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How Internet Access Affects Minority Students in Secondary Public Schools

CAPSTONE REPORT

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Abstract
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How Internet Access Affects Minority Students
in Secondary Public Schools

This paper examines Internet access as a factor to the limited numbers of qualified minorities, African Americans and Hispanic Americans, eligible for employment in corporations throughout the United States (Bennett, 2005). Selected literature published between 1995 to 2005 is analyzed to examine access and success rates in schools. Content analysis results in textual and graphical displays designed for diversity coordinators, working in corporations, who want to incorporate a diverse pool of employees in the workplace.

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Chapter I – Purpose of Study

Brief Purpose

According to the U.S. Census Bureau (2003) only 37 percent of African Americans and approximately 35 percent of Hispanic Americans have access to the Internet in their homes (U.S. Census Bureau, 2003). Consequently, most minority students often depend upon Internet access outside of the home in places such as schools (Roach, 2003). However, the latest figures per the U.S. Census Bureau (2003) indicate that only 36 percent of African American students and 31 percent of Hispanic American students have Internet access in their schools. These numbers are significant and profound as Irving (2004) concludes that Internet access promotes an environment conducive for individuals to enhance their knowledge base about education and employment opportunities and to connect with one another (p. 23).

The digital divide is a term used to characterize a condition in which some individuals, described as the *haves*, possess Internet access; in contrast, the *have-nots* are those who do not have the means to access information via the Internet in homes and/or school (Samoriski, 2002, p. 11; Rozer, n.d., para.3). Macavinta (1997) includes minorities in the group of have-nots, because they often lack Internet access and thus do not have the same opportunities as the *haves* to significantly benefit from Internet access (para. 4).

The purpose of this study is to examine the digital divide, and specifically the relationship between access to the Internet in secondary public schools and the ability of

minority students to succeed in education. Educational success is measured in terms of: standardized test scores, high school graduation rate, and the number of college entrants (Education Trust, 2003). For the purpose of this study, secondary students are those in tenth through twelfth grades.

In this study, the term *minority* designates African Americans and Hispanic Americans (Minority Group, 2005). Although Asian-Americans are included in the category of minorities in the United States, approximately 67 percent of Asian-American population has the capacity to access the Internet (U.S. Census Bureau, 2003). Thus Asian-Americans are excluded from the minority category.

The target audience for this study consists of individuals who serve as corporate diversity coordinators in the United States. Diversity coordinators are those individuals employed to investigate, identify and respond to the needs and challenges of incorporating a diverse pool of employees in the workplace (Monster, 2005).

Literature review is the chosen method of study, as the goal of this methodology is to understand the associations of the related subject matters (Taylor & Proctor, 2005). Literature published after 1995 concerning the digital divide is gathered. Specifically, material pertaining to discussions of the digital divide related to Internet access and educational success among African American and Hispanic American secondary students in public schools are collected. The literature used in this study includes books, Internet articles, and case studies.

Literature, as it is collected, is subjected to content analysis (CSU Writing Lab, 2005). The first phase of the content analysis is designed to identify information concerning the level of Internet access reported for African American and Hispanic American secondary students who attend public schools. The second phase of the content analysis has as its focus the reported success rates in school, among this same set of minority student populations, with and without Internet access. In this case, *success* is defined as stated above, (average standardized test scores, rate of high school graduates, and the rate of college entrants) (Education Trust, 2003). In the third phase, literature is coded to identify the diversity issues facing corporations in the United States and examine ways in which some corporations have dealt with the concerns.

The results of the content analysis are compiled into three specific graphical displays. One line graph presents the reported levels of access Internet access of all American students compared to the Internet access of selected minorities in public schools (U.S. Census Bureau, 2003). Additionally, there are two tables that summarize selected educational success measurements among the selected minority student populations, with and without Internet access (NTIA, 2002; Education Trust, 2003).

The outcome of this study is presented as both a descriptive and graphical interpretation of the content analysis results. The interpretation is framed from the standpoint of the professional goals of diversity coordinators and is designed to help them (1) gain an understanding of the levels of access to the Internet among African American and Hispanic American secondary students in public schools and (2) help them to

understand ways to positively impact the secondary public schools to create an educational environment that will more likely result in the educational success of selected minorities. The larger goal is to improve the likelihood for success in building a diverse pool of candidates for employment.

Full Purpose

According to the National Telecommunications and Information Administration[NTIA] and U.S. Census Bureau, Americans' use of information technologies, such as the Internet, grew exponentially in 2001 (NTIA, 2002; U.S. Census Bureau, 2003). A study by the NTIA (2002) suggests that 174 million people or 65.6 percent of the U.S. population were computer users. Of the 174 million computer users, 143 million people or 53.9 percent of the population used the Internet (NTIA, 2002). These figures exhibit the fact that more than half of the American population has Internet access. The rise in Internet access occurred by users not only in homes, but also at the workplace, schools, and other locations (NTIA, 2002).

The Internet is not equally accessible to all citizens, however. The U.S. Census Bureau (2003) reports that only 37 percent of African Americans and approximately 35 percent of Hispanic Americans have access to the Internet in their homes (U.S. Census Bureau, 2003). Individuals without home computers are 1.5 times more likely to access the Internet in locations outside of the home such as schools and libraries (NTIA, 2002). Consequently, most minority students often depend on Internet access outside of the

home in places such as public schools (Roach, 2003). Data provided by the National Center for Education Statistics reports that minority students account for 68 percent of the 100 largest public schools in America (National Center for Education Statistics [NCES], 2000).

The U.S. Department of Education provides an annual survey of the availability and use of technology in schools. The latest study, conducted in 2002, suggests that 92 percent of public schools in the United States had Internet access (U.S. Department of Education, 2003). This number has increased dramatically, as a previous survey in 1994 showed that only three percent of public schools in the United States had Internet access. However, these figures do not provide an accurate representation of the situation in public schools; Internet access in schools does not necessarily imply that every classroom in the school is so equipped (Kaiser Family Foundation, 2004). Despite the fact that public schools have made drastic improvements (U.S. Department of Education, 2003) to provide Internet access to their students, the latest figures from the U.S. Census Bureau (2003) show that only 36 percent of African American students and 31 percent of Hispanic American students have Internet access in their schools during school hours (U.S. Census Bureau, 2003; U.S. Department of Education, 2003). These figures are significant as Internet access “provides students with a magnitude of easily accessible information; create opportunities to reinforce learning basic, new, and higher-order cognitive skills; and increase student interest and motivation” (Eamon, 2004, para. 5).

Limitations to Internet access hinder minority students' educational success. Minority students lacking Internet access are adversely impacted by such measurements as: standardized test scores, high school graduation rate, and the number of college entrants and graduates (Bridges, 2003; Education Trust, 2004).

