

Are We Really A Nation Online?
Ethnic and Racial Disparities in Access to Technology and Their Consequences

Report for the Leadership Conference on Civil Rights Education Fund

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September 20, 2005

Executive Summary

Using data from the Computer and Internet Use Supplement to the October 2003 Current Population Survey (CPS), I examine whether there are large ethnic and racial differences in home access to computers, the Internet and broadband in the United States. The Supplement to the CPS, which is conducted by the U.S. Census Bureau and Bureau of Labor Statistics, contains detailed information on computer and Internet access by individuals not found in other government data sources. The October 2003 data are the most recent available, and the next supplement to the CPS is not scheduled for a couple of years. Estimates from the CPS indicate that there is a large and substantial digital divide currently existing in the United States and raises serious doubts as to whether we are truly a "Nation Online."

Findings from previous research of mine on the causes of the digital divide are also briefly summarized in this report. I examine whether ethnic and racial differences in the most likely "suspects" -- family income, education, occupation, and family structure - have independent effects on disparities in home computer and Internet use. I also discuss some of the likely consequences of the digital divide. Findings from research of mine on the labor market and educational consequences are summarized.

The main findings discussed in this report are:

- The Digital Divide is large and does not appear to be disappearing soon. Blacks and Latinos are much less likely to have access to home computers than are white, non-Latinos (50.6 and 48.7 percent compared to 74.6 percent). They are also less likely to have Internet access at home (40.5 and 38.1 percent compared to 67.3 percent).
- Asians have home computer and Internet access rates that are higher than white, non-Latino rates (77.7 and 70.3 percent), and Native Americans have lower rates (51.6 and 40.9 percent).
- Among Latino groups, Mexicans have the lowest home computer and Internet access rates followed by Central and South Americans who have the next lowest rates. Although Cubans, Puerto Ricans and Other Latinos have higher rates, all Latino groups are less likely to own a computer or have Internet access at home than are white, non-Latinos.
- Slightly more than half of all black and Latino children have access to a home computer and approximately 40 percent have access to the Internet at home (compared to 85.5 and 77.4 percent of white, non-Latino children). Ethnic and racial disparities in home computer and Internet access rates are larger for children than for adults.
- Roughly 1 out of 7 blacks and 1 out of 8 Latinos subscribe to broadband at home, compared to 26.1 percent of whites. One third of Asians and roughly 1 out of 8 Native Americans have broadband at home.

- Income differences are partly, but not entirely responsible for ethnic and racial disparities in computer and Internet access. Even among individuals with family incomes of at least \$60,000, blacks and Latinos are substantially less likely to own a computer or have Internet access at home than are whites.
- Using regression models and special decomposition techniques, I find that lower levels of income among blacks account for 27.4 percent of the disparity between white, non-Latinos and blacks in computer ownership and 24.7 percent of the disparity in Internet use at home. White/black differences in education levels account for 9.4 percent of the home computer rate gap and 15.2 percent of the Internet use rate gap.
- Relatively low levels of income among Latinos also contribute to why their rates of computer ownership and Internet use are lower than white, non-Latinos (these factors explain 26.6 and 21.0 percent of the gaps, respectively). Latinos have substantially lower levels of education than whites. These lower levels of education account for 22.5 percent of the white/Latino gap in home computer rates and 36.4 percent of the gap in Internet use rates.
- The explanations for low rates of computer and Internet use among Mexicans are similar to those found for all Latinos, however, the explanations differ somewhat for Cubans and Puerto Ricans. Education and income explain less of the Cuban/white gap in computer ownership, and education and income explain nearly 75 percent of the gap between Puerto Ricans and white, non-Latinos.
- Low levels of income explain 36.2 percent of the gap in computer ownership and 33.0 percent of the gap in home Internet use between Native Americans and whites. Low levels of education also explain a sizeable portion of the gaps (13.3 and 24.5 percent, respectively). Another factor that explains part of the gaps (4.2 and 4.7 percent) is the higher likelihood of Native Americans living in rural areas than whites.
- Language is an important determinant of computer ownership and Internet use even after controlling for education, family income and immigrant status. Spanish-speaking Latinos, especially Mexicans, have strikingly low rates of computer ownership and home Internet use.
- Sixty percent of all workers use a computer at work and 46 percent use the Internet at work. Among jobs that require a college degree, 85 percent of workers use a computer at work and 74 percent use the Internet at work.
- Estimates from the 2001 CPS indicate that 95.2 percent of children who have home computers are enrolled in school, whereas only 85.4 percent of children who do not have home computers are enrolled in school. Controlling for family income, parental education, parental occupation and other observable

characteristics, I continue to find a difference in school enrollment rates of 1.4 to 7.7 percentage points.

- Estimates from the 2000-2003 CPS and the National Longitudinal Survey of Youth 1997 indicate that teenagers who have access to home computers are 6 to 8 percentage points more likely to graduate from high school than teenagers who do not have home computers after controlling for individual, parental, and family characteristics. We also find evidence of similarly strong relationships between home computers and educational outcomes using several estimation strategies and even after controlling for detailed home environment and extracurricular activities. Home computers appear to increase high school graduation partly by reducing non-productive activities, such as school suspension and crime, among children.

1. Introduction

A recent report entitled, "A Nation Online: How Americans Are Expanding Their Use of the Internet" by the U.S. Department of Commerce (2002) documents the rapid growth in the use of the Internet in the past few years. The report also notes that Internet use among African-Americans and Latinos grew at a substantially faster rate from August 2000 to September 2001 than Internet use among whites or Asians. The differential trends in Internet use across ethnic and racial groups suggest that the so-called "Digital Divide" may be disappearing. In fact, the latest report by the Department of Commerce (2004) entitled, "A Nation Online: Entering the Broadband Age," does not even discuss racial differences in access to technology.¹ A closer look at the data, however, reveals that we have a long way to go. For example, slightly more than two thirds of all white, non-Latinos have access to the Internet at home. In contrast, only about 40 percent of African-Americans, Latinos and Native Americans have access to the Internet at home.

This "Digital Divide" may have serious economic consequences for disadvantaged minority groups as information technology skills become increasingly important in the labor market, and the Internet is "expected to become a primary medium for communications, commerce, education, and entertainment in the 21st century" (U.S. General Accounting Office 2001). Future economic, education and political advancement for these groups may depend on access to computers, the Internet and broadband technology.

Using data from the Computer and Internet Use Supplement to the October 2003 Current Population Survey (CPS), I document ethnic and racial differences in access to

home computers, the Internet and broadband. The Supplement to the CPS, which is conducted by the U.S. Census Bureau and Bureau of Labor Statistics, contains detailed information on computer and Internet use by individuals not found in other government data sources. It is the most recent available government data on home access to technology. The next supplement to the CPS is not scheduled until November 2007. In this report, I also summarize findings from recent research on the causes and consequences of the digital divide. I examine whether ethnic and racial differences in the most likely "suspects" -- family income, education, occupation, and family structure -- have independent effects on disparities in home computer and Internet use. I also discuss some of the likely consequences of the digital divide. Findings from recent research on the labor market and educational consequences of the digital divide are summarized.

2. Is There a Digital Divide?

Blacks and Latinos are substantially less likely to have a computer at home than are white, non-Latinos.² Figure 1 reports the fraction of the population that has a computer at home. Estimates from the 2003 CPS indicate that 74.6 percent of white, non-Latinos have access to a home computer. In contrast, only 50.6 percent of blacks and 48.7 percent of Latinos have access to a home computer. Asians have the highest rate of computer ownership at 77.7 percent, and Native Americans have a relatively low rate of ownership at 51.6 percent.

