

Low-Income Urban High School Students' Use of the Internet to Access Financial Aid

by *Kristan M. Venegas*

Kristan M. Venegas is assistant professor in the Educational Leadership Department in the College of Education in the University of Nevada, Reno.

This article focuses on the Web-based resources available to low-income students as they build their perceptions, make their decisions, and engage in financial aid activities. Data are gathered from the results of six focus groups with low-income high school students attending urban high schools. Findings suggest that low-income students do have access to computers but lack the knowledge and support needed to navigate the financial aid resources available on-line.

The Internet is increasingly used as part of the financial aid and college application process (Noel-Levitz, Tower, & NRCCUA, 2005). On-line financial aid processes expedite applications and can give students more time to make choices about the transition from high school to college. For example, students who complete their Free Application for Federal Aid (FAFSA) on-line tend to receive a faster decision about their student aid package than those who submit their forms on paper. This article considers use of the Internet as part of the financial aid process. Specifically, it considers the following question: How do low-income urban students use the Internet to access financial aid? Data sources include focus groups with a subset of students from two low-income urban high school sites in Southern California. A cultural ecological framework is used to analyze data, setting the stage for suggestions for future research and implications for practice.

The Internet, Financial Aid, and College Access

Although the literature on Internet use and access to financial aid is sparse, policy makers, financial aid providers, and postsecondary institutions are eager to turn to the Internet as a means to provide information and applications for financial aid (Venegas, 2006). The literature that does exist typically focuses on the use of the Internet by high school students as part of college admissions and as a means to access government-sponsored financial aid. While there are noted increases in low-income students' use of the Internet access beyond the traditional school walls (Norfle, 2001; Noel-Levitz et al., 2005), access to Web-linked computers is decreasing in the schools with the highest number of low-income students (Fox, 2005).

Research also suggests that there are real differences in access to computers and the Internet based on socioeconomic status. For example, the Table shows differences in computer access, Internet access, and broadband access at home in low-income versus high-income households. For purposes of this table, households with incomes above \$75,000 per year are considered "middle- to high-income," while those with income

levels below \$15,000 per year are considered “low-income.” These “at home” differences suggest that low-income students are more reliant on the availability of computers and Internet access at school.

However, research has shown that increasing the number of computers in low-income schools is not a guarantee of increased computer use (Gladiuex & Swail, 1999a)—especially in cases when students are not given access to the computers or students and school staff are not trained to complete financial aid processes on-line (Jackson, 2003).

While the school systems in this study claim that 100% of their K-12 institutions offer computer access, and they may indeed have computers on campus, the experiences described in this study suggest that these machines are not adequately functioning or readily available.

At the same time, colleges and universities have turned their attention to the Internet for marketing as well as admission, financial aid, housing, and registration processes (Frazier, 2003; Gladiuex & Swail 1999a; 1999b; Hartman 1998; Shelley, 1989). The advantages of real-time information, expedited admission, financial aid, and housing information via the Web increases the quality of service as students and parents can “virtually visit” colleges from the convenience of homes (Hartman, 1998; Noel-Levitz et. al, 2005). However, advocates for low-income and minority students caution that Internet resources have the potential to become “engines of inequality” for those student populations (Swail & Gladiuex, 1999a; Venegas, 2005).

Although financial aid has been historically the slowest area of higher education to computerize (Shelley, 1989), proponents of on-line financial aid processing see the Internet as a way to decrease application mistakes, expedite the review and processing of Web-based forms, and save materials, postage, and processing costs for government and postsecondary institutions, which can in turn use these savings to increase aid offerings (Jackson, 2003). While these goals are noble, they also recreate the continuing challenges of access for particular

Table
Computer and Internet Access: Differences by Income

Income level	Computer at home	Internet access at home	Broadband at home
Above \$75,000	96%	93%	51%
Below \$15, 000	45%	29%	7%

Source: Lazarus, W., Wainer, A. and Lipper, L. (2005). *Measuring digital opportunity for America’s children: Where we stand and where we go from here.* Washington, DC: The Children’s Partnership.

