A VIRTUAL ASSESSMENT OF

HISTORICALLY BLACK COLLEGES AND UNIVERSITIES

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Abstract

Technology is advancing the way people interact, communicate and learn at exponential rates. To determine if Historically Black Colleges and Universities (HBCUs) are keeping pace with the new digital resources available, this paper assesses the HBCU web sites. Three practical ideal categories are derived from a review of relevant literature pertaining to institutional web sites, distance education courses/programs and information technology strategic planning literature. The purpose of this research project is to identify whether HBCUs are offering ideal institutional web sites, distance education programs and online courses, as well as, strategic plans specifically addressing at increasing information technology on HBCU campuses.

With the use of two research methods, content analyses and structured interviews, sixty web sites are reviewed to determine if they provide ideal information regarding an effective web site and distance education programs. The top 10 HBCUs are further reviewed to determine whether they are providing information technology strategic plans. The population is derived based on the size of each institutions student enrollment and the top 60 out of the 104 current HBCUs are selected for the research. Coding sheets to observe the data were created for each ideal category based on the literature review.

All of the HBCUs reviewed provided web sites and a majority of them provided key components associated with an ideal institutional web site, such as an introduction to the college and a posted mission statement. The opposite was observed in terms of HBCUS offering distance education programs and online classes. Only a third of the

web sites reviewed provided such programs. While two of the 10 schools assessed had various aspects of information technology strategic plans available through their web sites, none of the 10 schools had strategic plans focused exclusively on information technology.

Overall, HBCUs provided ideal components for an institutional web site. Many of the web sites contained a mission statement, faculty credentials, and accreditation information. On the other hand, a number of HBCUs did not provide ideal components for an institutional web site that offered distance education programs, online courses and information technology strategic plans.

CHAPTER 1

Introduction

In our democratic form of government, education has been a staple of importance, necessity, and achievement. Since their inceptions, Historically Black Colleges and Universities (HBCUs) have supported these ideas by continuing to educate Americans, specifically African Americans. HBCUs are a source of accomplishment and great pride for the African American community as well as the entire nation (White House Initiative, 1999).

Many Black students rely on HBCUs to provide post secondary education and teach them skills that prepare them to effectively compete in the labor market. HBCUs contribute to the pluralism of American education, providing a wider freedom of choice for White and Black students. HBCUs discover and preserve the Black cultural heritage, thus serving as repositories for the Black experience (Tollett, 1994). While facing competition from predominately White institutions, technical and community colleges, and new-age corporate universities, HBCUs, in general, survived the 20th century. HBCUs face another threat - the consequences of not staying abreast of computer and information technology and their application in the virtual classroom.

The Digital Divide

As with any new advance in technology, there are factors that determine who has access to it. In regards to information technology, those factors include knowledge and money. There are some people (the haves) who are aware of the latest technology, know how to use it effectively, able to purchase the equipment and benefit from it. There are others (the have-nots) who lack the knowledge, access, and financial resources to the newest technology and are thereby left behind. The difference between the haves and the have-nots of information and computer technology is referred to as the "Digital Divide"[1] The term "Digital Divide" was coined by Lloyd Morrisett, the former president of the Markle Foundation, regarding the concern that the Internet may not benefit everyone equally (Hoffman and Novak 1998).

Research purpose

In order for HBCUs to remain a viable resource for African American students, they will have to address plans for strengthening their information technology for closing the Digital Divide that exists on many of their campuses. Also, as the phenomenon of distance learning programs grows, HBCUs will have to increase their information technology support of distance learning programs. Without such strategic plans and programs available, the role HBCUs played at one point in history may become obsolete in the 21st century. Hence, the purpose of this research project is to answer the following three questions:

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[1] The term "Digital Divide", coined by Lloyd Morrisett, the former president of Markle Foundation, regarding the concern that the Internet may not benefit everyone equally leading to the information "haves"and the "have-nots" (Hoffman and Novak, 1998). The Markle Foundation is an organization that provides funding in the development and use of the technologies of communication and information to enhance lifelong learning and promote an informed citizenry.

(1)   Are HBCUs providing web sites that promote the teaching and

        learning process?

(2)   Are HBCUs offering distance education programs[2] and providing

        information about the distance teaching and learning process?

(3)   Are HBCUs implementing strategic plans that address bridging the

        Digital Divide?

Given the nature of this project, two different types of conceptual frameworks will be used to explore and gauge the research questions. Each question has its own conceptual framework linked to literature regarding institutional web sites, distance education programs and strategic plans for bridging the Digital Divide.

The research project attempts to answer these questions by providing relevant literature and research methodologies appropriate for this kind of inquiry. Chapter two examines HBCUs in terms of their history, current status, and the future in an information technology age. Chapter three provides information about the Digital Divide, reviews some of the contributing factors of the Digital Divide and provides strategies for closing the gap and ends with a look at the impact the Digital Divide has in higher education. Chapter four presents the conceptual framework used for the empirical portion of the project. Chapter five explains the methodology used to collect the evidence that addresses the research questions. This chapter also explains how the units of analysis were chosen for the project and how the evidence was collected. Chapter six discusses the results obtained from the conceptual frameworks and the research methodologies.

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[2] The terms distance learning programs and distance education programs are used interchangeably throughout the research project.

Chapter seven concludes the project by summarizing the research, explaining challenges

presented by the research and offering recommendations to HBCUs and for future

research studies regarding this subject area.

CHAPTER 2

Historically Black Colleges and Universities: An Overview

Introduction

The role played by historically Black colleges and universities (HBCUs) in the United Stated has had a profound impact on the education of African Americans as far back as the 19th century. The purpose of this chapter is (1) to review the history of HBCUs, (2) examine their status, and (3) provide insights into the future of HBCUs. Understanding their status allows public administrators to create policies and programs aimed at securing their future in society during the 21st century and beyond.

The History

The recorded history of HBCUs dates back as far at the early 1800s, although it is difficult to determine exactly when African Americans began learning in institutions of higher learning during the times of slavery (Curry 1981, p. 149). As the black population moved north in twentieth century, especially during and after World War I, black children were forced, or at least urged, to attend schools there were predominately Negro, which was not too difficult, since in most communities blacks lived in restricted areas (Franklin and Moss, 1988, p. 362). Many of these schools were started by churches and consisted of as few as one student and one teacher and they met wherever it was feasible to do so (Franklin and Moss, 1988, p. 362.)