¹ To be sure, estimates of Internet use and broadband access at home by race and Hispanic origin are reported in an appendix table along with other demographic characteristics, but these estimates are not discussed in the text.

² Individuals of black, Asian, or Native American race can be of any Hispanicity.

The relatively low rates of access to home computers among blacks and Latinos have also existed for at least as long as the government began collecting data on computer use. Figure 2 displays the percent of adults (18 and over) who have access to a home computer by race for selected years from 1984 to 2003. These estimates are from the computer use supplements to the CPS and are reported in U.S. Bureau of the Census (1984, 1989, 1993, 1997). I calculate the estimates for 2000 to 2003 using similar sample criteria and racial group definitions. In 1984, only 4.4 percent of blacks and 4.1 percent of Latinos had home computers, whereas 10.0 percent of whites and those of other race had home computers. Over the past two decades, the racial gaps have declined in percentage terms, but not in percentage point terms. In either case, the estimates clearly indicate that blacks and Latinos have been and continue to be much less likely to have access to a home computer than whites.

PATTERNS OF INTERNET ACCESS

Racial differences in Internet access at home are also a cause of concern among policymakers. For example, the U.S. Department of Commerce (2000) has argued that economic advancement, educational advancement, and community participation are increasingly dependent on access to the Internet. Similarly, the U.S. Department of Commerce (2002) notes that access to the Internet is important because of the growth in commercial activity, government services, and health and educational materials online. Figure 3 reports the fraction of the population that has access to the Internet at home. Slightly more than two thirds of all white, non-Latinos have access to the Internet at home. In contrast, only 40.5 percent of blacks and 38.1 percent of Latinos have access to

the Internet at home. Asians have the highest rate of home Internet access at 70.3 percent and Native Americans have a relatively low rate at 40.9 percent.

Racial disparities in home Internet use have existed for several years (estimates are displayed in Figure 4). In 1997, the fraction of white, non-Latinos ages 18 and over that used the Internet at home was 16.7 percent. In contrast, only 5.8 and 5.7 percent of blacks and Latinos used the Internet at home, respectively (U.S. Bureau of the Census 1997). Both of these rates are roughly 35 percent of the white rate. Although Internet use has increased dramatically since 1997, racial disparities have changed only slightly. Using the same age group (ages 18 and over) in 2003, I find that 54.7 percent of whites use the Internet at home, whereas only 32.2 percent of blacks and 26.4 percent of Latinos use the Internet at home. These estimates imply that the black/white ratio in home Internet use is 0.588 and the Latino/white ratio is 0.483. As a percentage of the white rate, minorities have made some gains, however, it is difficult to compare rates when they are changing rapidly over time. Furthermore, in percentage points the gaps increased from 11 percentage points in 1997 to 23 percentage points for blacks in 2003 and 28 percentage points for Latinos in 2003.

LATINOS

Latinos are a heterogeneous group. It is well known, for example, that economic and educational outcomes differ greatly across Latino groups (U.S. Bureau of the Census 1993). Figures 1 and 3 report home computer and Internet access rates for several Latino groups. As expected, computer and Internet access rates also differ across Latino groups. Mexican-Americans have the lowest rates among all reported Latino groups followed by

Central and South Americans who have the next lowest rates. Cubans, Puerto Ricans, and Other Latinos have higher rates. All Latino groups, however, are less likely to own a computer or have Internet access at home than are white, non-Latinos.

The difference between Mexican-Americans and whites is striking. Less than 45 percent of Mexican-Americans own a computer, and less than 40 percent have access to the Internet at home. Clearly, the digital divide is a reality for Mexican-Americans. Their low rates of use are somewhat hidden in previous Department of Commerce reports because only estimates for Latinos as a group are reported.

Central and South Americans also have low rates of computer and Internet use among Latino groups. Only 53.7 percent of Central and South Americans have a home computer and 43.9 percent have access to the Internet at home. Cubans, Puerto Ricans, and Other Latinos have higher rates of access to home computers and the Internet.

CHILDREN

Children are more likely to have access to a home computer than are adults. Figure 5 reports home computer rates by race/ethnicity for children. Among white, non-Latino children, 85.5 percent have a home computer. In contrast, roughly half of all black and Latino children have access to a computer at home. Among Mexican-American children, only 47.1 percent have access to a home computer. These ethnic and racial disparities in access to home computers among children are extremely large. In fact, they are larger for children than for adults, which is especially troubling given the potential importance of access to technology on educational and future labor market outcomes. For example, the gap between white and Latino children is 32.9 percentage

points compared to a white/Latino gap of 24.8 percentage points for adults. The gap between white and black children is 32.7 percentage points compared to 21.9 percentage points for adults.

Children also have a higher likelihood of having access to the Internet at home than do adults for all reported groups, but the differences are not large (Figure 6). Slightly more than three fourths of all white children have access to the Internet at home, compared to 41.4 and 39.8 percent of black and Latino children, respectively. These racial gaps in Internet use are slightly larger than those for adults.

BROADBAND ACCESS

The CPS also includes information on the type of Internet access. Access to high-speed connections, such as DSL and cable modems, represent an emerging dimension of the digital divide. Estimates from the CPS indicate large ethnic and racial differences in home broadband access (Figure 7). Roughly one fourth of whites and one third of Asians have broadband access at home. In contrast, only 13.9 percent of blacks, 12.4 percent of Latinos and 12.7 percent of Native Americans have a hi-speed Internet connection at home. Mexican-Americans, who will soon be the largest minority group in the United States, have the lowest rate of broadband access at home. Only one of out ten Mexican-Americans has a hi-speed connection at home.

3. What are the Underlying Causes of the Digital Divide?

HOME COMPUTER AND INTERNET ACCESS RATES BY INCOME AND EDUCATION

How much of the racial digital divide is simply due to differences in income? Do the large ethnic and racial disparities in home computer and Internet use exist even after controlling for income? It is well known that ethnic and racial groups differ substantially in average levels of income (U.S. Census Bureau 1993) and that home computer and Internet use increase with income (Fairlie 2002). Figures 8 and 9 display home computer and Internet access rates by income level, respectively, to address this question. For every reported income category, blacks and Latinos are substantially less likely to have a home computer and Internet access. Even among individuals with family incomes of at least \$60,000, blacks and Latinos are substantially less likely to own a computer or have Internet access at home than are whites. Clearly, income is an important factor, but there must be additional factors at play.

Access to home computers and the Internet also increase sharply with education levels (Figures 10 and 11). For each education level, however, black and Latinos have lower rates of technology access. This finding is similar to the one for income.

THE CONTRIBUTIONS OF INCOME AND OTHER FACTORS TO THE DIGITAL DIVIDE IN COMPUTER OWNERSHIP?

How much of the digital divide is due to income and how much is due to other factors, such as education and family structure? In previous reports, I use 2000 and 2001 CPS data to explore the underlying causes of ethnic and racial differences in computer and Internet use (Fairlie 2003, 2004). In particular, I examine whether ethnic and racial differences in the most likely "suspects" -- family income, education, occupation, and family structure -- have independent effects on disparities in computer and Internet use.

The separate and independent effects of these variables are estimated using regression models and decomposition techniques. The decomposition techniques combine regression estimates and sample means to identify how much a factor, such as income or education, explains of the disparity between two racial or ethnic groups in a specific outcome, such as computer or Internet use. These techniques have been widely used in the literature to examine the causes of minority/white differences in wages.