A Cultural Framework

student populations. Past research suggests that the transition of low-income students to on-line processing has been slow and cumbersome; it acts as a deterrent for low-income students with little access to or experience in Internet technologies (Jackson, 2003; Resta, 1994; Gladiux & Swail, 1999a; Wright, Stewart, & Burrell, 1999).

Past studies of financial aid and low-income students have centered on rational choice, college choice, and even social capital (Choi, 2001; Cabrera, Nora, & Castenda, 1993; Flint, 1992; Grodsky & Jones, 2004; Hossler, Schmidt, & Vesper, 1998; Levine & Nidiffer, 1994), with little attention to contextual factors of students' lives. This study explores the notion that *culture* plays a role in the acquisition of financial aid knowledge. That is, a set of cultural influences, resources, and expectations affect students' ability and drive to acquire financial aid. The cultural framework used here is based on the understanding that environmental impacts are important in students' decision-making processes (Tierney & Venegas, 2005).

A cultural framework emphasizes the impact of family or home environments; peer environments; school environments; and community or out-of school environments on students' decisions to enroll in or seek funding for higher education. In the case of on-line financial aid processing, it is possible to see how these environments might influence access to resources and information. Students who are part of an active, informed college-going culture have more exposure and better chances of participating in college-related activities. Students who experience schooling environments that do not advocate college or do not provide the resources to prepare for college are then less likely to be college bound.

Likewise, if the high school counselor advocates for the use of paper-based FAFSAs, the students in that environment may be less likely to complete their FAFSA on-line. In contrast, students who are frequently reminded that they need to go on-line and get their FAFSA "PIN" (personal identification number) and are provided time during their school day to access the Internet and request this access code are more likely attempt the on-line FAFSA process.

The idea of culture impacting students' college and financial aid decision making is also supported in recent research. St. John (2006) and Perna (in press) suggest that a formal logical or rational model of college access sometimes misses the unique challenges that low income students frequently face in attaining their postsecondary goals.

Method

The data presented here are part of a three-year study of low-income, urban high school students in Southern California and their perceptions about seeking financial aid for college. The timeframe for this study was 2003 through 2006. Low-income students are defined as those who are eligible for the federal

free/reduced lunch program. In ninety interviews with study participants, the Internet was frequently mentioned by the participants as a part of the financial aid process.

To understand more about the use of the Internet and access to financial aid, six focus groups were conducted with low-income students at two urban high schools that had participated in the larger study. The two high schools were representative of other high schools in the urban area in which this study took place. Students who participated in the focus groups were in the 12th grade, were planning to attend either two-year or four-year postsecondary institutions, and had applied for financial aid. Six focus groups were conducted at each school site. Approximately five students participated in each group, for a total of 60 student participants. Focus groups were conducted in the college guidance center at each school site. Interview protocol included background questions about students' plans for financing college and their use of the Internet and other resources related to college and financial aid.

It is important to note that data provided in this study cannot be generalized. The goal of qualitative research such as this is to "describe and interpret rather than to generalize" (Lichtman, 2006, p. 119). The goal in this article is to present a snapshot and starting point for thinking about the important relationships between the Internet and access to financial aid.

Findings

The levels of computer activity reported by focus group participants suggest that these students do access the Internet to obtain financial aid information and engage in aid processes on-line. We considered this activity in terms of three categories: access and preferences, on-line experiences, and awareness of financial aid processing requirements.

Access and Preferences

Focus group participants often reported having access to the Internet in a number of locations and using the Internet in different kinds of locations. However, they often experienced problems with connectivity and the ability to interface with certain features of different sites. One student explained her financial aid-related Internet practices as follows:

I will go on-line at school to check some Web sites, but other ones take too much time, or they freeze up the computer. It's the same thing at home. So now I know which sites I can check at home or at school.

Other students nodded in agreement with this student's story. The student continued, "Accessing e-mail is the same thing. I can get my e-mail at home but not at school." While a lack of e-mail access may seem like a small issue, it has large implications for financial aid access. A number of Web sites offering financial aid services rely on e-mail communication for aid application updates and scholarship notifications, and to provide other relevant

information. When students are not able to access e-mail on a consistent basis, it becomes difficult to receive information in a timely manner and to meet important deadlines.