History books record Cheyney University in Pennsylvania as the oldest HBCU, founded in 1837. It was originally founded as the Institute for Colored Youth, made possible by a $10,000 contribution by a Quaker philanthropist, Richard Humphreys (UNCF, 1991). Predominately black colleges increased from one in 1854 to more than a hundred by the middle of the next century. During this period the only types of institution of higher learning existed for blacks were church-related colleges, privately endowed colleges, and public colleges (Franklin and Moss, 1988, p. 363).

In 1965, Congress passed the Higher Education Act. This was the first time Negro institutions of higher learning were officially recognized by the federal government. They were collectively called HBCUs and defined as an institution that was established prior to 1964 and whose principal mission was, and is, the education of black Americans, and that is accredited by a nationally recognized accrediting agency or association determined by the Secretary of Education to be a reliable authority as to the quality of training offered or is, according to such an agency or association, making reasonable progress toward accreditation (Higher Education Act of 1965). With the passage of the Higher Education Act, came federal financial support for the advancement of these institutions.

The federal government continued to increase its support for HBCUs after 1965. In 1971, the Carnegie Commission on Higher Education[3] defined the roles for HBCUs as:

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[3] The Carnegie Commission of Higher Education is the leading typology of American colleges and universities. The have been very influential in creating and promoting policy initiatives for institutions of higher learning. The commission's Classification of Institutions is the framework in which institutional diversity in U.S. higher education is commonly described. Most of the Carnegie Foundation's higher education projects rely on the Classification to ensure a representative selection of participating individuals and institutions (Carnegie Commission, 1971).

- To assume leadership in outreach programs of consultation and service to the black community.
- To stimulate the interest of black youth in higher education.
- To serve as custodians for the archives of black Americans, and as centers for both the systematic study of the black man's problems and achievements, and the interpretation of his aspirations and responses to life as represented in his literature and art.
- To develop and expand programs of education and occupational retraining for black adults.
- To continue developing alternate programs to provide improved postsecondary education for students whose preparation for college falls short of requirements of conventional institutions of higher learning
- To assume leadership in the development of techniques of overcoming handicaps in the educationally disadvantaged (Carnegie Commission, 1971).

During the next decades, several presidential executive orders were signed to provide support for HBCUs. The objective of these initiatives was to strengthen the capacity of historically black colleges and universities (HBCUs) to provide excellence in education. In 1980, President Jimmy Carter signed Executive Order 12232, which established a federal program to overcome the effects of discriminatory treatment and to strengthen and expand the capacity of historically black colleges and universities to provide quality education (White House Initiative on HBCUs, 1999). This program was created to allow better access to federal funds by HBCUs. Executive Orders 12320 and 12677 were issued during the 1980's by Presidents Reagan and Bush respectively. The significance of former president Bush's executive order is that it established a Presidential

Advisory Board on Historically Black Colleges and Universities

In 1993, President Clinton signed Executive Order 12876 in order to advance the development of human potential, to strengthen the capacity of historically black colleges and universities to provide quality education, and to increase opportunities to participate in and benefit from Federal programs (White House Initiative on HBCUs, 1999). These presidential executive orders were important because they provided federal and state support to HBCUs while keeping their missions and goals clearly defined.

The Current Status of HBCUs

There are 104 HBCUs in the United States. Most HBCUs are 50 to 100 years old. Forty-six percent of all HBCU are public and 54 percent private. Eighteen HBCU are 2-year colleges. Out of 104 HBCUs, 16 % have land-grant status. Most HBCUs are located in the southern part of the country with some states not having any HBCUs. About 273,500 or 16 percent of all African-American college and university students in the nation are enrolled at HBCU, which comprise only 3 percent of all colleges and universities (NCES 2000).

According to the National Center for Education Statistics (NCES 2000) there were approximately 273, 500 students enrolled at HBCUs in 1998. Overall, enrollment at HBCUs rose by 17% percent between 1980 and 1998 (see Table. 2.1). Yet, the increase in black enrollment at HBCUs lagged behind the 40 percent rise in black enrollment at other colleges. Perhaps the low increase in enrollment over this 18-year period can be attributed to HBCUs slow adoption of technology or lack of government in terms of financial resources needed to create an information technology infrastructure.

Table 2.1

Total enrollment at Historically Black Colleges and Universities for selected years:

1980, 1990, and 1998.
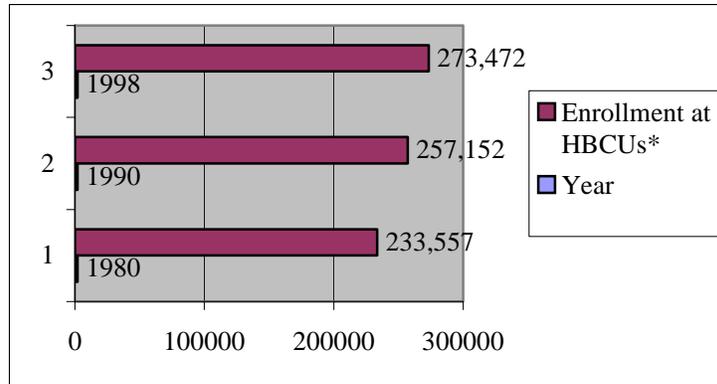
*Includes total enrollment at both private and public HBCUs for each respective year.

Source: U.S. Department of Education, National Center for Education Statistics, Higher Education General Information Survey (HEGIS), prepared in August, 2000.

In terms of federal support, help is on the way. The Bush administration recently announced that a budget request for the Education Department includes more than $350 million, an increase of more than $12 million over current funding levels for programs that will strengthen HBCUs (Paige, 2002).

In a 2002 press release from the Education Department, Secretary Rod Paige reflected upon the significance of President Bush's commitment to educating America's youth through the *No Child Left Behind Act of 2001*, which he signed into law in February, 2002. Noting that his commitment extends beyond elementary and secondary schools to expanding higher education opportunities, Paige announced that President

Bush will continue to support funding increases for programs that support higher education institutions serving large numbers of minority students and will ask Congress for more than $264 million in federal support for HBCU for fiscal year 2003 (Paige, 2002).

A Future Look at HBCUs

The future of HBCUs depends on quality leadership that focuses on several key aspects including lobbying for more government support and funding and developing strategic plans that offer distance education (also referred to as distance learning) programs and address the Digital Divide that exists between historically Black institutions and predominately White colleges and universities. Like all higher education institution, HBCUs must offer the best possible administrators, faculty, and students the ability to function within flexible programs of study conducted in the best possible facilities, and must be able to handle increasing amounts of technology (Henderson, 2001).