Table 1 reports estimates from this procedure for decomposing the gap in computer ownership rates between white, non-Latinos and each ethnic/racial group. The gap between whites and Asians in the home computer rate is not reported because there is essentially no difference between rates for the two groups. The main findings from this analysis are:

- Lower levels of income among blacks account for 27.4 percent of the disparity between white, non-Latinos and blacks in computer ownership and 24.7 percent of the disparity in Internet use at home. White/black differences in education levels account for 9.4 percent of the home computer rate gap and 15.2 percent of the Internet use rate gap.
- Relatively low levels of income among Latinos also contribute to why their rates of computer ownership and Internet use are lower than white, non-Latinos (these factors explain 26.6 and 21.0 percent of the gaps, respectively). Latinos have substantially lower levels of education than whites. These lower levels of education account for 22.5 percent of the white/Latino gap in home computer rates and 36.4 percent of the gap in Internet use rates.
- The explanations for low rates of computer and Internet use among Mexicans are similar to those found for all Latinos, however, the explanations differ somewhat for Cubans and Puerto Ricans. Education and income explain less of the Cuban/white gap in computer ownership, and education and income explain nearly 75 percent of the gap between Puerto Ricans and white, non-Latinos.
- Low levels of income explain 36.2 percent of the gap in computer ownership and 33.0 percent of the gap in home Internet use between Native Americans and whites. Low levels of education also explain a sizeable portion of the gaps (13.3 and 24.5 percent, respectively). Another factor that explains part of the gaps (4.2

and 4.7 percent) is the higher likelihood of Native Americans living in rural areas than whites.

- Language is an important determinant of computer ownership and Internet use even after controlling for education, family income and immigrant status. Spanish-speaking Latinos, especially Mexicans, have strikingly low rates of computer ownership and home Internet use.

4. What are the Consequences of the Digital Divide?

The digital divide may have serious economic consequences for disadvantaged minority groups as information technology skills become increasingly important in the labor market and for education. The Internet is rapidly becoming a primary medium for communications, commerce, education, entertainment and finding jobs. Future economic, education, community participation and political advancement for these disadvantaged groups may depend on access to computers, the Internet and broadband technology. Information on government services, health and education are also increasingly going online. Access to the Internet may also be increasingly important for consumers as the Internet has lowered the price of many goods and services, provides extensive information on many products, and has made shopping more convenient. As a result, online sales represent an increasing share of all retail sales. It has also been argued that the Internet improves political engagement and there is evidence that computers make it easier to start businesses.

LABOR MARKET IMPACTS

Although there may be several long-term economic, educational, political and health impacts of access to technology, two of the most important impacts in the near

future are likely to be in the labor market and education. It is quite clear that information technology skills are becoming increasingly important in the labor market. The U.S. Department of Labor's 2002-03 Occupational Outlook Handbook projects Computer Software Engineers-Applications, Computer Support Specialists, Computer Software Engineers-Systems Software, Network and Computer Systems Administrators, and Network Systems and Data Communications Analysts to be the fastest growing occupations from 2000 to 2010. There is evidence in the literature that the share of employment in information technology industries and occupations and the share of employees using computers and the Internet at work have risen dramatically over the past decade, a large percentage of new hires are required to use computers, and workers who use computers on the job earn more than their non-computer-using counterparts (Freeman 2002). Furthermore, online-job search is becoming increasingly popular.

One method of demonstrating the increasing importance of computer and Internet skills in the workplace is to examine estimates of the use of computers and the Internet at work. Sixty percent of all workers use a computer at work and 46 percent use the Internet at work (see Figure 10). Among jobs that require a college degree, 85 percent of workers use a computer at work and 74 percent use the Internet at work. Even among high school graduates who did not attend college, 43 percent use a computer at work and 27 percent use the Internet. The use of computers and the Internet at work have become the norm especially in higher-skilled jobs. Given that technology skills are required in the labor market, especially for better paying jobs, the digital divide is likely to have serious negative consequences on labor market opportunities for individuals who have limited opportunities to acquire these skills.

EDUCATIONAL IMPACTS

The educational impacts of the digital divide also appear to be large. In previous research, I find evidence suggesting that home computers increase school enrollment, high school graduation, and grades (Fairlie 2005 and Beltran, Das and Fairlie 2005). I also find evidence that home computers decrease school suspension and criminal activities. Home computers may exert a positive influence on academic performance directly through the use of educational software and indirectly by facilitating the completion of school assignments and learning. The use of home computers may also open doors to learning, encourage some teenagers to stay in school, reduce truancy and crime, and offer economic incentives for completing high school.

In the first article, I use data from the Computer and Internet Use Supplement to the 2001 Current Population Survey to explore whether access to home computers increases the likelihood of school enrollment among teenagers who have not graduated from high school (Fairlie 2005). A comparison of school enrollment rates reveals that 95.2 percent of children who have home computers are enrolled in school, whereas only 85.4 percent of children who do not have home computers are enrolled in school. Controlling for family income, parental education, parental occupation and other observable characteristics, I continue to find a difference in school enrollment rates of 1.4 percentage points. Using additional statistical techniques that try to control for family differences in educational motivation, I find a difference of school enrollment rates of 7.7 percentage points. These estimates suggest that home computers increase the likelihood that children stay in school.

In the second article, we use panel data from the two main U.S. datasets that include recent information on computer ownership among children -- the 2000-2003 CPS Computer and Internet Use Supplements (CIUS) matched to the CPS Basic Monthly Files and the National Longitudinal Survey of Youth 1997 -- to explore the relationship between computer ownership and high school graduation and other educational outcomes (Beltan, Das and Fairlie 2005). Teenagers who have access to home computers are 6 to 8 percentage points more likely to graduate from high school than teenagers who do not have home computers after controlling for individual, parental, and family characteristics. It is important to control for these characteristics because children who live in families with home computers are wealthier, have more educated parents and have other "advantaged" characteristics. We also find evidence of similarly strong relationships between home computers and educational outcomes using several estimation strategies and even after controlling for detailed home environment and extracurricular activities. Home computers appear to increase high school graduation partly by reducing non-productive activities, such as school suspension and crime, among children.

Overall the results of these two studies and others from the literature provide evidence that access to home computers improves educational outcomes among children. These findings indicate that the digital divide may translate into educational inequality, and thus future economic inequality.

5. Conclusions

Estimates from the Computer and Internet Use Supplements to the October 2003 Current Population Survey (CPS) indicate that the Digital Divide is large and does not

appear to be disappearing soon. Blacks and Latinos are much less likely to have access to computers, the Internet and broadband at home than are white, non-Latinos. Asians have home computer and Internet access rates that are higher than white, non-Latino rates, and Native Americans have lower rates. The Digital Divide also appears to be larger for children than for adults.

The summary of previous research on the causes of the digital divide indicates that income and education inequalities were found to be leading causes of the digital divide. These two factors, however, only explain part of the digital divide. In fact, large disparities in computer ownership and Internet use were found between blacks and Latinos, and white, non-Latinos in high-income families.

Previous research also indicates that the digital divide has important consequences for labor market and educational outcomes. Employers are increasingly requiring the use of computers and the Internet in jobs, especially the more lucrative ones held by college graduates. Evidence is also provided in previous studies that access to home computers improves educational outcomes among children. I find evidence suggesting that home computers increase school enrollment, high school graduation, and grades. I also find evidence that home computers decrease school suspension and criminal activities. The digital divide clearly has important implications for educational and economic inequality in the United States.