One result of widespread Internet access, specifically in the United States, has been the creation of a digital divide (Samoriski, 2002). The digital divide describes a society in which there is a division between those who have Internet access and those who do not (Bridges, 2003). Bridges (2003) characterizes Internet users based on their level of access. The *have-nots* are "in disadvantaged groups within countries because they do not have Internet access to improve their lives" (Bridges, 2003, para.2). Minority students who depend solely on public schools to provide Internet access but who cannot obtain Internet access are classified as *have-nots* (Bridges, 2003). Macavinta (1997) supports this concept as she suggests minorities are in the group of *have-nots* because they often lack Internet access and thus do not have the same educational opportunities as those who have Internet access (Macavinta, 1997, para. 4). Such opportunities include, but are not limited to healthcare, e-government, jobs, and enhanced education (Bridges, 2003).

Multiple studies have shown that there are educational benefits linked to using the Internet (Eamon, 2004). Specifically, this study examines how access to the Internet affects the educational success of selected minority students. The target populations of the study exclusively include African American and Hispanic American students in secondary public schools. These selected minorities are less likely than their White and Asian-American counterparts to have access the Internet (Eamon, 2004).

The audience for this study is diversity coordinators - individuals who serve in corporations within the United States and investigate, identify and respond to the needs and challenges of incorporating a diverse pool of employees in their workplace (Monster, 2005). In some situations, diversity coordinators partner their corporations with local schools and communities to mitigate technological deficiencies such as a lack of computer presence or Internet access (“Companies Join”, 2001). An important professional goal of a diversity coordinator is to increase minority students’ ability to earn a post-secondary education and ultimately increase the number of minority individuals capable of entering into corporations (“HP and Magic”, 2005; Monster, 2005). Reaching this goal will help to bridge the digital divide and also increase diversity within the corporations. Research shows that when decision-makers have similar backgrounds, their decisions are not very resourceful because they tend to view the world from similar perspectives (Grove & Hallowell, 1998). Thus, this concept further demonstrates the need for diversity within the workplace.

The selected research method is literature review. This method was chosen because it is based upon reviewing and understanding pre-existing literature to convey the “strengths and weakness” of the argument in question (Taylor and Proctor, 2005, para. 1). Literature is gathered from texts, Internet articles, and case studies. Based on the protocols of a literature review and guided by the focus of the study, literature collected for this study is (1) organized and related to the purpose of this study (2) compiled into results of what is known and unknown (3) identified as controversial, if

applicable and (4) used to create additional questions to further research for the target audience (Taylor and Proctor, 2005).

Literature gathered from the sources is subject to content analysis (CSU Writing Lab, 2005). Content analysis is a research tool that allows for inferences to be made about related subject matters of this study (Krippendorff, 2004). Within this study, inferences are made regarding the relationship between the digital divide and the potential for educational success among selected secondary minority students enrolled in public schools.

Three phases are constructed for the content analysis. In the first phase, the researcher attempts to identify information related to the level of Internet access reported for both minority and non-minority secondary students who attend public schools. Based on the methods of content analysis, the researcher first analyzes occurrences within the text of instances of minority students with Internet access, and Internet access in public schools. The second phase of the content analysis is designed to identify reported success rates in school, among this same set of minority student populations, with and without Internet access. To perform the content analysis in the second phase, the researcher examines concepts related to educational success, and minority Internet usage in public schools. The third phase of content analysis identifies the diversity issues facing corporations in the United States and ways in which some corporations have handled with the issues.

Once the concepts are identified, they are used to frame a set of results, consisting of three purpose-specific graphical displays. A line graph presents the reported levels of Internet access of all American students in public schools compared to the Internet access of selected minorities in public schools (U.S. Census Bureau, 2005). Additionally, two tables summarize selected educational success rates among the selected minority student populations, with and without Internet access. The Method chapter of this study goes into details about the formulation of the content analysis results.

The outcome of this study is presented as a textual and illustrative interpretation of the content analysis results. The interpretation is framed from the standpoint of the professional goals of diversity coordinators and is designed to help them (1) gain an understanding of the levels of access to the Internet among African American and Hispanic American secondary students in public schools and (2) help them to understand ways to impact the public schools to create an educational environment that will more likely result in the educational success of selected minorities. The larger goal is to improve the likelihood for success in building a diverse pool of candidates for employment.

Significance

Corporations in the United States are committed to incorporating diversity in the workplace (Chung, 2004). To meet this commitment, corporations have employed diversity coordinators to help bridge the diversity gap in their corporations (Ethnic Majority, 2004). And while it should be possible for corporations to employ a diverse

group of employees, there are limited numbers of qualified minorities who are eligible to enter the workforce (Bennett, 2005). Although progress has been made to deplete the technological deficiencies that exist in secondary public schools by providing Internet access, most minority students are still without Internet access in the classroom (U.S. Department of Education, 2003). Consequently, selected minorities do not have the same opportunities to achieve educational success as other non-minority students (Morino, 2000). Diversity coordinators employed by corporations in the United States have an opportunity to ameliorate this problem as demonstrated by a summary of their commitments and expectations.

Diversity Coordinators can improve the technological deficiencies of selected minorities via fulfilling the following corporate roles and responsibilities:

- Investigate, identify, and respond to the needs and challenges of incorporating a diverse pool of employees in their workplace (Monster, 2005).
- Partner their corporations with local schools to mitigate technological deficiencies such as a lack of computer presence or Internet access (Zardoya, 2001)
- Enhance a minority student's ability to seek post-secondary education and ultimately increase the number of minority individuals able to enter into corporations within America ("HP and Magic", 2005).

The digital divide is the result of a society that has evolved into a group of technological *haves* and *have-nots* (Samoriski, 2002). By helping to diminish the digital divide in secondary public schools, diversity coordinators hope for an increase in the number of minorities eligible to enter the workforce ("Companies Join", 2001). Katz (1997) argues that failure to close the digital divide will have serious consequences:

The rich are going to be getting richer in terms of information. The information-poor will become more impoverished because government bodies, community organizations, and corporations are displacing resources from their ordinary channels of communication onto the Internet (cited in Macavinta, 1997).

For corporations in the United States committed to diversity, these results mean that there may not be enough qualified diverse candidates eligible to enter into the job pools of corporations, as information is a key resource in obtaining employment in the United States (Eamon, 2004).

Limitations

The limitation section describes the parameters developed to frame the study, presenting choices to include and exclude literature and information.