Increased federal funding makes the task of HBCUs providing its students and faculty access to technology much easier. The fact that money and donations are becoming more available is an opportunity. To best take advantage of this opportunity HBCUs should have base line information about the current state of technology use. Perhaps more important HBCUs should be prepared by adopting a careful planning process for technology use and application. The perception that a 'digital divide' exists in higher education between Black institutions and most White colleges and universities has enabled advocates for Black schools to raise money, attract computer equipment

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donations, and build awareness to help bridge the divide (Roach 2001, p. 45). In addition, many schools and companies are providing solutions to address the digital gap (Hurd, 2000, Roach, 2000b, Roach, 2001) including HBCUs themselves.

Once such program, started at Howard University referred to as "Project Arcimedes", is a three-year project that attempts to rank and compare all HBCU web sites to an ideal type web site. The project, comprised of information technology administrators at Howard University, ranks each web site and publishes the rankings for all HBCUs for their review (Olsen 2001). The impact of this project is difficult to assess since it is relatively new and the project is incomplete. The first set of rankings was published in November, 2001, giving Tennessee State University, an HBCU located in Nashville and founded in 1912, the first No.1 ranking (Olsen 2001).

Conclusion

Historically, the preservation of HBCUs has continued to be a commitment by each presidential administration and higher education officials. In order for HBCUs to remain a viable resource for African American students, they will have to address plans for strengthening their information technology for closing the Digital Divide that exists on many of its campuses. Also, as the phenomenon of distance learning grows, HBCUs will have to increase their information technology that supports learning programs.

The Carnegie roles and Presidential Executive Orders' allowed school administrators and policy makers leeway to create advisory boards and grants HBCUs could utilize to increase technology to support their advancement. Yet, many issues currently plague the future of HBCUs and need to be addressed, including reports of

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recent financial troubles and low enrollments, as well as, the issue of the digital divide.

The following chapter examines the Digital Divide and its impact on HBCU campuses.

CHAPTER 3

The Digital Divide

Introduction

There has always been a difference in the acquisition of resources among the poor and the middle class. What appears to make this gap more noticeable is the current adoption of the Internet in an information technology age. Internet access is dependent upon access to a computer. In today's information technology, the lack of access to computers or knowledge of computer technology has led to what Lloyd Morrissett has coined the "Digital Divide". Hence, the purpose of this chapter is to (1) look at factors that contribute to the Digital Divide, (2) review strategies on the closing the gap in information and computer technology in the United States, and (3) explore implications of the Digital Divide for HBCUs.

The Digital Divide centers around two main elements: (1) acknowledging the Digital Divide and (2) the causes of the Digital Divide. The Digital Divide first came to public and government attention in 2000 during a government summit in Okinawa, Japan (Koss 2001). Shortly after, the Digital Opportunity Taskforce produced a report that identified "at least one-third of the world has yet to make a telephone call, much less see or use a computer" (Koss 2001). U.S. Secretary of State Colin Powell referred to the Digital Divide as the "digital apartheid"(Koss 2001). He commented, "If digital apartheid persists, we all lose. The digital have-nots will be poorer, more resentful of progress than

ever, and will not be able to become the skilled workers or potential customers that are

needed to sustain the growth of the Internet economy" (Powell, as stated in Koss, 2001).

Contributing Factors

While there are several factors that contribute to the existence of the Digital

Divide, two factors are reviewed in this project: race and access to a computer and the

Internet. Tables 3.1and 3.2 (U. S. Department of Commerce) illustrate the percents of

U.S. households with Internet access (Table 3.1) and with a computer (Table 3.2) for

1998 and 2000. According to the U.S. Department of Commerce, out of U.S. homes that

had a computer, 41.5% had Internet access. White (46.1%) and Asian American &

Pacific Islander (56.8%) households had Internet access at levels more than twice those

of Black (23.5%) and Hispanic (23.6%) households.

Table 3.1

Percent of U.S. Households with Internet Access by Race/Hispanic Origin,
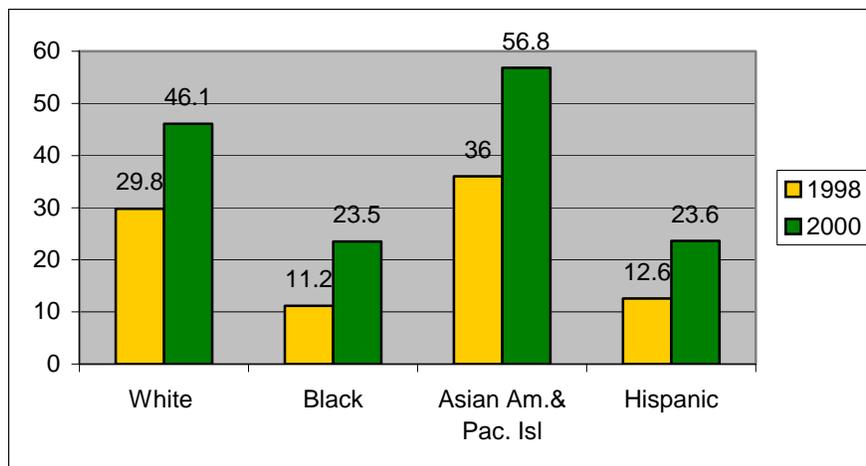
1998 and 2000

Source: U.S. Department of Commerce, NTIA, and ESA, using U.S. Bureau of the Census Current
Population Survey supplements.

According to the tables, the digital divide appears to be divided between Whites and Asians/Pacific Islander on the "have" side of the equation and Blacks and Hispanics on the "have-not" side. Both tables also support the idea that Internet access is affected by race and has a positive relationship in households with a computer - a prerequisite for household Internet access.

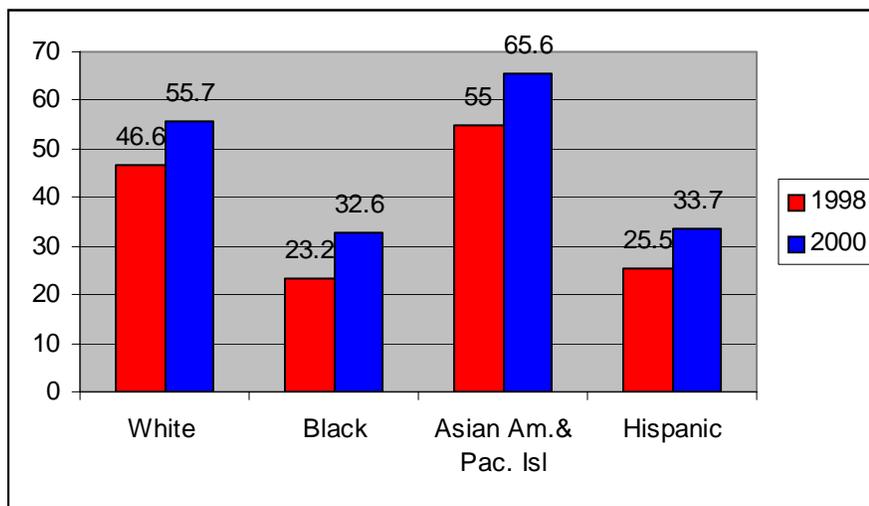**Table 3.2**

Percent of U.S. Households with a Computer By Race/Hispanic Origin, 1998 and 2000

Source: U.S. Department of Commerce, NTIA, and ESA, using U.S. Bureau of the Census Current Population Survey supplements.