References

- Fairlie, Robert W. 2003. *Is There a Digital Divide? Ethnic and Racial Differences in Access to Technology and Possible Explanations*, Final Report to the University of California, Latino Policy Institute and California Policy Research Center.
- Fairlie, Robert W. 2004. "Race and the Digital Divide," *Contributions to Economic Analysis & Policy*. 3(1), Article 15: 1-38.
- Fairlie, Robert W. 2005. "The Effects of Home Computers on School Enrollment," *Economics of Education Review* (forthcoming).
- Beltran, Daniel O., Kuntal K. Das and Robert W. Fairlie. 2005. "The Effects of Home Computers on Educational Outcomes: Evidence from the Current Population Survey and National Longitudinal Survey of Youth 1997," University of California, Santa Cruz Working Paper.
- Freeman, Richard B. 2002. "The Labour Market in the New Information Economy," National Bureau of Economic Research Working Paper No. 9254.
- U.S. Bureau of the Census. 1984. Computer Use in the United States: 1984, Current Population Reports P23-155. Washington, D.C.: U.S.G.P.O.
- U.S. Bureau of the Census. 1989. Computer Use in the United States: 1989, Current Population Reports P23-171. Washington, D.C.: U.S.G.P.O.
- U.S. Bureau of the Census. 1993. 1990 Census of Population: Persons of Hispanic Origin in the United States, 1990 CP-3-3. Washington, D.C.: U.S.G.P.O.
- U.S. Bureau of the Census. 1993. Computer Use in the United States: 1993, Detailed Tables. <http://www.census.gov/population/www/socdemo/computer/computer93.html>.
- U.S. Bureau of the Census. 1997. Computer Use in the United States: October 1997, Current Population Reports P20-522. Washington, D.C.: U.S.G.P.O.
- U.S. Department of Commerce. 1999. Falling Through the Net: Defining the Digital Divide. Washington, D.C.: U.S.G.P.O.
- U.S. Department of Commerce. 2000. Falling Through the Net: Toward Digital Inclusion. Washington, D.C.: U.S.G.P.O.
- U.S. Department of Commerce. 2002. A Nation Online: How Americans are Expanding Their Use of the Internet. Washington, D.C.: U.S.G.P.O.
- U.S. Department of Commerce. 2004. A Nation Online: Entering the Broadband Age. Washington, D.C.: U.S.G.P.O.

U.S. Department of Labor 2002. Occupational Outlook Handbook, Washington, D.C.: U.S.G.P.O.

U.S. General Accounting Office. 2001. Telecommunications: Characteristics and Choices of Internet Users. Washington, D.C.: U.S.G.P.O.

Figure 1
Percent of the Population that Has a Home Computer by Race/Ethnicity
Current Population Survey, October 2003

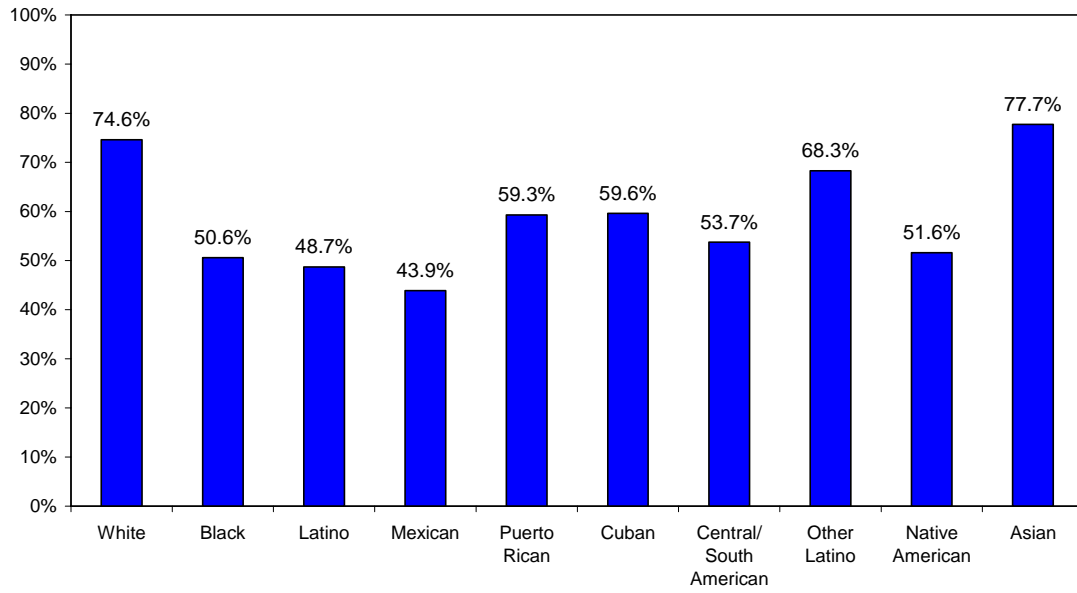


Figure 2
Percent of the Population (Ages 18+) with Access to a Home Computer by Race/Ethnicity
Current Population Survey, 1984-2003

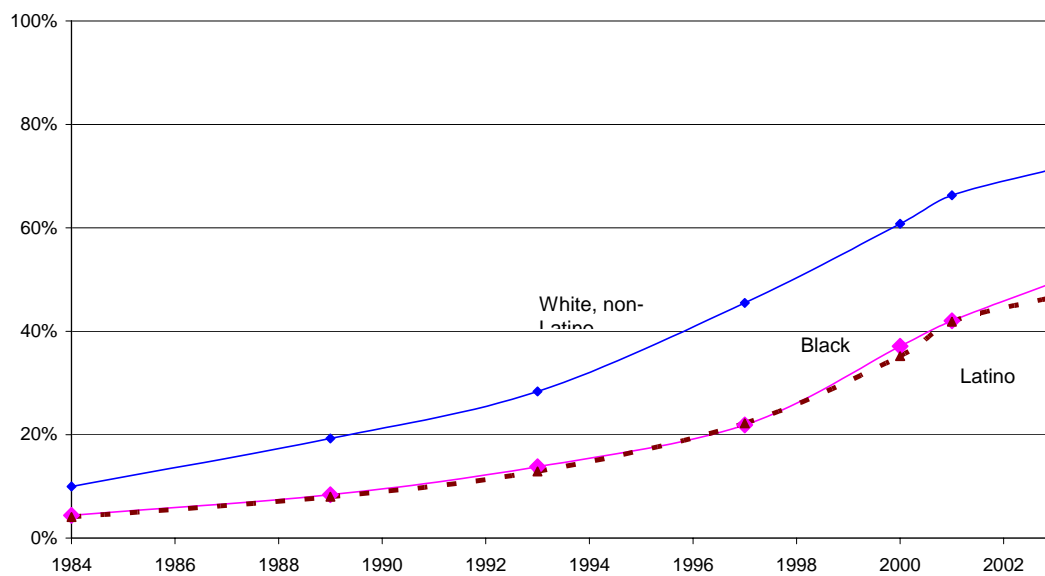


Figure 3
Percent of the Population that Has Access to the Internet at Home by Race/Ethnicity
Current Population Survey, October 2003