Study participants reported visiting three kinds of Web sites: federal and state Web sites, college or university Web sites, and Web sites that provided more general financial aid information. Of these three type of sites, students most often visited federal Web sites and institutional sites.

In all of the focus groups, students were able to recall the federal Web site URLs from memory. They noted that they visited the federal sites for multiple purposes: "I use the Web site to learn about what financial aid I can get, and then I also used it to apply for the FAFSA," reported one focus group participant.

When sharing their experiences about using institutional sites, students described mixed experiences. These distinctions might be explained not only by students' varying levels of proficiency on-line, but also due to the different types of services at each site.

Four-year institutions usually offered more information than community college sites and enabled students to complete more of their forms on-line. A student using a four-year institutional site noted: "I can go on-line and check my financial aid offer. There is also a special Web site for me with a password that I can see if there are school scholarships to apply for."

In contrast, an incoming community college student said: "I was really trying to do my financial aid on-line, but I couldn't because I could read about programs at the site, but I couldn't fill out any forms. Everything had to be done at the school."

When discussing their use of state Web sites, students confessed that they had spent very little time at those locations. In one particular focus group, a student admitted: "I'm sorry but I didn't know that there was a [state] Web site. I thought that [state] forms and information were just for college counselors." Once this student made this public admission, more focus group participants disclosed their lack of knowledge and usage of state-sponsored Web sites.

Although students were more familiar with financial aid sites that offered multiple services but were not run by federal, state, or institutional sources, they reported that they did not visit these sites very often:

At the beginning, I went to [a financial aid services] Web site a lot. I was trying to learn things, look for scholarships, stuff like that. Then as I got more into [the financial aid process] I stopped going there. Plus I had to fill out this form to be part of the site, but I never heard back from them about my answers.

Students in other focus groups related similar stories. Such stories helped to explain why students were less likely to rely on

these sites for information in comparison to the more frequently used federal and individual institution Web sites.

On-line Experiences

Students reported both positive and negative experiences accessing financial aid on the Web. For example, students reported that completing the FAFSA was a multi-step process that spread over a period of months. One student described her process as follows:

...at first I had to go on-line to get a PIN [personal identification number] for myself. Then later I went back to fill out my FAFSA. When I was at the end of the form, I saw that I had to get a PIN for my parents...I got a PIN for my parents and then I went back to complete the form....then I had to go back again and look at my SAR [Student Aid Report].

Other focus group participants described similar experiences. On average, completing the FAFSA application on-line meant a minimum of three visits to the site. Students who were not clear about how to navigate the FAFSA site visited many more times.

In some cases, even students who rated themselves as prepared for the process encountered challenges. At times, students were confused by what they perceived to be misinformation or a lack of adequate preparation:

...at the [financial aid] workshops, they told us to do the FAFSA on paper and then transfer...answers onto the Web site...I got my stuff ready to do that...when I went on-line...things looked different on the screen and I couldn't get the questions...I kept looking at the help screen but sometimes that didn't help either.

Not only does this quote shed light on student's confusion about how to complete on-line aid application, it also highlights the lack of training that students receive about how to navigate important financial aid services on-line.

Locating accurate information was another challenge that many students noted. When asked where they go to learn more about financial aid and Internet, study participants provided only a few sources. Peers, peer counselors, and college counselors were cited most often as people to go to for help with on-line aid processes and questions. However, misinformation or lack of information was common even among these networks of support:

I asked my friend, she told me to check with a peer counselor. So I did, but he told me to talk to [the college counselors]. I talked to [a college counselor] and she actually told me to check with a peer counselor because she

didn't know either. My counselor just knew how to help with doing the FAFSA on paper. So no one knew.

Not only was locating the correct Internet information and services difficult, accessing the particular services and sites also proved challenging:

You have to have a student ID# and a login and an e-mail to get into the financial aid information. So this makes it very complicated. If you don't have all of that log-in stuff, then you can't get online.