The majority of adults without Internet access say they are likely to stay away from the Internet. A third of non-users (32%) say they definitely will not get Internet

access. Another 25% of non-internet users say they probably will not venture online This

information gives policy makers and public administrators areas to begin considering

how (and in many cases where it is politically and financially plausible) to close the

digital divide. In addition, these officials must be able to recognize the causes of the

digital divide in order to develop solutions aimed at its closing.

Strategies for Closing the Digital Divide

Much of the research on closing the Digital Divide centers around increased
government support and available financial resources.

> The real divide among individuals, organizations and nations is defined by the
> freedom, incentives and capacity to innovate, and by the opportunity to
> experiment and take risks. Leaders and governments need to take advantage of
> the great potential offered by new technologies in a socially responsible way. The
> Digital Divide becomes a digital opportunity when the technology is available to
> everyone. Presently it appears that access to technology is limited to the "haves"
> by virtue of their education (Koss, 1998).

Economic growth and social equity are both needed to bridge international and

domestic digital divides. No consensus exists, however, on exactly what policies are

needed for either of these goals. Governments face constituencies with radically different

perspectives on how to bridge the divides, ranging from labor unions to international

businesses to government regulatory agencies. Numerous governments, private

businesses, civil society members, and international organizations have turned their

collective attentions to bridging these divides, and have launched a variety of initiatives

to shape policy.

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These questions, when appropriately addressed policy makers, provide a guide that can be directed at closing the digital divide. Educating people on how to use the technology once it is affordable is also a key dynamic needed for a discussion on bridging the technology gap.

Implications for HBCUs

The phenomenon of distance education programs is sweeping the higher educational system at record paces. Four-year colleges and universities are moving forcefully to offer online distance education courses. Technical and community colleges are also preparing for this new age in education by meeting the increasing demands for computer instruction while remaining in the context of a traditional community college educational setting (Habour 2000). Arguably, the institutions most needing to embrace this digitalized form of education are HBCUs.

HBCUs began as institutions serving the educational needs of African Americans during the 1800's and were recognized by the Federal government during the 1960's. These schools are typically private, plagued by under funding and low enrollments. In a March 2000 article, William Gray III, president of the United Negro College Fund, stated "many historically Black colleges and universities had fallen victim to the digital divide, lagging behind other institutions in the ability to help students and teachers get Internet access" (Gray, as stated in the Sacramento Observer, 2000).

Some HBCUs are taking the appropriate steps to address these issues. Schools like Tennessee State University and Clark Atlanta University are teaming up with corporate sponsors, like America Online (AOL), to implement initiatives by working

with community groups, other businesses, health organizations and government to increase funding for HBCUs and to develop partnerships aimed at increasing information and computer technology (Roach, 2000). "Know how to use a computer to communicate is empowering, however, educators in higher education know all too well that our students 'must get wired to get hired'" (Cross, 2001).[4] With these kinds of plans in action, the higher education system is poised to address to issue the closing of the digital divide.

Conclusion

The digital divide is not just about people owning computers. It is about having access to technology and the knowledge on how to use that technology. As mentioned earlier, factors that explain the digital divide include race, income, and education. These factors need to be addressed by policy makers attempting to develop and implement strategies for closing the Digital Divide. A key player in the process is education. Since a majority of the people online are adults, all institutions of higher learning need to focus on this issue and offer solutions. HBCUs, in particular, must go a step further to deal with historical disadvantages to create a bridge for the Digital Divide in education, as well as in America.

In order to offer recommendations to HBCUs for strategies to increase their information technology infrastructure, there needs to be an assessment of the current status of technology being utilized at HBCUs. This applied research project attempts to

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[4] Dr. Delores Cross is president of Morris Brown College, an HBCU in Atlanta, GA.

do that through a content analysis of HBCU web sites. The next chapter discusses the

conceptual frameworks that will be used to answer the questions for this research project.

CHAPTER 4

Conceptual Framework

This chapter summarizes the conceptual framework for each of the research questions and explains the link between the literature review on the research method for each research. In addition, this chapter identifies the ideal concepts used to create the coding sheets for this study. Developing a conceptual framework gives the research focus and utilizes the coding sheet for observation for content analysis and structured interviews in attempting to answer the questions of the overall research project. Given the nature of this project, practical ideal type conceptual frameworks will be used to explore the research questions. Each question has its own conceptual framework linked to literature regarding institutional websites, distance education programs and information technology strategic plans.

A conceptual framework is, according to Shields (1998, p. 206) a concrete integration of research purposes and frameworks with specific names and goals. Shields had classified five different types of conceptual frameworks (Shields, 1998, p 206.) The conceptual framework that will be used to answer questions one and two is a practical ideal type created by Cherry Beth Luedtke, a former SWT MPA student, who assessed the websites of Texas' technical and community colleges. Although her research was directed at technical and community colleges, the conceptual framework she developed has external validity and relevance for HBCUs. Categories will be the conceptual framework used to answer the third question. This framework is a strategic information

technology model developed by the Executive Leadership Foundation Technology

Transfer Project. This model provides a plan that schools, particularly HBCUs, can

utilize to enhance their learning environment through technology (ELF Technology

Transfer Project 2000).

Institutional Web Presence

Table 4.1 shows the conceptual framework for exploring the status of institutional

web sites at HBCUs. The literature review provides information showing that a practical

ideal type for an institutional web site should include several elemental categories. The

first category discusses literature that supports the institution actually providing a web

site. This is a key element for this project since the unit of analysis for this project is

each HBCUs web site.

The next category explains the institutions' objectives. An ideal web site includes

elements of such as a stated purpose of the website and an introduction to the college or

university. In addition to a stated purpose, a clear mission statement and philosophy

should also be found on an institutional web site. Not only would an ideal web site be

posted on the Internet, it would include the institutions' goals and objectives (Luedtke,

1999).

Table 4.1. Conceptual framework for research question 1 linked to relevant literature.

INSTITUTIONAL WEB PRESENCE

Question 1. Are HBCUs websites providing information about the teaching and learning process?