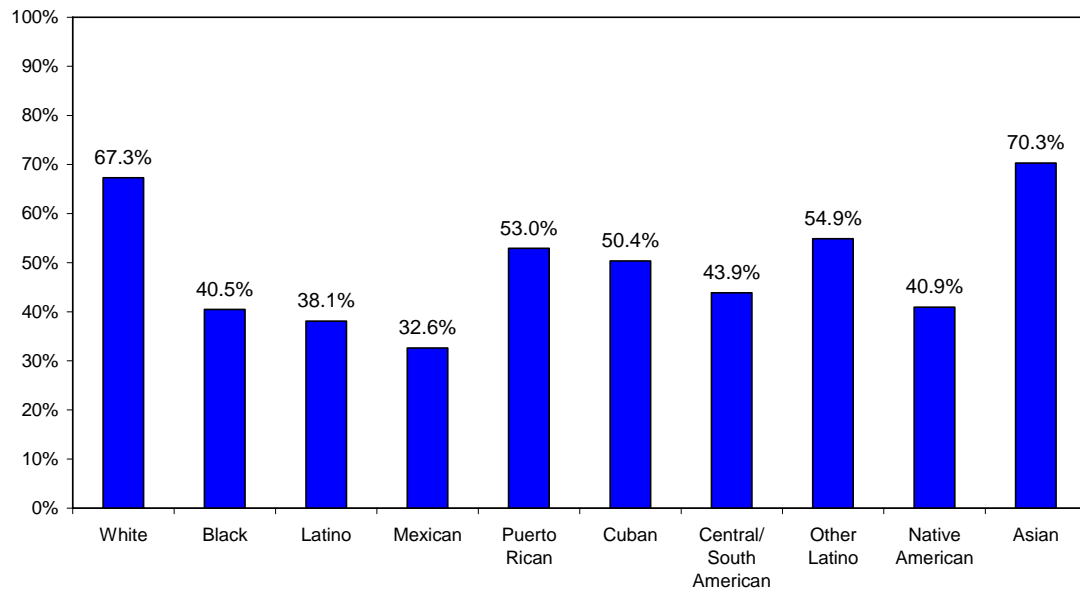


Figure 4
Percent of the Population (Ages 18+) Who Use the Internet at Home by Race/Ethnicity
Current Population Survey, 1997-2003

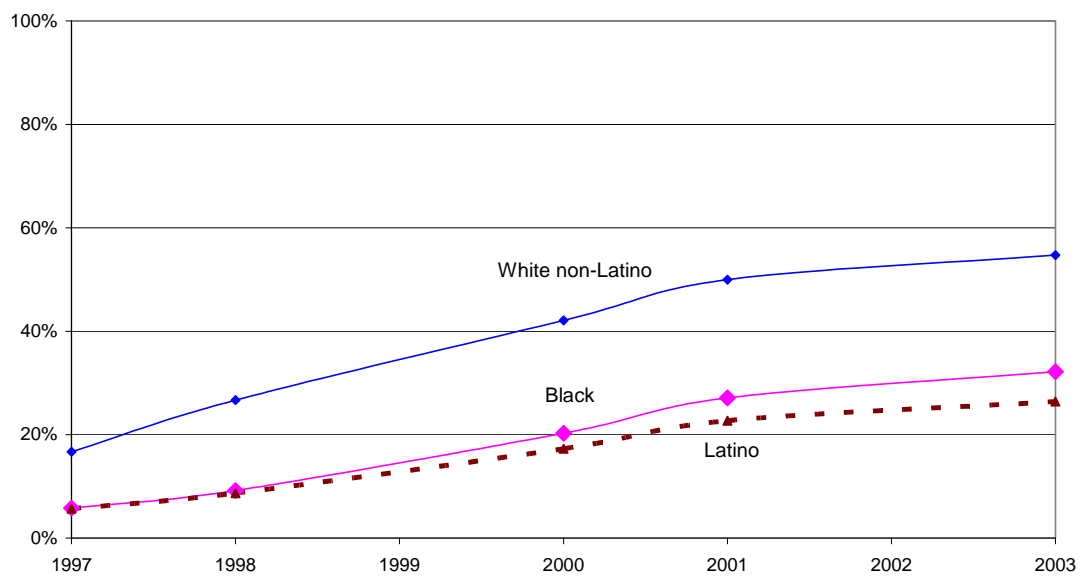


Figure 5
Percent of Children that Have a Home Computer by Race/Ethnicity
Current Population Survey, October 2003

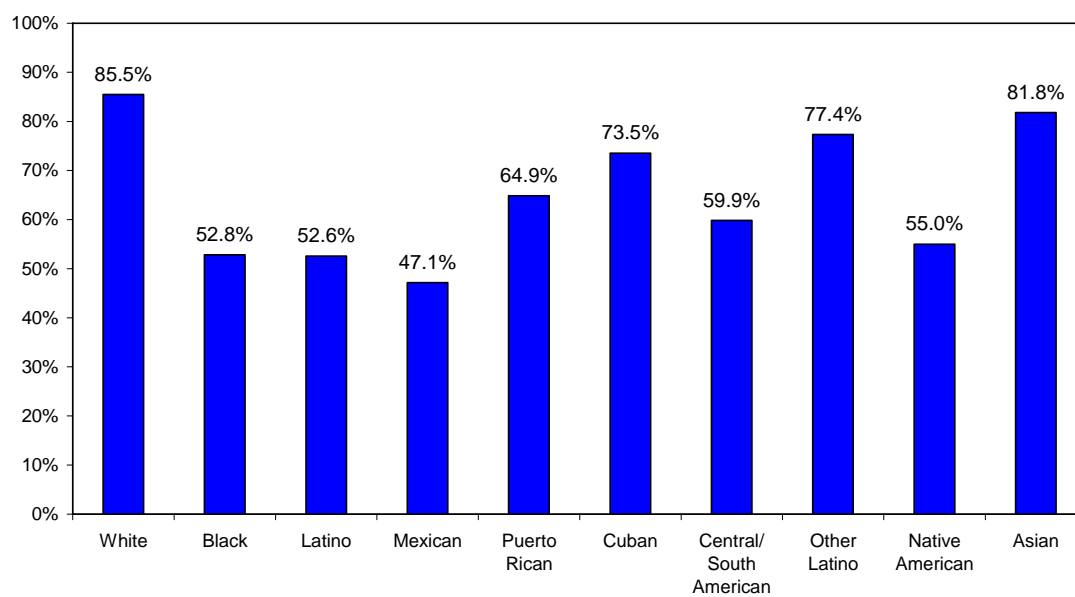


Figure 6
Percent of Children that Have Access to the Internet at Home by Race/Ethnicity
Current Population Survey, October 2003