(Time Frame) Public presence on the Internet and World Wide Web emerged in 1992 (Castells, 2001). Since that time, a “digital divide” has evolved, with little or no access to the Internet available for selected minorities (Bridges, 2003). This has resulted in decreased opportunities for selected minorities in public schools to learn about various subject matters and post-secondary schools, and employment opportunities that are available (Bridges, 2003). In 1994, NCES began to collect data on access to the Internet among minorities and their preparedness for post-secondary education (Bridges, 2003). In view of the theory that the digital divide is continuing to widen, the study is based on information published between 1994 to the present year of 2005, concerning the digital

divide, specifically, discussions of the digital divide related to Internet access and educational success among African American and Hispanic American secondary students in public schools.

(Literature sources) Literature collected for this study is identified using the Internet, the Gateway catalog at the Dallas public library, and University of Oregon libraries on-line systems.

(Literature focus) Information is focused on minorities in secondary public schools, Internet access, educational success, and the challenging role of diversity coordinators in the United States. Similar information regarding the digital divide in other countries, such as Africa, has been excluded as that subject matter is not applicable to the study.

(Target population) African American and Hispanic American students in public secondary schools are the target population of this study as they are two largest minority groups without Internet access in public schools (U.S. Census Bureau, 2003). While the educational success parameters defined within this study include entrance into post-secondary institutions, minority students enrolled in post-secondary institutions are not part of the selected minority category of students.

The digital divide is not exclusive to the United States. Many countries in Africa and other third world countries are without Internet access (Castells, 2001). However, based on the purpose of this study, the United States is the chosen country to study.

(Literature Review Method) The study is designed as a literature review (UM Writing Lab, 2004). It is the chosen method of study based on its methodology to understand the associations of the related subject matters (Taylor and Proctor, 2005). For this particular study, no new data are developed. Instead, the study is based on a review of existing material.

Content analysis is the chosen method for data analysis. Conceptual analysis, a form of content analysis, is utilized to examine the data by totaling the presence of concepts related to the study. Conversely, relational analysis, which seeks to go beyond the presence of concepts by exploring the relationships between the concepts identified, is not used within this study (CSU Writing Lab, 2005).

(Data Presentation) The results of the content analysis are compiled into three specific graphical displays. One line graph was chosen to present the reported levels of Internet access of all American students in public schools in comparison to the Internet access of selected minorities in public schools (U.S. Census Bureau, 2003). This line graph shows a visual comparison of the different levels of Internet access among different student groups in the United States (Few, 2004). Additionally, two tables summarize the educational success rates among the selected minority student populations, with and without Internet access. Tables are chosen as the method of presentation as they are designed to summarize and present numerical data (Few, 2004).

Problem Area

The U.S. Census (2003) estimates that approximately 37 percent of African-Americans and 35 percent of Hispanic-Americans have Internet access in their homes (U.S. Census Bureau, 2003). Roach (2003) argues that the lack of Internet access in the home causes minority students to seek Internet access in places outside of the home such as their schools. In 2003, the U.S. Census reported that 36 percent of African American and 31 percent of Hispanic American students were able to access the Internet in their schools. With less than 35 percent of either ethnic group having Internet access in their public schools (U.S. Census Bureau, 2005), these figures support the theory that minority students are at an educational disadvantage (Eamon, 2004). A NCES survey reports that “Teachers in schools with more minority students are less likely to have computers in their classroom or access to the Internet in their classroom than those with fewer minority students” (NCES, 2000). Despite the attempts to integrate Internet access into secondary public schools, many minority students are unable to achieve educational success as they do not have opportunities that the Internet provides (Edwyn, 2001).

According to Education Trust (2003), educational success is determined by average standardized test scores, rate of high school graduates, and the percentage of college entrants (Education Trust, 2003). Samoriski (2002) argues that educational success factors are closely related to Internet access. In agreement with Samoriski’s (2002) belief, Eamon (2004) notes the following:

IT can provide students and teachers with a large body of easily accessible information; create opportunities to reinforce learning basic, new, and higher-order

cognitive skills; and increase student interest and motivation, parent-school communication, and parent involvement (Eamon, 2004).

As stated earlier in this chapter, the number of minority students that have access to the Internet is limited (U.S. Census Bureau, 2003). Well-documented inequalities in access to IT such as the computer and Internet reflect patterns of educational success and unmet educational success per the *haves* and *have-not*, respectively (Eamon, 2004). Because Internet access affords multiple educational benefits, those students who are able to access the Internet not only sharpen their knowledge of coursework, but gain valuable digital literacy. These advantages, in turn, are expected to produce positive educational outcomes such as increased student achievement. However, it is believed that students without access to Information Technology (IT) are at an educational disadvantage (Bridges, 2003; Eamon, 2004). The result of the unavailability of Internet access for minority students in the United States negatively reflects academic performance in secondary schools, likelihood of college acceptance and entrance.

In addition to Internet access impacting a minority's educational success, a lack of Internet access determines employment opportunities for minorities. IT skills prepare students to successfully compete in job markets in which occupations require such skills (U.S. Department of Education, 2003). Moreover, Internet access assists those researching and locating employment opportunities (NTIA, 2002). Without the ability to access the Internet, minority students cannot reap the benefits of employment opportunities in comparison to those who have Internet access (Eamon, 2004).

The lack of minorities' educational success influences the diversity goals of corporations in the United States. Professional employment within corporations generally requires a post-secondary education as a prerequisite for entrance. Without the necessary educational background and skills, the selected minorities are not entitled to consideration for employment. The end results of these effects are multiple corporations within the United States without a diverse band of employees (Ethnic Majority, 2005).

The sheer number of people without Internet access, and the concentration of have-nots in minority populations, has created a challenging role for diversity coordinators (Grove & Hallowell, 1998). These specialists are employed by corporations to investigate, identify and respond to the needs and challenges of incorporating a diverse pool of employees in their workplace (Monster, 2005). One of their most important professional goals is to enhance minority students' ability to earn a post-secondary education and ultimately increase the number of minority individuals able to enter into corporations ("HP and Magic", 2005; Monster, 2005). Meeting this goal will both help to bridge the digital divide and increase the diversity of candidates for corporate jobs.

Corporations within the United States seek diverse employees (Chung, 2004). This premise is based on research findings that suggest that when decision-makers have similar backgrounds, their decisions do not add resourceful value because they view the world from similar perspectives (Grove & Hallowell, 1998). However, when corporations employ a diverse group of people, the corporations benefit from obtaining various business perspectives from employees (Grove & Hallowell, 1998). The aforesaid is one

of the many reasons corporations employ candidates from different backgrounds.

Companies that embrace diversity in their commitments to diverse audiences, find improvement in stock market shares and corporate profits (Goffery, 2005).

Chapter II - Review of References

The Review of References section presents a thorough summary, in the form of an annotated bibliography, of the most relevant literature used to construct this study. Key references are listed alphabetically. Each reference annotation describes the relevant content, a description of how the reference is used to support this paper, and the criteria used to select the reference.