Categories	Elements	Source
Web Sites	• Institutional web sites	• Luedtke, 1999
Objectives	• Stated purpose of website	• Luedtke, 1999, SACS Criteria for Accreditation Section 4.4 and Section 5.3
	• Introduction to college	• Luedtke, 1999, Smith, 1998.
	• Mission statement available	• Luedtke, 1999, Smith, 1998.
	• Philosophy	• Luedtke, 1999, Smith, 1998
Credentials	• Accreditation	• Luedtke, 1999, Smith, 1998.
	• Links to regulatory / accrediting agencies	• Luedtke, 1999, Smith, 1998.
	• Faculty credentials	• Luedtke, 1998, Smith, 1998.

The third category notes that an institutional web site should provide information about school's credentials. The credentials should list the schools affiliations with its

accrediting and/or regulatory agencies and an ideal web site would provide hypertext links to the regulatory and/or accrediting agencies. Furthermore, a listing of the institutions faculty credentials should be found on an ideal type web site. Many schools provide a faculty directory, yet research shows that it is important to the faculty members' educational background and other important academic credentials (Luedtke 1999).

Post-Secondary Distance Education

There is extensive research on distance education programs provided in Luedtke's research.   The second question examines whether HBCUs provide distance education programs and information about the distance teaching and learning process. Table 4.2 illustrates the conceptual framework for the second research question. The conceptual framework establishes the ideal categories linked to relevant literature that should be posted on an institution's web site (Luedtke 1999).

The first category discusses the concepts of distance education programs. An ideal web site should provide a reference to distance education program or online courses available to students through the Internet. These courses could be offered by a department or as individual classes. In addition, an ideal web site with references to distance education courses should group all of the online courses available for easy access and browsing by the student.

The next category for an ideal institutional web site regards distance-learning objectives. Much like an the concept that ideal web site should provide references to the school's objectives, and ideal web site that promotes the distance teaching and learning

process should provide information about the objectives of the distance education

programs. HBCUs serve different communities and their goals may be focused on

certain aspects of a community (the non-traditional, ex-military, at risk youth) or by

academic programs (engineering, medicine, law). By staying abreast of current

technology, the goals of the distance education programs, including a mission statement,

philosophy, and program and course policies and outcomes should be available on the

wed site (Luedtke 1999).

Table 4.2. Conceptual framework for research question 2.

POSTSECONDARY DISTANCE EDUCATION

Question 2.   Are HBCUs providing distance education programs and providing information about the distance teaching and learning process?

Categories	Elements	Source
Distance education programs	• Reference to distance learning course with no program / unit available • Distance learning program identified as a separate program / unit	• Luedtke, 1999, Smith, 1998, Roach, 2000 (a), Hurd, 2000. • Luetdke, 1999, Smith, 1998, Hurd, 2000.
Distance learning objectives	• Distance learning program mission statement / philosophy stated • Distance learning program / course outcomes – objectives, policies, procedures	• Luetdke,1999, *Principles of Good Practice* • Luetdke, 1999, *Principles of Good Practice*
Distance learning credentials	• Distance learning regulatory / accrediting agencies • Links to distance learning regulatory / accrediting agencies provided • Expected learning outcomes stated • Nature of faculty / student interaction stated	• Luedtke, 1999, *Principles of Good Practice*, Smith, 1998. • Luedtke, 1999, *Principles of Good Practice* Smith, 1998. • Luedtke, 1998, *Principles of Good Practice* Smith, 1998. • Luetdke,1999, *Principles of Good Practice,* SACS Criteria 4.8.2.4, Smith, 1998.

Information Technology Strategic Plan

The conceptual framework used for the last question in the research project is presented in Table 4.3. The conceptual framework is derived from a plan, referred to as the Technology Transfer Project, designed in 2000 by the Executive Leadership Foundation. The plan is aimed at assisting primarily HBCUs in implementing an information technology plan aimed at closing the digital divide at exists at HBCUs. It provided a practical ideal type information technology (IT) strategic plan comprised of nine essential elements. The research shows that an ideal IT strategic plan focusing on these elements will assist HBCUs in closing the Digital Divide (ELF Technology Transfer Project 2000, Roach 1998, Hurd 2000).

The first element begins the plan by addressing the need for a kick off strategic planning process. This process could be an initiative declaration or statement made by the school that discusses it commitment to address bridging the digital divide. Ideally, the kick off planning process should be followed by a prepared mission statement or a listing of the institutions goals and objectives. In addition, a definition of the school's current status on information technology should be addressed. All HBCUs are not on the same level, in terms of their access to information technology. Understanding each schools level would be critical to this strategic plan (ELF Technology Transfer Project 2000, Roach 1998, Hurd 2000).

Other elements addressed in an ideal IT strategic plan include assessment of the school's needs, technology requirements, as well as, an establishment of an IT governing body. Perhaps the most important aspects of an ideal IT strategic plan involve developing a funding strategy for the institution. A lack of financial resources may be the greatest

factor affecting the Digital Divide. HBCUs need to address measures to increase or

reapportion funding to address the concern.

Table 4.3. Conceptual framework for research question 3.

INFORMATION TECHNOLOGY STRATEGIC PLAN

Question 3. Are HBCUs implementing strategic plans for bridging the gap of the Digital
Divide?

Elements	**Source**
• Kickoff Strategic Planning Process	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Prepare Mission Statement/Goals/ Priorities	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Define Present Situation	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Assess Needs	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Identify Technology Requirements	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Establish Governance	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Develop Funding Strategy	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Create Implementation Plan	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.
• Complete Strategic Plan	• ELF Technology Transfer Project 2000, Roach 1998, Hurd, 2000.

These conceptual frameworks provide the structure for reviewing the current status of technology at HBCUs by observing their web sites for specific content. The next chapter discusses the methodology used for the research project. It provides information about the population of study and, as well as, the coding sheet and questionnaire used for collecting and recording the data. The coding sheets for questions one and two are also presented and their relevance to the research explained.

CHAPTER 5

Methodology

Purpose

The purpose of this chapter is to discuss the research methods that will be used to collect, aggregate and interpret the data observed. This research project explores the current status of web sites and distance education programs at HBCUs and gauges whether HBCUs are implementing strategic plans to bridge the Digital Divide. Therefore, the methodologies chosen to answer these questions are content analyses of web sites and structured interviews. According to Babbie, content analysis may be applied to any form of communication even if it exists in a virtual environment, including website analysis, therefore, making it an acceptable methodology to explore this research (Babbie 1998, p. 286). Due to the preliminary nature of this type of research, however, structured interviews and web site analyses were also used to provide empirical evidence that can establish whether HBCUs are implementing strategic plans for information technology.