On the other hand, there were some students who much preferred having access to the Internet to learn more about and complete their financial aid process. Some students appreciated the independence and the opportunity to use the Web to "be able to get information at any time, without having to call" postsecondary institutions. One student noted:

I can go online and take my time...to find answers to questions without [calling on the phone]...it can be expensive, but the Internet isn't as expensive. I've wasted a lot of cell phone minutes...trying to call during office hours.

The student who provided this quote, however, was very dedicated to the college and financial aid process. He was one of the few focus group participants who had been actively reviewing college Web sites, attending college admission workshops, and strategizing to apply for scholarships since his sophomore year of high school. While his activities were not common in comparison to his peers, his circumstance merits attention because it helps in understanding the possibilities of accessing financial aid services on-line with adequate practice and knowledge.

Awareness of Financial Aid Processing Requirements

Overall, study participants were unsure about many of the steps of the financial aid process online. Planning tools like calendars, timelines, and guides were available at all of the types of Web sites discussed in focus group meeting. However, many students were unaware of them. "One of the things that makes it hard for me to go [on-line] only is that I have a hard time following the steps," one participant explained. "They just aren't easy for me to understand what they are."

In addition to this perceived lack of organization, many students were unaware of the need to frequently check their e-mail accounts. Often, study participants who did not frequently check their e-mail accounts fell behind in the financial aid process:

I completed the FAFSA, but I never heard from them [FAFSA processors], so I thought I was done. It wasn't until like two months later when I checked my e-mail

that I found out that I had made a mistake...but I didn't know that I needed to check it.

This study participant did not understand that she needed to be proactive. She mistakenly believed that her responsibilities were fulfilled. "They just say to complete the application, but you don't know you have to follow up on it," she said.

This perceived lack of communication was not just an issue at the federal aid site. As noted in a previous section, a number of students did not even know that a state financial aid Web site was available to them.

Although a number of students visited financial aid service Web sites such as Fastweb.com, they rarely used these sites to the fullest extent possible. As one focus group participant recalls: "I went on Fastweb.com to look for scholarships. I knew that there were other things to learn about, but I just didn't take the time."

For the few students who did spend more time on the site, scholarships were also specified as the main purpose for their visit. Students in focus group meetings paid little attention to the financial aid planning and guidance that was available. "Really, I just used [the financial aid services] site to learn about scholarships. I never looked at a planner or anything like that," said one student. For students in low-income, urban high schools where college counseling support services and resources are scarce, assistance with college and financial aid planning is an important tool to potentially be accessed via the Internet.

Discussion

Despite past findings that low-income students have little access to computers and the Internet (NTIA, 2000; Resta, 1994), the students who participated in this study reported computer access in multiple places: home, school, and community. While access to computing equipment may be increasing, going on-line for college processes presents more complicated issues. Using financial aid Web sites seems to be a tricky task. Entering passwords, social security numbers, and other personal information seemed to further complicate the process.

Overall, students felt that applying for financial aid on-line is difficult. Comments included, "Using the Internet to apply for financial aid is a complicated thing to do." "Finding someone who knows the rules and can help you apply online is hard." "Figuring out how to follow up on applications is tough." These findings suggest that even when students engage in the on-line process, they face challenges.

Focus group data recounts the various missteps by students during the financial aid process. Problems with beginning, completing, and following up on Web-based application processes were common. Students perceived a disconnect between Web-based resources and telephone or in-person follow-up with financial aid agencies. Student stories suggest that there is a lack of instrumental knowledge related to the financial aid

application process and a lack of access to relevant financial aid information, particularly when going on-line. From the cultural ecological perspective, this instrumental knowledge was rarely available in school, peer, or familial environments.

Students understood that there were three basic types of financial aid Web sites: government-based, school-based, and financial aid resource-based Web sites. They were typically aware of the federal financial aid application process using the FAFSA and Web-based scholarship search engines such as those available through Fastweb.com or Collegeboard.com. Many students also knew key financial aid deadlines for state and federal applications.

While this information serves as a beginning, and in some cases, jumpstarts the ongoing process of financial aid acquisition, students displayed a lack of knowledge about the follow-through processes of financial aid, such as

- How to check on the status of their financial aid applications, scholarships applications, and financial aid offers
- The need to check e-mail for information regarding application mistakes and approvals
- The importance of activating individual student information portals in a timely manner, to allow access to time-sensitive information.