CSU Writing Lab. (2005). *Overview: Content Analysis*. Retrieved September 1, 2005, from <http://writing.colostate.edu/index.cfm>.

The Colorado State Writing Lab (CSU Writing Lab) provides an online resource on how to successfully conduct a content analysis. The researcher has chosen conceptual analysis as the method of data analysis. The CSU Writing Lab is a trusted resource as it is a widely used reference for both writing students and professors. Moreover, it is a recommended reference for AIM students enrolled in the Capstone Project.

Eamon, M. (2004). Digital divide in computer access and use between poor and non-poor youth. *Journal of Sociology and Social Welfare*. Retrieved October 15, 2005, from http://www.findarticles.com/p/articles/mi_m0CYZ/is_2_31/ai_n6156815.

Eamon produced a six-page article detailing Internet access differences among two groups of users. This detailed study supports the fact that most minority students,

mostly Hispanic American and African American, have a need to access to the Internet in schools as those two groups of students are less likely to have Internet access in homes. This article is relevant as it details that public schools do not adequately provide Internet access for their students. This chosen reference contributes to the Full Purpose and Problem Area, which focus on how the divide affects the educational success of those without the Internet. The content provided in this article is both textual and graphical and is used to perform the data analysis. Tables and charts within this article draw upon the level of Internet access of the two minority groups. The graphs further demonstrate the impact Internet access can have on students.

The article, “The digital divide in poor and non-poor youth”, was written for the *Journal of Sociology and Social Welfare*. Published in 1994, this literature was deemed credible as *The Journal of Sociology and Social Welfare* is a well-recognized journal and Eamon cites over fifteen references dated from 1987 to 2004.

Education Trust. (2003). Education Watch: The Nation. Key Education Facts and Figures. Achievement, Attainment and Opportunity from Elementary School through College. Retrieved September 11, 2005, from ERIC Database.

Retrieved from the ERIC Database, “Education Watch: The Nation. Key Education Facts and Figures. Achievement, Attainment and Opportunity from Elementary School through College” provides measures to frame the outcome of this study. This article guides the researcher to produce baseline measurements of educational

success. Through the use of this article, educational success is measured in terms of standardized test results, high school graduation rate, and lastly the college graduation rate. In turn, these success measures are used to produce the outcomes of the study. Moreover, the terms within educational success are used to conduct content analysis. Education Trust produces government reports on education; the reports are archived in the ERIC database.

Grove, C. & Hallowell, W. (1998). Diversity in Corporate America. Retrieved September 29, 2005, from <http://www.groverwell.com/pub-diversity-explain.html>.

Grove is a diversity consultant who has spent almost thirty years researching and working in the area of social classes. With a doctorate and expertise, Grove started his own diversity firm in 1990. Two years later, Grove partnered with Hallowell, an individual with her masters degree in anthropology, dedicated to understanding people and societies. Together they provide a detailed description of the term *diversity*, as it is used in this study. Additionally, this reference contributes to understanding the role diversity plays within corporations in the United States and a brief explanation of how corporations suffer by not having a diverse pool of employees. This literature adds value to the Definition and Significance sections of the study to provide an understanding of what diversity is and related benefits.

Kaiser Family Foundation. (2004). *Children, the digital divide, and Federal policy*. Retrieved October 14, 2005 from,

<http://www.kff.org/entmedia/loader.cfm?url=/commonspot/security/getfile.cfm&PageID=46360>.

The Kaiser Family Foundation [KFF] is a non-profit, private operating foundation dedicated to providing information and analysis on issues to policymakers, the media, the health care community, and the general public. KFF develops and runs its own research and communications programs, often in partnership with outside organizations. The Foundation contracts with a wide range of outside individuals and organizations through its programs. The article, *Children, the digital divide, and Federal policy*, provides detailed data related to the level of Internet access students in public schools. It also gives insight into the educational benefits Internet access can provide. While this article adds value to Chapter II and III of this study, it is used heavily in the analysis of data as it helps to connect the relationship between minority Internet access and educational success.

National Center for Educational Statistics. (2000, February). Internet Access in U.S. Public Schools and Classrooms: 1994-1999. Retrieved September 14, 2005, from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000086>.

This key material provides variable statistics on the number of public school students by race, a breakdown of those students with Internet access, the number of high school graduates, and the number of school graduates who enter into a post-secondary

institution. The NCES statistics are used to provide a basis to help build the Full Purpose. Moreover, this material is part of the data set selected for content analysis.

NCES is part of the U.S. Department of Education, and functions as the primary federal entity for collecting and analyzing socio-economic data and compiling the data into useful information related to education in the United States and other nations.

National Telecommunications and Information Administration. (2002, September). *A Nation On-line: How Americans are expanding their usage*. Retrieved from September 7, 2005, from <http://www.ntia.doc.gov/ntiahome/dn/html/toc.htm>.

This article provides comprehensive information on levels of Internet access among Americans based on certain characteristics. The figures outlined support the purpose sections in Chapter I of this study. Used in the Full Purpose, the details of this article describe the level of Internet access in the homes of minority students. Moreover, the chosen literature presents relevant information that supports the idea that minorities do not have access to the Internet in their homes and, thus, look to their schools to provide Internet access. This article is part of the data set to be analyzed.

The National Telecommunications and Information Administration [NTIA], a department of the United States Department of Commerce, provides an annual report on Internet access among various races in America, including the locations in which the

users access the Internet. This literature is chosen as it is an official U.S. government report that provides accurate and detailed information of the target population.

Samoriski, J. (2002). *Issues in Cyberspace*. Boston: Ablongman.

Samoriski provides well-documented details and facts about the digital divide, its foundation, and how it impacts minority students in public schools. As one of the three texts used to support the frame of this study, the content of this text provides various supporting literature for Chapters I and III of this study. Specifically, Samoriski's literature helps to develop the Significance of this study.

While there are numerous texts based on the digital divide, this text is held in high esteem as the author has spent over twenty years in the field of communications. Samoriski has Ph.D. in Communications Electronic Media and has performed research in New Communication Technologies, Communication Law & Policy, and The First Amendment.

U.S. Census Bureau. (2003, October). Computer and Internet Use in the United States. Retrieved September 3, 2005, from <http://www.census.gov/population/www/socdemo/computer/2003.html>.

The U.S. Census Bureau is a division of the Department of Commerce in the United States Government. The U.S. Census Bureau gathers and produces quality data about the nation's people and economy. The U.S. Census Bureau includes data on the

amount of Internet access Americans in the United States have based on social and economic characteristics such as race, age, and educational attainment. The U.S. Census Bureau specifically highlights the percentages of African Americans and Hispanic Americans that can access the Internet in their schools.