Content Analysis

Given the explorative nature of this research project, content analysis is the methodology chosen to collect the evidence for the project. According to Babbie (1999, p. 286), content analysis may be applied to virtually any form of communication, which may include newspapers, magazines, books, speeches, letters, and laws. Even

though web sites exist in a virtual environment, they are printable sources, therefore appropriate for content analysis. Babbie further notes that once the concepts of the research have been specified, the type of measurement techniques or operations must be made (Babbie, 1998, p. 89). Yet, as with any research methodology, including content analysis, there are associated strengths and weaknesses.

Strengths. As Babbie (1999, p. 295) notes, probably the greatest advantage of content analysis is its economy in terms of both time and money. A content analysis can be undertaken by a single person, whereas, a more complex and time-consuming methodology, like a survey, may not be feasible. The need for a large research staff and specialized equipment is also eliminated with content analysis. According to Babbie (1999, p. 296), safety is another strength. If a survey has been constructed incorrectly it may require the research to be completely redone. The same may result from an erred field research methodology. Yet, it is usually easier to complete a portion of the study for a content analysis. A portion of the coding process for the content analysis may have to be repeated, but it does not generally mean the entire project has to start over (Babbie 1999, p. 296).

The strengths noted by Babbie were found in this research as well. Since one student conducted the empirical portion of the research in a relatively small amount of time, content analysis method was feasible both economically and financially. Moreover, the issue of safety was never a factor as it could have been perhaps in another research methodology, like field research.

Weaknesses. There are related weaknesses with content analysis. As Babbie explains, content analysis is limited to the analysis of recorded communications only.

These records can be in any format – oral, written, or graphic, but they must be recorded (Babbie 1999, p. 296). Another weakness associated with content analysis, per Babbie, is reliability and validity. Problems of reliability are less likely to occur in occur with content analysis than field research, since the researcher can code and recode as often as needed to ensure consistency (Babbie 1999, p. 296). Nevertheless, these problems can occur in content analysis and weakens the methodology.

These related weaknesses were no stranger to this project. Examining recorded communications that exist in a virtual environment may not be as valid as printed communications. The results of the research are based on the information observed during a given period of time. These results may have significantly different outcomes given longer times frames of observation. This study addresses these limitations by acknowledging these weaknesses and providing the actual time frames the web sites were observed for reference purposes. In addition, by using a conceptual framework from a previous research project, the external validity is enhanced since it has already been tested as a valid research method.

Another potential research, as noted by Luedtke, is related to the nature of distance education programs. Information technology and the integration of the Internet are relatively new to HBCUs. The evolving nature of institutional web sites is also an issue (Luedtke 1999, p. 102). Web sites can be added, removed, updated, constructed, or altogether changed in an instance, making the observation process unreliable and invalid, or valid for a limited amount of time (Leudtke 1999, p. 102).

Structured interviews

Most of the date collected for the research project was obtained from the institutions' web site. Yet, to obtain data regarding whether an institution has an information technology strategic plan available may not be available on the institution's web site. Therefore, telephone structured interviews were conducted to collect this information. According to Babbie (1998), an interview is an alternative method of collecting data that provides a face-to-face encounter. Moreover, an interview generally decreases the number of "don't knows" or "no answers".

Babbie (1998) lists several strengths and weaknesses for structured interviews. One strength is that the interviewer can provide greater control over data collection if several interviews are engaged in the project. Another strength specific to a telephone interview is that the interviewer can dress any way they please, without affecting the answers the respondents give. Weaknesses related to a telephone interview include being hung up on by the respondent and an increasing presence of voice mails and answering machines which allow the respondent the option of participating in the interview by returning the call (Babbie 1998).

Since a telephone interview is method of collecting data, a questionnaire was designed for the third question of the research (see Table 5.3) which allows the school to provide answer the questions relating to an ideal IT strategic plan or provide insight to existing or prospective IT strategic plans the respective school plans to implement. This date can determine whether HBCUs have such plans available and how closely related they are to the ideal type IT strategic plan.

Population of Study

For purposes of validity and significance, this project analyzed the web sites of 60 HBCU web sites (population) and contacted 10 HBCUs (sample) to participate in a structured interview. The colleges were ranked by enrollment figures reported by the National Center for Education Statistics in 2000. The top 60 HBCUs were chosen for the project. For the third question, the top 10 HBCUs, based on 2000 NCES student enrollment figures were used for the study. The following schools were selected (based on enrollment size, see Appendix A for numbers) to participate in the structured interviews for the third research question:

(1)   The University of the District of Columbia
(2)   Southern University A&M College
(3)   Howard University
(4)   Texas Southern University
(5)   Florida A&M University
(6)   Norfolk State University
(7)   North Carolina A&T State University
(8)   Tennessee State University
(9)   Grambling State University
(10)   Jackson State University

A preliminary review of the schools was not completed because it was not critical to the research. If a school did not have a web site, was accredited, or offered distance education courses online, that information would validate the research purpose and could be used as recommendations based on the overall findings. The research assumes that if the 60 largest HBCUs do or do not have web sites that are ideal for the teaching and learning process, providing distance learning programs and/or creating and implementing strategic plans for increasing information technology on their campuses, smaller schools

will less likely have such plans as well. A listing of the names of the schools and their URL web site addresses reviewed for this project can be seen in Appendix A.

The research was conducted between February 18, 2002 and March 1, 2002. During this time, HBCUs web sites were observed. An institutional web site is found on the Internet by accessing the web site's home page through its URL, uniform resource locator or web address). The home pages acts as a portal or starting point for other pages that can be linked to other information regarding the school or related interests and is maintained by the school or an outside source.

Coding Sheet

Babbie notes that content analysis is a coding operation from some entity (newspaper, TV show, radio broadcast), thus a coding sheet, derived from the conceptual framework, is needed for operationalizing questions one and two (Babbie 1998, p. 290). The coding sheet that will be used for questions one and two was also created by Luedtke in her research of Texas' technical and community colleges and should be replicable to this research project since the conceptual framework is also being replicated. As Shields (1997, p. 12) notes, the practical ideal type can be used as a starting point of reference and can be used as a benchmark to understand and improve a pragmatic process. Also, to provide greater clarity, the practical ideal type is generally organized by categories (Shields 1997, p. 12).

Institutional Web Presence

   Table 5.1 shows the coding sheet for the first research question. The coding

operation is directly created from the conceptual framework and allows the observation to

be recorded and categorized by the question. It provides a section for the name of the

college being observed, the date of the observation, and the type of web browser

(software program which allows the computer to access the Internet, i.e., Netscape

Navigator and Microsoft Explorer) used for the observation. The coding sheet for

question one focuses on whether or not HBCUs have web sites that promote the teaching

and learning process. Each ideal element is observed and coded by either with a 1,

meaning the ideal element was found on the web site, or with a 2, meaning the ideal

element was not found on the web site.