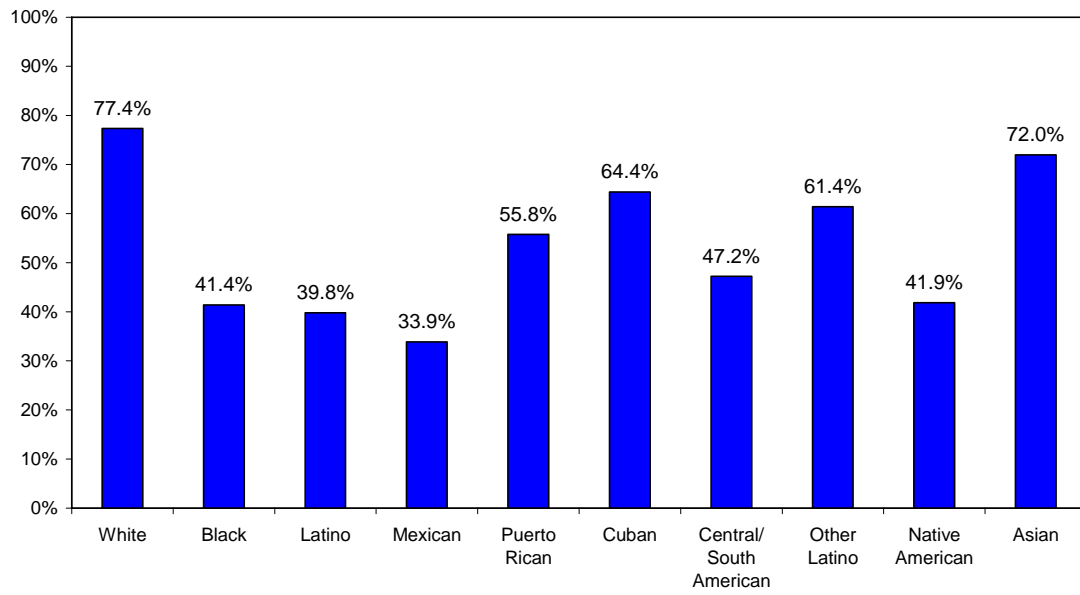


Figure 7
Percent of the Population that Has Hi-Speed Internet Access at Home by Race/Ethnicity
Current Population Survey, October 2003

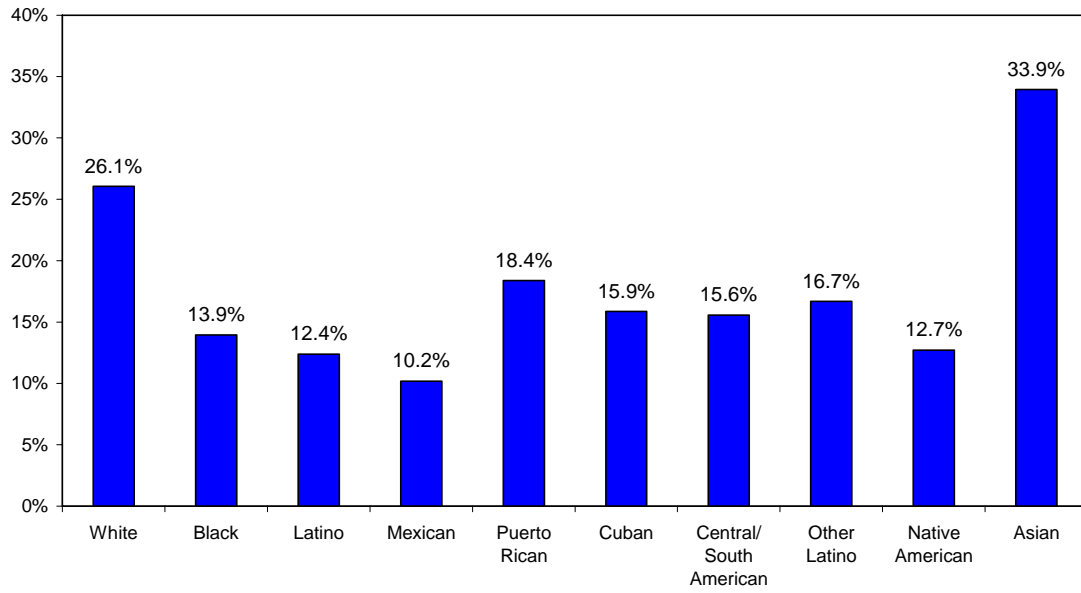


Figure 8
Percent of the Population that Has a Home Computer by Income and Race
Current Population Survey, October 2003

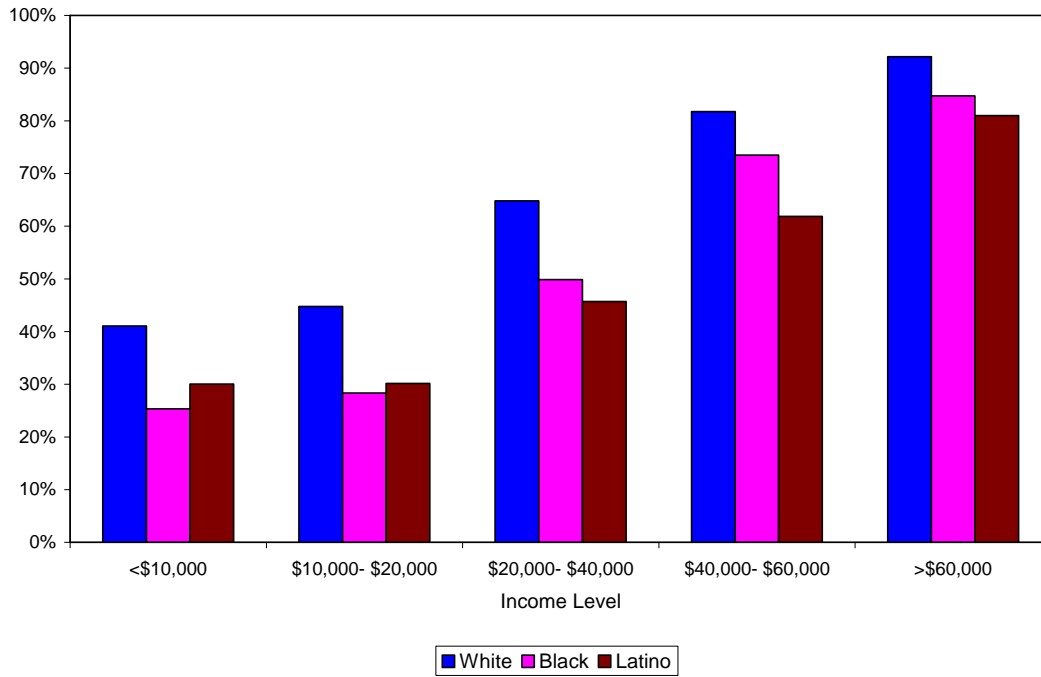


Figure 9
Percent of the Population that Has Access to the Internet at Home by Income and Race
Current Population Survey, October 2003

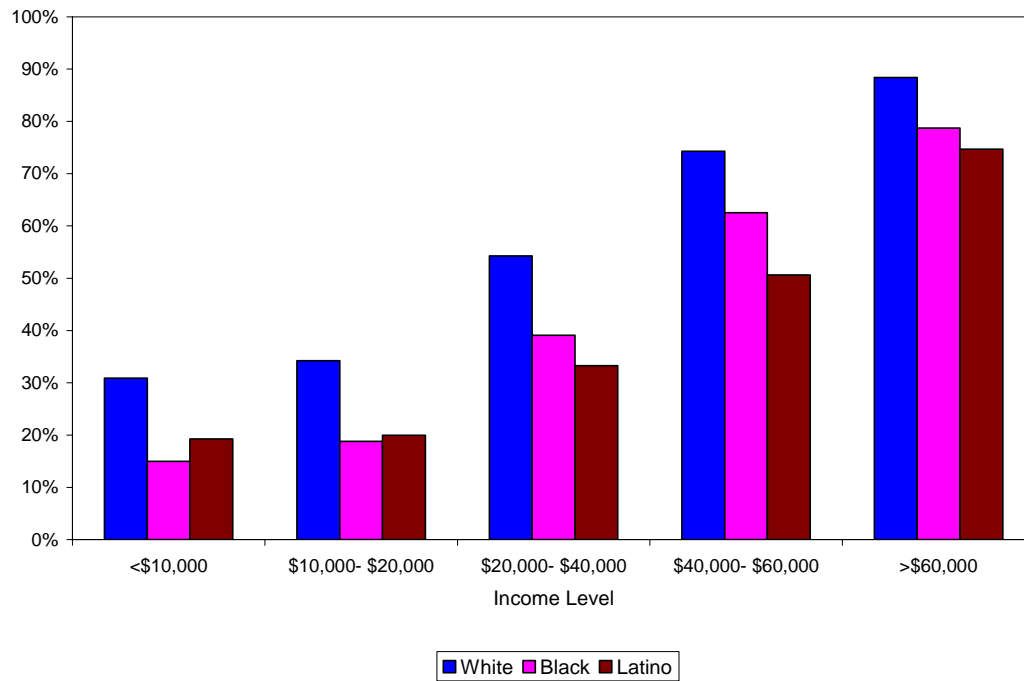


Figure 10
Percent of the Adults (Ages 25+) that Have a Home Computer by Education and Race
Current Population Survey, October 2003