Because college admissions or academic advising staff and/or high school counselors have little or no training in financial-aid requirements and procedures, many students engage in financial aid processes on-line without a clear understanding of how to advocate for one's own financial aid needs. In the many cases in which students reported that they rely on the Internet as their only source of financial aid information, communications between the individual and financial aid agencies were lost in cyberspace—the student never received a response to questions posed by e-mail or through other electronic means. Miscommunication may prevent low-income students from attaining college goals.

Using the cultural ecological perspective as a lens for examining the use of the Internet in financial aid processes, material resources and instrumental knowledge come to the forefront. Very few students discussed a concern with having access to a computer (as a material resource) as part of the challenge of engaging in financial aid searches or on-line application processes. Many of the necessary components that Brown (2000) outlines in his discussion of what it takes to learn in digital society are available to students in these contexts.

What is missing from these students' environments is access to the instrumental knowledge that is needed to effectively navigate the financial aid process.

Conclusion

The results of this study address some key issues related to the timing and frequency of Internet use. However, there are a number

of issues that deserve further attention. How might Internet-only applications encourage or discourage different types of students from applying for various aid programs? More nationally based research with up-to-date surveys on computer use in and out of school would help to answer these questions.

Quantitative and mixed-method research can be used to identify key issues and areas for improvement. A study that delineates the number and type of computers available to low-income students should also include a consideration of how many computers are Web-accessible, functioning, and actually available to students at the high school or college site. A district-wide study using a random sampling technique may be another reasonable option. Quite often in this study, empty computer labs could be observed in one area of the school, and broken, inaccessible computers in the college counseling area.

The timing of use of the Internet for financial aid purposes affect the amount of financial aid the student may receive in his or her package; the frequency of use can affect the student's proficiency in completing the necessary steps to receive aid. Additional research that traces students' use of the Internet for financial aid processes over time can illuminate when, how, and why students choose to use the Web for this purpose.

One final possibility for future research is a close examination of student's use of scholarship search engines and financial aid resource sites. A study that traces the individual experiences of students who actively utilize these sites might create a stronger picture of how these sites have influenced and can continue to impact students' financial aid choices and available options.

Two implications emerge from this study:

- Students need to have a clear understanding of the timing and process of financial aid acquisition from beginning to end. Completing a financial aid application is simply one of the "starting point" activities in the aid process. Student should be aware that follow-up is necessary to achieve their goal.
- Students, parents, and counselors need to have specific training for using Web-based financial aid sites. Training should include the actual use of a computer with live Internet access. Support for such training would ideally be based on a combination of local, state, and federal financial aid practitioners. The College Goal Sunday initiative (www.CollegeGoalSunday.org) is a great place to start. Completing an aid application the day before the priority deadline should not be the first time that students, parents, or counselors see the aid application Web site. Just as use of the telephone and in-person inquiries are accepted forms of seeking financial aid information, so too should be Web-based inquiries.

As more and more colleges and universities move to Web-based financial aid processes (Frazier, 2003), all students, and especially

low-income students and their families, need to understand these processes from the beginning to the end. They need to recognize that the process does not end with completion of the FAFSA, but is ongoing throughout their postsecondary education programs.