The data provided by the U.S. Census is used frequently throughout the Chapter I – Purpose of Study. The figures in this report help to provide background information necessary to build the Brief and Full Purpose of the study. The data is relevant in this part of the study as it provides both recent and accurate data of Internet access among the selected minorities. Data within the literature is used to conduct the data analysis as it provides figures on the level of Internet access of the selected minority students in public schools.

Chapter III - Method of Study

The primary method used in this study is literature review (Taylor & Proctor, 2005). A literature review is the chosen method of inquiry as it enables a researcher to gather, evaluate, and synthesize established literature pertaining to the focus of a study. By conducting a literature review, the researcher defines the study with a concept. Conceptual analysis (CSU Writing Lab, 2005), a form of content analysis, is the selected method of data analysis. This approach is preferred as it examines the concepts of the study and performs analysis by enumerating the selected concepts or studying the occurrence of selected terms (CSU Writing Lab, 2005).

A Summary of the Description of Data Methods

Data Collection

The data collection process is conducted by searching the Internet, public libraries, and UO on-line library systems on multiple occasions for literature published from 1995 to the present year of 2005.

Initially, the Internet was queried as the main source to gather preliminary literature pertaining to the focus of the study. As the study progressed, the Internet remained a source for literature retrieval.

The keyword searches are framed to obtain information regarding the matters of the digital divide, Internet access in public school, and the various factors correlated to

the level of educational success of minorities. Data is gathered based on the keyword(s) and phrases presented in Table 1: Queried of keywords used to search.

Table 1: Queried keywords used to search

List of Queried Keywords	
Digital Divide	Secondary Education
African-American	Internet Access
Hispanic-American	Public school + United States
Minority	Educational success measures
Haves	Internet Access + Minority
Have –Nots	Secondary public schools + Internet access
Impact of digital divide	

Four Internet search engines were used to collect literature for this study. Each search engine produced differing results. The title of search engines utilized and their efficiencies are summarized below.

- **Ask.com** – Provided links to approximately nine articles related to the level of Internet access within public schools, statistical information, and the role of business in corporations within the United States.
- **Msn.com** – Produced very little literature related to the focus of the study. This search engine mainly provided very detailed definitions of the terms used in this study.
- **Google.com** – Returned scholarly reviews and news results of the digital divide.
- **FindArticles.com** - Generated six articles pertaining to Internet access, educational success, and diversity in corporations in U.S. corporations.

Ed.gov and Census.gov web sites were searched to provide the most accurate statistics on minority public school students and the number of overall Americans students with and without Internet access.

As a student of the University of Oregon in the Applied Information Management Master's Degree Program, the researcher had previous availability to three books from coursework focusing on the digital divide and its impacts on minority students. Additional books were sought after from a search of the Gateway Catalog of the main Dallas Public Library in Dallas, Texas.

Additional literature was gathered from the UO on-line library systems. Education [Education Abstracts and ERIC (Education)], and business [Business Source Premier] databases were chosen to search for literature. Each database provides at least one full-text article relating to the focus of the study.

Data Analysis

The selected literature is analyzed using a form of content analysis known as conceptual analysis (CSU Writing Lab, 2005). Based on the methods of the CSU Writing Lab (2005), data (specific words and/or context) collected for this study is coded to determine the relationships of the specific words within texts (books, journals, web articles) (2005). The usage of content analysis in this study allows for inferences to be made based on the text of the author. Within the conceptual analysis process, eight specific steps must be followed as indicated by the CSU Writing Lab (2005). Steps are

applied to three conceptual analysis phases. Each phase of conceptual analysis has a different focus. In the first phase, the researcher examines concepts pertaining to the level of Internet access of the target populations. The second phase of this study examines the educational status of minority students of the target populations, both devoid and with Internet access. In the third phase, diversity issues and solutions within U.S. corporations are examined. This literature is explored in hopes to increase diversity relations within corporations. An explication of each step in relation to the plan for this study follows.

Step 1: Decide the level of analysis. “Internet access for secondary students in public schools”, “Internet access for minority students in secondary public schools”, “Educational success”, and “diversity in corporations” are the chosen concepts to determine the level of analysis. These concepts are based on the keywords used to query and the results produced.

Step 2: Decide how many concepts to code. The concepts identified have been determined to be the most relevant to the study. Based on a set of interactive concepts, coding is developed on a set of concepts instead of single words. No additional coding of words is used.

Step 3: Decide whether to code for existence or frequency. The researcher decides that coding will be done based on “existence” rather than frequency.

Step 4: Decide how to distinguish among concepts. A level of generalization of concepts is employed that allows the chosen concepts to be recorded as the same even if they appear in various formats.

Step 5: Develop rules for coding. Transition rules based on the concepts are created to streamline and organize the coding process. Tables are created to group similar concepts together.

Step 6: Decide what to do with “irrelevant” information. Non-coded, irrelevant information is not examined.

Step 7: Code the texts. Coding proceeds as the researcher reads the selected texts and concepts and manually records the occurrences of the concepts. Initially, the concepts are recorded within an electronic Microsoft Excel spreadsheet. For visual clarity, the researcher prints the spreadsheet to manually check that she has not made any errors while coding in the spreadsheet.

Step 8: Analyze the results. Information that is not relevant to the study is not reexamined once the coding is complete. Upon the coding and elimination of concepts, data is examined and conclusions are drawn. (CSU Writing Lab, 2005).

Data Presentation

Content analysis of this study is being framed via a pragmatic approach with tables and graphs, delimitating data for presentation and interpretation from the standpoint of diversity coordinators. The results of the content analysis are compiled into three specific graphical displays. Few (2004) suggests that graphical displays be used in addition to context as audience members can sometimes be visual learners and able to better comprehend material by viewing displays. In this study graphical displays include tables, and a graph.

The first result from the content analysis is a line graph (see Figure 1: Level of Internet access among all sets of students in public schools) that documents the level of Internet access among all student groups. This graph provides the diversity coordinators with a perspective on the actual level of Internet access for minority students in comparison to all students in secondary public schools. A line graph (see Figure 1: Level of Internet access among all sets of students in public schools) is the chosen format to present the levels of differentiation in Internet access that exists between all American students in public schools settings in comparison to selected minorities in public schools (U.S. Census Bureau, 2003). This format works accordingly as Few (2004) suggests that the utilization of a line graph should show a “change between different instances of the same measure” (Few, 2004, p.2).

Furthermore, the two tables present a summarization of educational success rates among the selected minority student populations, with and without Internet access (see Table 7: Summary of selected educational measurements of selected minorities impacted by Internet Access in 2003) and Table 8: Summary of selected educational measurements of selected minorities impacted by a lack of Internet Access in 2003). Tables are the selected format as Few (2004) notes that they are used best for data presentations to compare individual values and values that involve multiple units of measure (Few, 2004).