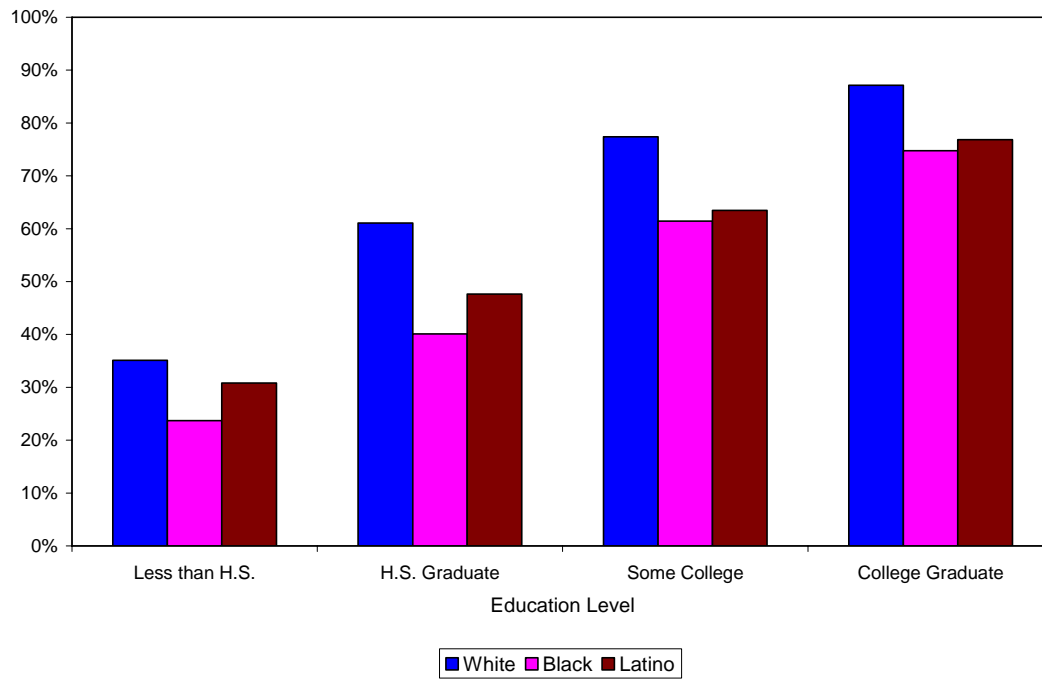


Figure 11
Percent of Adults (Ages 25+) that Have Access to the Internet at Home by Education and Race
Current Population Survey, October 2003

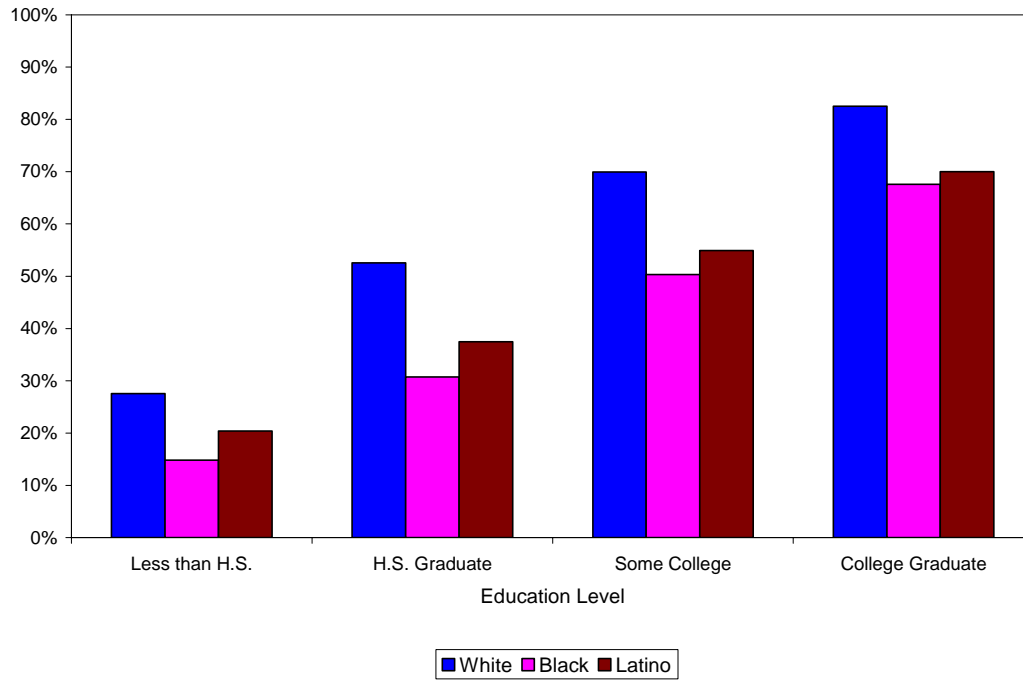


Figure 12
Work Computer and Internet Use by Education, United States
Current Population Survey, October 2003

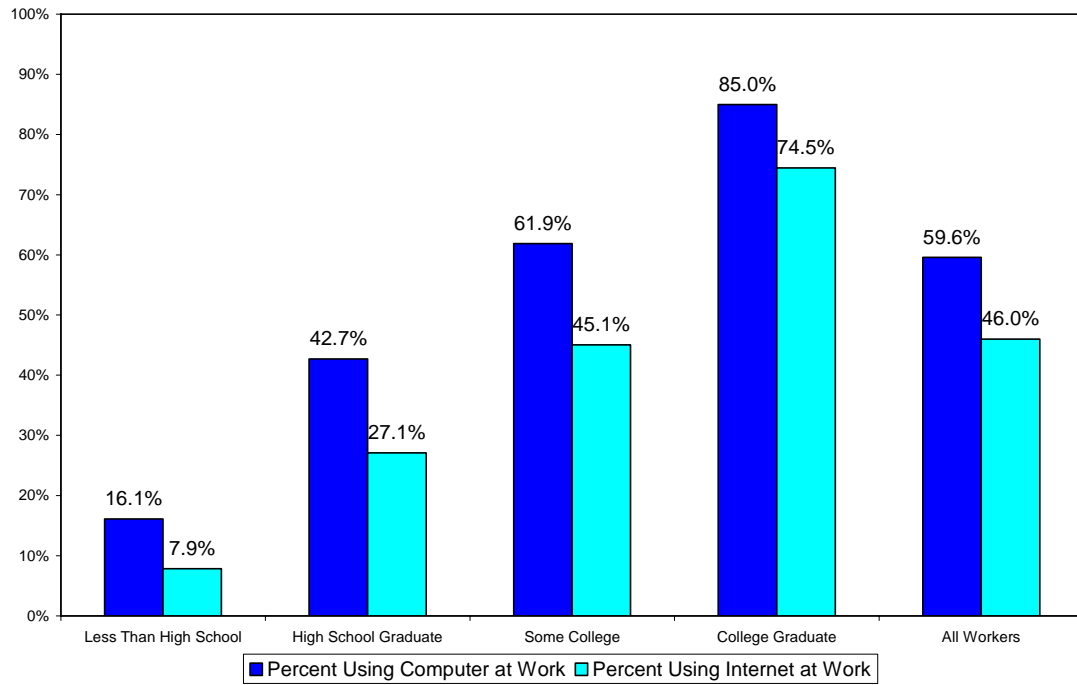


Figure 13
School Enrollment among Children Ages 16-18
Current Population Survey, 2001