References

- Brown, J.S. (March/April 2000). Growing up digital: How the Web changes work, education, and the ways people learn. *Change*: 11-20.
- Cabrera, A.F., Nora, A., and Castaneda, M.B. (1993). College persistence: Structural equations modeling test of an integrated model of student retention. *Journal of Higher Education* 64 (2): 123-139.
- Choi, S. (2001). Students whose parents did not go to college: Postsecondary access, persistence, and attainment. Washington, DC: National Center for Education Statistics. NCES 2001-126.
- Flint, T. (1992). Early awareness of college financial aid: Does it expand choice? *Review of Higher Education*, 16(3): 309-327.
- Fox, E. (2005). Tracking US Trends. *Electronic transfer: Moving technology dollars in new directions* 24 (35); 26-28. Retrieved May 6, 2005 from <http://www.edweek.org/ew/articles/2005/05/05/35federal24.html>.
- Frazier, L.R. (2003). An admissions process transformed with technology. *Educause Quarterly* 23(3): 32-38.
- Gladieux, L. & Swail, W.S. (1999)a. The virtual university and educational opportunity: Issues of equity and access for the next generation. Washington DC: The College Board.
- Gladieux, L & Swail, W.S. (July/August 1999)b. The Internet: New engine of inequality? *On the Horizon* (7) 4: 8-9.
- Grodsky, E. and Jones, M. (2004). *Real and imagined barriers to college entry: Perceptions of cost*. Paper presented at the annual meeting for the American Sociological Association. San Francisco, CA.
- Hartman, K.E. (March/April 1998). The Internet & college admissions: Implications and opportunities. *Change*: 54-55.
- Hossler, D., Schmidt, J., and Vesper, N. (1998). Going to college: A study of the postsecondary educational decision-making process of high school students. Johns Hopkins University Press.
- Jackson, C. (2003). Divided we fall: The federal government confronts the digital divide. *Journal of Student Financial Aid* 33 (3): 21-39.
- Lazarus, W., Wainer, A. and Lipper, L. (2005). Measuring digital opportunity for America's children: Where we stand and where we go from here. Washington, DC: The Children's Partnership.
- Levine, A. & Nidiffer, J. (1996). *Beating the odds: How the poor get to college*. San Francisco: Jossey-Bass.
- Lichtman, M. (2006). *Qualitative research in education: A user's guide*. Thousand Oaks, CA: Sage Publications.
- National Telecommunications and Information Administration (NTIA). (1999). *Falling through the net: Defining the digital divide*. Retrieved April 29, 2005 from <http://www.ntia.doc.gov/ntiahome/fttn99/content.html>.
- Noel-Levitz, Tower, J., & National Research Center for College and University Admissions. (2005). *Navigating toward e-recruitment: Ten revelations about interacting with college-bound high school students*. Iowa City: Noel-Levitz.
- Norfles, N. (2001). *Closing the divide: Technology among TRIO Upward Bound projects*. National TRIO Clearinghouse of the Council for Opportunity in Education, Washington, DC 20001.
- Perna, L. (in press). Studying college access and choice: A proposed conceptual model. In J.C.Smart (ed.). *Higher Education Handbook of Theory and Research XXI*: 99-157. Netherlands: Springer.
- Resta, P. (1994). Minorities and the new information technologies: Barriers and opportunities. In M.J. Justiz, R. Wilson, & L.G. Björk (Eds.). *Minorities in Higher Education*. Phoenix, AZ. American Council on Education/Oryx Press.

- Shelley, R.F. (1989). Technological innovation in financial aid offices in public colleges and universities. *Journal of Student Financial Aid* 19 (11): 26-37.
- St. John, E. P. (2006). Contending with financial inequality: The theory problem in research on college access and persistence. In Tierney, W.G. and Venegas, K. (eds.) *Financial Aid and Access to College: The Public Policy Challenges*. *American Behavioral Scientist*. Pgs. 1604-1619.
- Tierney, W.G. and Venegas, K. M. (April 2005). Financial aid and decision-making: A synthesis of the literature. Paper presented at the Annual Meeting of the American Education Research Association. Montreal, Canada.
- Trotter, A. (2005). Federal role seen shifting. *Electronic transfer: Moving technology dollars in new directions* 24 (35); 26-28. Retrieved May 6, 2005 from <http://www.edweek.org/ew/articles/2005/05/05/35federal24.html>.
- Venegas, K. (2005). Internet Inequalities: Financial aid, the Internet and low-income students. In W.G. Tierney, K.M.Venegas, and Luna De la Rosa, M. (eds.) *Financial Aid and Access to College: The Public Policy Challenges*. *American Behavioral Scientist* 49(12): 1652-1669.
- Venegas, K.M. (2005). Aid and Admission: Narratives of pre-college, low-income urban Latina high school students. Los Angeles, CA: University of Southern California.
- Wright, D.A, Stewart, G., and Burrell, C. (1999). Financial aid application technology utilization by high school students and their parents. *Journal of Student Financial Aid* 29(2): 45-52.