As previously stated, the goal of this study is to examine the digital divide, and specifically the relationships between access to the Internet in secondary public schools and the ability of minority students to obtain educational success. The final outcome of

this study is presented as a descriptive interpretation of the line graph and two tables described above. This interpretation is prepared for the targeted audience, diversity coordinators.

The role of a diversity coordinator is oftentimes challenging because it is difficult to find minorities with the necessary educational background to enter the workforce of corporations (Grove & Hallowell, 1998). The professional goals of diversity coordinators are listed in Table 2: Professional Goals of Diversity Coordinators.

Table 2: Professional goals of diversity coordinators

Goals of Diversity Coordinators
<ol style="list-style-type: none"> 1. Investigate, identify, and respond to the needs and challenges of incorporating a diverse pool of employees in their workplace (Monster, 2005). 2. Partner their corporations with local schools to mitigate technological deficiencies such as a lack of computer presence or Internet access (Zardoya, 2001) 3. Enhance a minority student's ability to seek post-secondary education and ultimately increase the number of minority individuals able to enter into Corporate America [thus the decreasing the lack of diversity] ("HP and Magic", 2005).

By framing the final outcome of this study from the standpoint of the professional goals of diversity coordinators, the goal is to help them: (1) obtain an understanding of

the levels of access to the Internet among African American and Hispanic American secondary students in public schools; and (2) help them to understand ways to positively impact the public schools to create an educational environment that will more likely result in the educational success of selected minorities. The larger goal is to improve the likelihood for success in building a diverse pool of candidates for employment.

Chapter IV - Analysis of Data

Content Analysis

As descriptively outlined in Chapter III – Method of Study, conceptual analysis is the chosen method of data analysis for this study. Three phases of content analysis are used to reach the results, leading to the development of the outcomes of this study. The following sections describe in detail the process of each phase of the conceptual analysis.

Phase One

In the first phase, the researcher focuses on identifying information related to the level of Internet access reported for African American and Hispanic American secondary students who attend public schools. By identifying and coding these concepts, the researcher hopes to gain an understanding of the percentage of non-minority and minority students with Internet access in secondary public schools. Initial concepts of discernment begin with the following: “Internet access for secondary students in public schools” and “Internet access for minority students in secondary public schools.” It is important to note that these concepts are created based on keywords used to query the literature. Further details are provided in Table 1: Summary of queried keywords.

To ensure that the researcher fully understands the literature at hand, the eight articles, forming the data set for content analysis in Phase one, are read, reviewed, and concepts are highlighted. A tangible highlighter is used for the hardcopy references and a Microsoft Office tool is used to highlight the electronic references. The existence of each

concept is documented as the researcher has established that selected concepts are to be recorded as the same even if they appear in various formats. Based on researcher-defined transition rules, both the hardcopy and electronic data are grouped together into tables in Microsoft Excel.

Selected concepts for Phase one are comprised of various supplementary words and phrases that assist the researcher in deciding the usefulness of the information. In Phase one, supplementary text are those terms pertaining to Internet access in public schools for both secondary students and minority secondary students in public schools with and devoid of Internet access. Such text within the literature is deemed useful as they add meaning to the concepts and help to establish the results of this study. As a transition rule, supplementary words throughout the literature are formatted, accordingly, in bold in the same manner as the chosen concepts. The formatting procedure is performed in all three phases on conceptual analysis. The guidelines of proper conceptual analysis require that the researcher define if he or she will code “irrelevant” information (CSU Writing Lab, 2005). Described in Chapter III – Method of Study, irrelevant data is not examined.

The first phase of the content analysis is designed to explicate the chosen concepts. A list references used in Phase one is presented in Appendix A: Data Set for Phase One Content Analysis. Collectively, Table 3 and Table 4 summarize the coded data related to Internet access for all sets of students enrolled in public schools. Table 3:

Coding results for *Internet access for all students enrolled in public school* explicates the coded concepts related to Internet access for all students enrolled in public school.

Table 3: Coding results for Internet access for all students enrolled in public school.

Coded Concept	Occurrences in Literature	Source
Internet Access for all students	There is no doubt that more American children of all incomes and backgrounds are using computers and the Internet than ever before.	U.S. Department of Education
	In fall 2003, nearly 100 percent of public schools in the United States had access to the Internet , compared with 35 percent in 1994.	U.S. Department of Education
	More children and adolescents use computers at school (81 percent) than at home.	U.S. Department of Education
	More than a third of White and Asian American children use the Internet.	Kaiser Family Foundation
	Schools are the primary source of Internet access and often the only place they go online.	Roach, R.
	Internet use by children and adolescents of elementary and high school age has also increased rapidly.	NCES
	Internet use has grown at a rate of 20 percent a year since 1998.	NTIA
	In 1997, 19 percent of all secondary students in public schools report accessing the Internet at school.	U.S. Census Bureau (Table)
	In 2001, 60 percent of all secondary students in public schools report accessing the Internet at school.	U.S. Census Bureau (Table)
	In 2003, 66 percent of all secondary students in public schools report accessing the Internet at school.	U.S. Census Bureau (Table)

Table 4: Coding results for *Internet access for minority students enrolled in public school* elucidates the concepts related to Internet access for minority students enrolled in public school.

Table 4: Coding results for Internet access for minority students enrolled in public school.

Coded Concept	Occurrences in Literature	Source
Internet Access for Minority Students	The DOC report shows that 39.8 percent of blacks and 31.6 percent of Hispanics are online.	U.S. Census Bureau
	The fact that virtually all schools have at least one wired computer does not mean that all students , or even all students who have gone online at school, are reaping the same educational benefits .	Kaiser Family Foundation
	Differences in home computer access between whites and African Americans and Latinos have been established by past studies based on information collected.	Eamon, M.
	Lower income and minority youth are far less likely than other children to have gone online .	Kaiser Family Foundation
	27 percent of African American students and 31 percent of Hispanic American students have Internet access in their schools.	National Telecommunications and Information Administration
	Schools with higher minority enrollment are less likely to have a fulltime technology .	Kaiser Family Foundation
	In 1997, 11 percent of all African American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)
	In 1997, 9 percent of all Hispanic American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)
	In 2001, 31 percent of all African American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)
	In 2001, 27 percent of all Hispanic American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)
	In 2003, 36 percent of all African American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)
	In 2003, 31 percent of all Hispanic American students in public schools report accessing the Internet at school .	U.S. Census Bureau (Table)

Phase Two

The second phase of the content analysis is designed to identify reported educational success rates in school, among this designated group of minority public school student populations, with and without Internet access. The goal of this phase is to

code selected literature to gain an understanding of the educational impact the Internet has on minority students. To conduct the content analysis, the researcher examines concepts relative to educational success and minority Internet usage in public schools. In this phase of content analysis, concepts related to the phrase “educational success” are used to guide the coding. Defined by Education Trust and outlined in the Chapter I, educational success is measured in terms of average test scores, high school graduation, and college entrance (Education Trust, 2003)

To ensure that the researcher fully comprehends the data within the eight references used in Phase two, the selected articles are read, reviewed, and chosen concepts are eventually highlighted. A tangible highlighter is used for the hardcopy references and a Microsoft Office tool is used to highlight the electronic references. The existence of each concept is documented as the researcher has established that selected concepts are to be documented in the same manner, regardless of the format in which they appear. To streamline the documentation process, the hardcopy and electronic conceptual data are grouped together into tables in separate Excel spreadsheets.