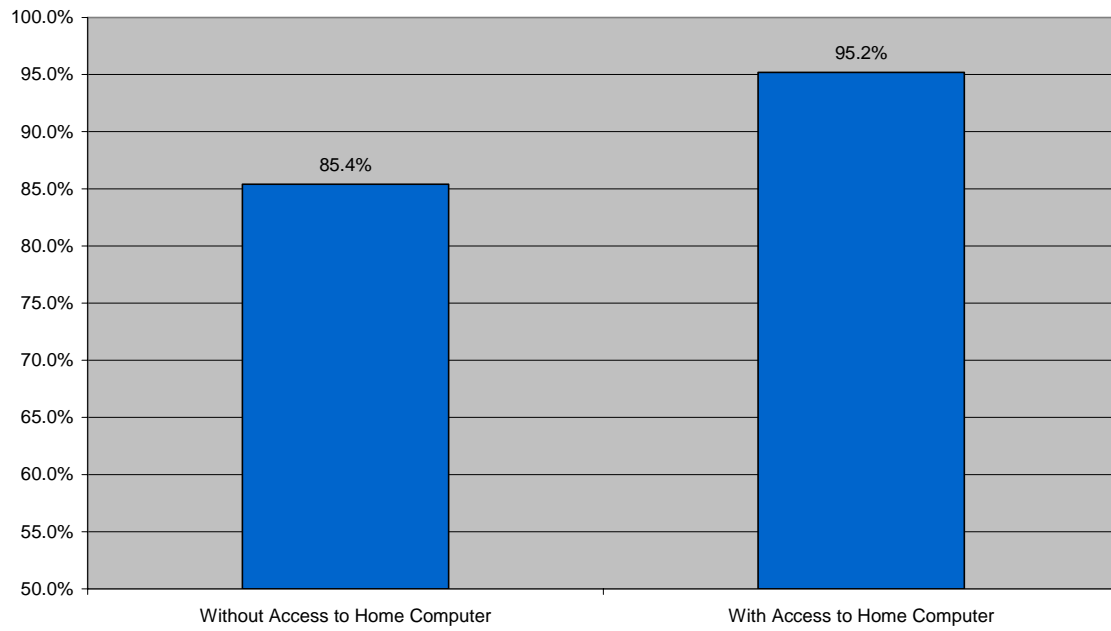


Figure 14
School Enrollment Differences from Access to Home Computers
Current Population Survey, 2001

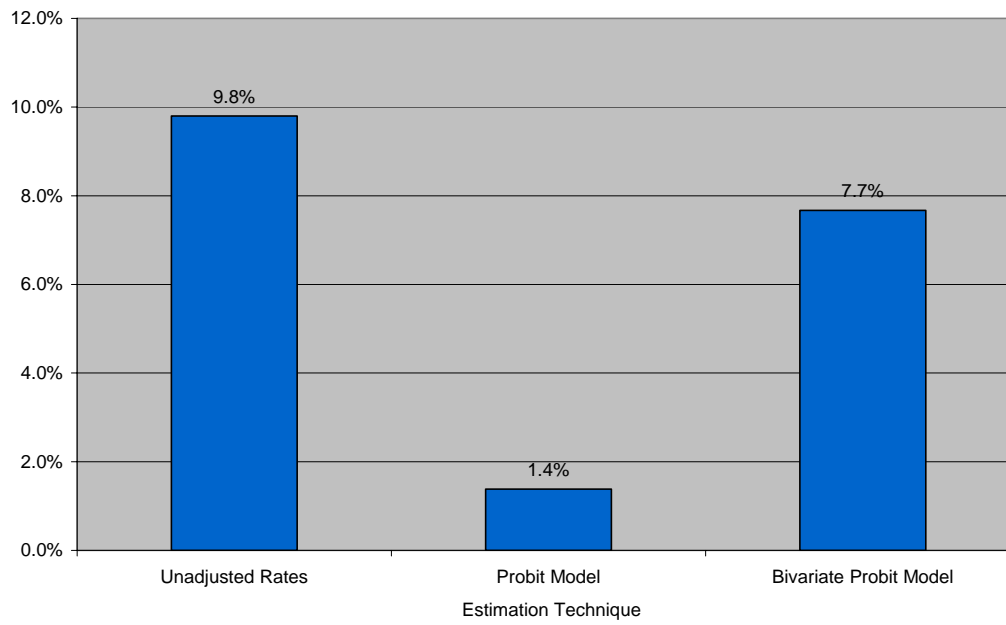


Table 1
Decomposition of Racial/Ethnic Gaps in Home Computer Rates

	Black	Latino	Mexican	Cuban	Puerto Rican	Central/ South Amer.	Native Amer.
White/minority gap in home computer rate	0.244	0.242	0.296	0.224	0.139	0.170	0.199
Contributions from racial differences in:							
Sex and age	-0.011 -4.6%	-0.025 -10.5%	-0.028 -9.6%	0.005 2.4%	-0.020 -14.4%	-0.028 -16.6%	-0.021 -10.5%
Marital status and children	0.023 9.6%	-0.001 -0.2%	-0.004 -1.3%	0.009 3.8%	0.011 7.7%	0.000 0.2%	0.011 5.4%
Education	0.023 9.4%	0.054 22.5%	0.063 21.3%	0.033 14.7%	0.045 32.1%	0.044 25.5%	0.027 13.3%
Income	0.067 27.4%	0.064 26.6%	0.072 24.3%	0.046 20.4%	0.063 45.2%	0.048 28.4%	0.072 36.2%
Region	0.009 3.8%	-0.010 -4.1%	-0.013 -4.3%	0.005 2.2%	-0.002 -1.3%	-0.009 -5.0%	-0.011 -5.6%
Central city status	0.001 0.3%	-0.002 -0.8%	-0.002 -0.5%	-0.006 -2.9%	-0.002 -1.3%	-0.004 -2.3%	0.008 4.2%
Employment / Occupation	0.007 2.8%	0.015 6.3%	0.019 6.3%	0.006 2.8%	0.006 4.0%	0.017 9.7%	0.009 4.4%
All included variables	0.119 48.6%	0.096 39.7%	0.107 36.1%	0.097 43.3%	0.100 72.0%	0.068 40.0%	0.094 47.4%

Notes: (1) The sample consists of adults ages 25 and over (2) Contribution estimates are mean values of the decomposition using 1000 subsamples of whites. See text for more details