Table 5.1. Operationalizing the Conceptual Framework for Question 1:

Are HBCUs websites providing information about the teaching and learning process?

College   Browser
Date Searched

Coding Sheet for Question 1			
		Yes = 1 No = 2	
Institutional Web Presence			
1	Institutional Web site		
2	Stated purpose of web site		
3	Introduction to college		
4	Mission state available		
5	Philosophy		
6	Accreditation		
7	Links to regulatory/ accrediting agencies		
8	Faculty credentials		

Post Secondary Education

Table 5.2 shows the coding sheet for the second research question. This coding

sheet was used to observe information regarding the status of distance education

programs and online courses at HBCUs. Again, the ideal elements taken from the

conceptual framework are recorded and used to collect data from each of the 60 HBCU

web sites. The same steps followed for question one were used for question two, with all

the ideal elements found totaled and calculated for percentage reporting purposes.

The coding sheet for question two focuses on whether or not HBCUs offer

distance education programs and/or online courses that promote the teaching and learning

process. Following the same format as with the first question, each ideal element is

observed and coded by either with a 1, meaning the ideal element was found on the web

site, or with a 2, meaning the ideal element was not found on the web site.

Table 5.2. Operationalizing the Conceptual Framework for Question 2:

Are HBCUs providing distance education programs and providing information about the distance teaching and learning process?

College   Browser
Date Searched

Coding Sheet for Question 2.			
		Yes = 1 No = 2	
Postsecondary Distance Education			
9	Reference to DL course offerings – no program unit		
10	Identified as separate program/ unit		
11	DL program mission, philosophy		
12	Program/course outcomes- objectives, policies, procedures		
13	DL regulatory / accrediting agencies		
14	Links to regulatory / accrediting agencies		
15	Expected learning outcomes		
16	Nature of faculty / student interaction		

Information Technology Strategic Plan

The operationalization of the conceptual framework for the third question is different from the first two questions. Since it may be difficult to ascertain whether HBCUs are implementing information technology strategic plans from their web sites alone, a questionnaire was created for use in contacting the schools via telephone to record this information. Table 5.3 shows the questionnaire that is used to collect data for the third research question. The bolded statements correspond directly to the conceptual framework used for this research question.

The next chapter discusses the results of the content analyses and structured interviews. The information is referenced with tables that answer the questions for this project. These results obtained also assess how close HBCU web sites are to the practical ideal types for web sites based upon their respective conceptual frameworks.

Table 5.3. Operationalizing the Conceptual Framework for Question 3:

Are HBCUs implementing strategic plans for bridging the gap of the Digital Divide?

College   _____
Name of College Official Interviewed   _____
Date Interviewed   _____

1. To what extent do your school have a **kick-off strategic planning** process?

_____
_____
_____
_____

2. Has your school prepared a **mission statement**, or set goals, or set priorities?

_____
_____
_____
_____

3. Has your school defined the **present situation**?

_____
_____
_____
_____

4. Has your school **assessed its needs**?

_____
_____

_____

_____

5. Has your school identified **technology requirements**?

_____
_____
_____
_____

6. Has your school established a **governance**?

_____
_____
_____
_____

7. Has your school developed a **funding strategy**?

_____
_____
_____
_____

8. Has your school created an **implementation plan**?

_____
_____
_____
_____

9. Has your school completed a **strategic plan**?

_____
_____
_____
_____

CHAPTER 6

Results

Statement of purpose

The purpose of this chapter is to summarize the results of the research project. The goal of the research project is to explore the status of HBCU web sites to determine if HBCUs are providing web sites that promote the teaching and learning process, offering distance education programs through their web sites, and have strategic plans that address closing the digital divide that exists on HBCU campuses.

Summary of results

Are HBCUs providing web sites that promote the teaching and learning process?

As shown by the research, HBCUs, on average, are providing web sites that promote the teaching and learning process. Table 6.1 shows the results of the content analysis for the first question. All of the schools analyzed provide a web site, however, the ideal information that should be found on an institutional web site that promoting the teaching and learning process varied a significantly. For example, only 8% have a stated purpose of the web site and 10% percent of the web sites provide links to regulatory / accrediting agencies. On the other end, a majority of the web sites provided a mission statement (83%) and an introduction to the college (73%).

Table 6.1

Institutional Web Presence

# of web sites analyzed = 60	Frequency	Percentage
Institutional web site	60	100
Stated purpose of web site	5	8
Introduction to the college	50	83
Mission statement available	44	73
Philosophy	22	37
Accreditation	29	48
Links to regulatory / accrediting agencies	6	10
Faculty credentials	20	33

Overall, HBCUs are at least embracing information technology with the

establishment of a web site that does meet some of the ideal categories for an institutional

web site that promotes the teaching and learning process. See Appendix B for a listing of

best practice web sites. While these results looks promising and shows that HBCUs are

not far off from the ideal, there is still room for improvements in areas like providing a

well defined philosophy of the school, a reference to accrediting agencies with links to

the agencies, as well as, a listing of faculty credentials. Most of the schools researched

provide a faculty directory of names and telephone numbers, but a listing of the faculty

credentials was seldom found, even when faculty members were divided into academic

departments.

Are HBCUs providing distance education programs and providing information about the distance teaching and learning process?

Based on the findings from the research, HBCUs, in general, are not providing distance education programs and information about the distance teaching and learning process. Table 6.2 shows that out of the 60 HBCUs researched, approximately one third of the schools offer either distance educations courses that were not identified with a program or a distance learning program that was identified as a separate program / unit. The numbers are even lower for the remaining six categories, with less than 10 percent of the schools providing a listing or links to distance education regulatory/accrediting agencies and a stating the expected learning outcomes.

Table 6.2

Postsecondary Distance Education

# of web sites analyzed = 60	Frequency	Percentage
Reference to distance learning course offering with no program / unit available	22	37
Distance learning identified as a separate program / unit	20	33
Distance learning program mission statement / philosophy stated	11	18
Distance learning program / course outcomes, objectives, policies, procedures	9	15
Distance learning regulatory / accrediting agencies listed	4	7
Links to distance learning regulatory / accrediting agencies provided	3	5
Expected learning outcomes stated	6	10
Nature of faculty / student interaction stated	8	13

A part of this research project set out to determine the status of HBCUs web sites and the status of distance education programs at HBCUs.. Even though all the schools researched had web sites that provided aspects of what constituted an ideal web site, only about a third of the schools offered distance education programs through their web sites. See Appendix C for best practice web sites that offered distance education programs/online courses.