The chosen concepts for Phase two encompass multiple accompanying words and phrases that assist the researcher in deciding the usefulness of the information. The accompanying phrases are those terms pertaining to the educational successes and disadvantages created by Internet access or a deviance of Internet access available to minority secondary students in public schools. The aforesaid concepts within the literature are deemed useful as they add meaning to the concepts and help to establish the

outcomes. As recommended by the CSU Writing Lab, proper conceptual analysis requires that the researcher define if he or she will code “irrelevant” information (CSU Writing Lab, 2005). Described in Chapter III – Method of Study, irrelevant data is not examined. Only supplementary text and selected concepts deemed useful in helping to establish the outcomes of this study are formatted in bold.

A list of the eight references analyzed in Phase two are presented in Appendix B: Data Set for Phase Two Content Analysis. Table 5: Coding results for *Educational Success*, is a report of the results of the data coded for the concept “educational success”.

Table 5: Coding results for Educational Success

Coded Concept	Occurrences in Literature	Source
Educational Success	Education is probably the most important issue that affects the ability to benefit from technology .	Arrison, S.
	Internet access provides educational advantages, future employment and earnings , opportunities for social and civic involvement, and equity and civil rights issues.	Eamon, M.
	These advantages , in turn, are expected to produce positive educational outcomes such as increased student achievement and school retention	Eamon, M.
	In today's world, a lack of knowledge and understanding of technology puts an individual at a distinct disadvantage	Kaiser Family Foundation
	Twelfth-graders who reported using the Internet for research projects about topics in history or geography to a moderate or large extent had higher average scores than those who said they did so to a small extent or not at all.	NCES
	Twelfth-graders who made extensive use of computers to write reports scored higher , on average, than peers who did so less frequently.	NCES
	Today, graduates need to be fluent in a range of technologies , from word processing to using the Internet as a research tool.	Chappell, K.
	Schools have succeeded in raising student achievement with the state's professional development and technology standardization initiatives.	School Administrator

Students are highly motivated and enthusiastic about whatever topic the teacher is presenting with this technology	School Administrator
The latest national statistics indicate a slowdown in the rate of enrollment by students of color . Trends in this year's report indicate a need for higher education officials to recommit to efforts aimed at helping students of color enroll in college and successfully complete their academic programs .	Harvery, W.
Blacks are less likely to attend college than whites, and black college attendees are less likely to complete college than white college attendees .	NCES
Black children scored lower on mathematics tests than white children .	NCES
Black children scored lower on reading tests than white children .	NCES
This annual report features national data on academic progress in U.S. public schools, showing student achievement and opportunity patterns from kindergarten through college , by race , ethnicity and family income	Education Trust
In earlier times, young people with poor reading and math skills could succeed if they were willing to work hard. Now they need much more . Not only do young people need to graduate from high school , but most will need some postsecondary education or training .	Education Trust
By the end of high school , African American students have math and reading skills that are virtually the same as those of eighth grade White students .	Education Trust
Neither the college enrollment nor completion rates of Latinos have increased over the last 20 years.	Education Trust
In 2000, 87% and 62% of African and Hispanic American students graduated from high school .	Education Trust
This documents the current status of Latino Achievement in America Bottom of Form	Education Trust
This documents the current status of African American Achievement in America Bottom of Form	Education Trust

Phase Three

The goal of phase three coding is to identify the diversity issues facing corporations in the United States and understand ways in which some corporations have dealt with the concerns. Guided by the content analysis literature from the CSU web site and Chapter Three of this study, the researcher examines concepts related to diversity within corporations. To complete the coding, similar procedures followed in Phase one and Phase two are utilized. The existence of each concept is documented into tables in Microsoft Excel spreadsheets as the researcher has established that selected concepts are to be recorded as the same even if they appear in various formats. Concepts for Phase three are comprised of a range of supplementary words and phrases that assist the researcher in deciding the usefulness of the information. Only texts and phrases that have similar semantics as the phrase diversity within corporations help the researcher in establishing outcomes of this study and are distinguished by a bold typeface.

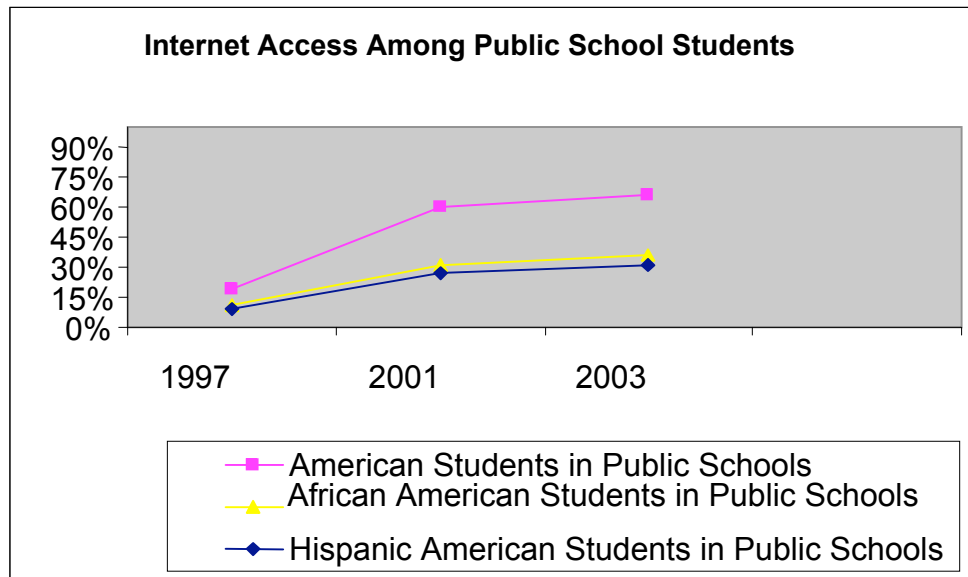
Five references were analyzed to provide detailed information to contribute to both the results and outcome of this study. Each of these references pertains to how corporations within the United States struggle to incorporate diversity into their respective workplaces. Only one of the references coded examine what other corporations can do to meet their diversity goals. A list of these references is presented in Appendix C: Data Set for Phase Three. Table 6: Coding results for *Diversity within corporations*, is a report of the results of the data coded for diversity within U.S. Corporations.

