.

Bibliografische Information Der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der
Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über
<http://dnb.d-nb.de> abrufbar.

1. Auflage Juli 2007

Lektorat: Stefanie Laux

Der VS Verlag für Sozialwissenschaften ist ein Unternehmen von Springer Science+Business Media.
www.vs-verlag.de

Umschlaggestaltung: KünkelLopka Medienentwicklung, Heidelberg
Satz: <Bausatz> Frank Böhm, Siegen
Druck und buchbinderische Verarbeitung: Krips b.v., Meppel
Gedruckt auf säurefreiem und chlorfrei gebleichtem Papier
Printed in the Netherlands

ISBN 978-3-531-15319-3

Inhaltsverzeichnis