Table 6: Coding results from Diversity within corporations

Coded Concept	Occurrences in Literature	Source
Diversity in Corporations	What corporate America needs now and in the future are people that bring valuable language skills and cultural affinities that allow them to contribute immediately and grow into world-class executives	Buford, P.
	Companies need employees who can relate to their customers, employees who can communicate with diverse audiences .	Goffney, P.
	Newspapers are full of stories on the nation's inability to work through diversity issues	Chung, A.
	While we are in the midst of the longest period of economic growth this country has ever seen, the gap between the "haves" and "have nots" continues to widen. One of the reasons for this has been the lack of diversity in corporate America .	Ethnic Majority
	Managing diversity is good for business and a necessity for companies that want to remain competitive in today's marketplace .	Goffney, P.
	"Diversity" is a word often heard in many U.S. companies these days.	Grove and Hallowell
	Recognizing that people of color can't get out of business school if they can't get in, corporate America has, in some instances, stepped in to correct the problem. By teaming with academia, corporations are now helping increase the numbers of minorities that enter and graduate from business schools .	Goffney, P.

Chapter V - Conclusion

The U.S. Census provides statistical data, in the form of tables, on Internet users based on characteristics such as race, education level, age, and location of Internet access. These tables are used in the Analysis of Data – Phase One section of this study to document the level of Internet access of all students in U.S. public schools. A line graph is developed, comparing the levels of Internet access among all American students and the selected minorities. As shown in Figure 1: Level of Internet access among all sets of students in public schools, progression, as shown by years on the X axis, details how all secondary students gain access to the Internet. The Y axis shows the level of Internet access, in percentages, of all American students who have Internet access versus African American and Hispanic American students from 1997 until 2003. While each group of students gains access to the Internet, the level of Internet access for both minority groups is below that of all American students. A reading of the line graph suggests that the level of access within the two selected minority groups is not commensurate with other American students enrolled in public schools.

Figure 1: Level of Internet access among all sets of students in public schools

In consideration of the purpose of this study and the problem statement, measurement of one selected academic discipline (Reading) is targeted as an example. Additional measurements include the high school graduation rates and college entrance rates of the selected minorities. Although additional years are examined throughout this study, the year of 2003 is used to provide educational measurements as it provides the most recent data available. Literature constructed by Education Trust is used in Chapter IV- Analysis of Data, Phase Two, to produce the tables below to further illustrate the magnitude of the impact the level of Internet access places on the minority students.

Table 7: Summary of selected educational measurements of selected minorities impacted by Internet Access in 2003 and Table 8: Summary of selected educational measurements of selected minorities impacted by a lack of Internet Access in 2003, each display descriptive educational measurements of the Reading levels, high school graduation, and college rate among minority students in secondary schools with Internet access and without Internet access.

While the reading levels of minority students virtually remain the same, regardless of Internet access, both the high school graduation rates and entrance into college rates of each minority group exhibits a variance. African-American and Hispanic American students who had Internet access in 2003 were more likely to graduate from high school. Additionally, the same pattern of educational success is shown in those same set of students with regards to college entrance. African-American and Hispanic American students who had Internet access in 2003 were more likely to enroll into college.

Table 7: Summary of selected educational measurements of selected minorities impacted by Internet access in 2003

Educational Measurements	African American Students	Hispanic American Students
Reading Level	African American students have reading skills that are virtually the same as those of eighth grade White students.	Hispanic American students have reading skills that are virtually the same as those of eighth grade White students.
High School Graduation	71 percent of African Americans graduated high school.	62 percent of Hispanic Americans graduated high school.
College Entrance	54 percent of African Americans enter into postsecondary institutions.	46 percent of Hispanic Americans enter into postsecondary institutions.

Table 8: Summary of selected educational measurements of selected minorities impacted by a lack of Internet access in 2003

Educational Measurements	African American Students	Hispanic American Students
Reading Level	African American students have reading skills that are virtually the same as those of eighth grade White students.	African American students have reading skills that are virtually the same as those of eighth grade White students.
High School Graduation	69 percent of African Americans graduated high school.	59 percent of Hispanic Americans graduated high school.
College Entrance	51 percent of African Americans enter into postsecondary institutions.	43 percent of Hispanic Americans enter into postsecondary institutions.

A key interpretation of this data for diversity coordinators to consider is that without Internet access, minorities are less likely to graduate high school and enter into college. The data suggest that the lack of Internet access impinges on and ultimately prohibits selected minorities from obtaining entry into employment with American corporations, due most likely to a lack of opportunities that the Internet presents.

This interpretation leads to the conclusion that diversity coordinators must seek ways to ameliorate the issue of Internet access for African American and Hispanic American students in the public school setting now, if they hope to improve the likelihood for success in building a diverse pool of candidates for employment in the future.

Appendices

Appendix A – Definitions of Terms

Definitions

To clarify terms used in this study, definitions of keywords have been provided.

Digital Divide - Term used to characterize a situation in which some individuals have, while others do not have, access to the Internet. (Arrison, 2002).

Diversity – Efforts by U.S. business leaders to hire, promote, and retain on their payrolls people of every conceivable type (Grove & Howell 2004).

Diversity Coordinator – Subject matter expert who coordinates and implements essential diversity business initiatives and serves as strategic planner (Monster, 2005).

Educational Disadvantage –Being unable to achieve educational success. (Eamon, 2004)

Educational Success - Success that is measured in terms of attainment, standardized test scores, high school graduation rate, and the number of college entrants and graduates (Education Trust, 2004).

Haves – Those individuals who have Internet access (Samoriski, 2002),

Have- Nots – Those individuals who do not have Internet access (Samoriski, 2002),

Internet- A communication medium that allows the communication of many to many, in a chosen time, on a global scale (Castells, 2004)

Minority – A group of people who differ from a larger group of which it is a part of.

African Americans and Hispanic Americans in the United States are the selected minorities for this study (WorldWeb, 2005; Minority Group, 2005).

Public school - A school that is maintained at public expense for the education of the children of a community or district and that constitutes a part of a system of free public education commonly including primary and secondary schools (InfoPlease, 2005).

Secondary school - A school for students intermediate between elementary school and college; usually grades 9 to 12 (WordWeb Online Lookup, 2005). The limitations for this study include only grades 10-12.

Appendix B – Data Set for Phase One Content Analysis

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Appendix C – Data Set for Phase Two Content Analysis

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Appendix D – Data Set for Phase Three Content Analysis

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