Are HBCUs implementing strategic plans for bridging the Digital Divide?

Based on the evidence found in the research, HBCUs are not implementing strategic plans aimed at closing the Digital Divide. When several of the 10 largest HBCUs were contacted to discuss how close their school was to the model information technology strategic plans chosen for this project, none of them were willing to provide answers to the questions. Many persons contacted at the HBCUs, via telephone, made reference to their web sites for information regarding their strategic plans. Others simply stated they did not have a plan in progress as of the time of the research and once a strategic plan was available it would be posted on their institutional web site.

As a result of this inquiry unexpected at the beginning of the research, each of the 10 HBCUs web sites originally sampled were observed through their institutional web site to determine if an IT strategic plan existed online. If the strategic plan did not state specifically "information technology", "IT", or "Digital Divide", or if the plans did not address these components in some way, then the web site was recorded as not having

such plans available online. Also, if a strategic plan was found at the web site, however, it address other institutional issues, such as building a new student union or revising the curriculum for a particular program, then the web site was recorded as not having a strategic plan available at the institutions' web site.

Table 6.3 shows the number of HBCUs (out of the largest 10 sampled) that had strategic plans at their web sites that address increasing the information technology on their campuses. Only 3 out the 10 schools observed had an IT plan available at their web site. Those schools were Howard University, Florida A&M University, and Tennessee State University. An information technology strategic plan was not observed on any of the remaining seven HBCUs sampled during the dates of the research (February 18, 2002 through March 1, 2002). See Appendix D for a reference to two schools that provide information regarding information technology 4strategic planning.

Table 6.3

INFORMATION TECHNOLOGY STRATEGIC PLANS

# of web sites analyzed = 10	Frequency	Percentage
HBCUs that have information technology strategic plans available on their web sites	3	30

Another interesting observation made regarding the third question is that while three of the schools had strategic plans available at their web sites, none of them had

plans that specifically focused on the issue of closing the digital divide. While the three strategic plans observed each contained components that indirectly address bridging the gap of information technology, none used a model that focused solely on addressing this issue. Several reasons might offer an explanation. Perhaps HBCUs are focused on other issues they determine have a greater impact on their institution than the Digital Divide, like increasing funding and enrollment figures. Or maybe the schools feel it is better to create individual plans that address each campus' IT needs. While the reasons may bare some validity, research shows that HBCUs across the board face similar issues regarding the Digital Divide and creating a task force, much like the project underway at Howard University, is critical for addressing the issue of the Digital Divide.

Summary

These findings show that HBCUs have, at least, a foundation for an information technology in that they are have a web site. Yet, there are many improvements that can be made to make the web sites ideal for promoting the teaching and learn process. Regarding HBCUs offering distance education program, the numbers are extremely low. Only a third of the schools currently offer either distance education programs or online courses. As technology increases so must the application of the new technology by HBCUs increase to remain competitive in enrolling and retaining students. An information technology strategic plan that focuses on increasing information technology is a critical foundation for this process to be achieved. The results of this research show that very few schools have such plans available, at least on the institutions' web sites.

The final chapter discusses the overall conclusion and summary of the research project. It provides a brief overview of the research purpose, methods used and results obtained. It concludes by explaining some of the challenges presented by the research and offers recommendations to HBCUs and for follow up research in this area.

CHAPTER 7

Conclusion

Summary of project

HBCUs have been an educational resource primarily for African Americans as early as the 1800's. Today, they continue to produce many productive, educated citizens and leaders. A majority of the Black federal judges, teachers, attorneys and officers in the military have been educated at HBCUs (Henderson, 2001). As technology creates new ways for students and schools to teach and learn, HBCUs must step up their efforts to continue to attract students while competing with larger and richer schools. It is important that HBCUs embrace new technology as the world adapts to the information technology age.

The purpose of this project is to observe whether HBCUs are meeting these criteria. Based on the evidence obtained by the research, HBCUs, on average, are providing web sites that contain an introduction, a mission statement, and information regarding its accrediting agencies. The research also shows, however, that HBCUs, overall, are not providing distance education program or online courses through their web sites. The most surprising aspect of the research involved the third question. When several of the largest HBCUs were contact via telephone to participate in the interview to determine whether they had a strategic plan similar to the ideal type of a strategic plan, many of the schools referred to their web sites to obtain this information. None of the schools contacted answered the questions or where willing to participate in the structured

interview and many of them acknowledged their lack of understanding the intent of the research project.

A further review of the web sites show a small number (3) of the schools researched (10) have strategic plans posted on their web sites and these plans only provided certain components that could be considered addressing the issue of closing the digital divide on HBCU campuses. There was no system-wide approach either available online or via telephone contacts that shows any of the HBCUs in the research project addressing the overall issue of the digital divide. Given their unwillingness to participate in the interview or provide that information on their web sites, perhaps HBCUs do not see that as an issue worth addressing individually. Perhaps there are other factors that can explain these findings, such as a lack of funding, lack of qualified employees, low enrollment figures, economic pressures, etc, factors that are unique to HBCUs. Possibly, they may feel that they are addressing the overall issue of the digital divide by creating strategic plans that focus on each campus assessment of its information technology needs. While one school may focus on improving the information technology infrastructure for its administration, another school may focus on equipping its dormitories with computer labs and providing students with lap top computers. Yet, literature shows that HBCUs need to provide a strategic approach to addressing the overall issue of the digital divide on their campuses.

Challenges presented by the research

There are several challenges presented by the research, including the nature of a content analysis of a web site, the unwillingness of the schools to participate in the

structured interview, and the various problems associated with the time needed for a comprehensive review of each HBCU. These challenges are important to acknowledge because they directly impact the results, as well as, provide insights for future research in this area.

Arguably the biggest challenge of the research was the content analysis of the web sites. This presented a challenge because web sites change by design. Information is added or updated with ease and it is difficult to report empirical data from a constantly changing virtual source. For the purposes of the research project, printed versions of the web sites that show support the evidence found in the research has been included (see Appendix B).

Another challenge of the research regarded the unwillingness or lack of knowledge displayed by the larger HBCUs chosen to participate in the structured interview. Since the third question involved obtaining information regarding a strategic plan that may not be found on an institutions web site, contacting the schools to determine if such plans exist was a key element of the research.

Time was also another challenge for this research project. The web sites were reviewed during a period of a week in the middle of the spring semester. Had the analyses been conducted over a longer period of time (i.e., a year or longer) perhaps the results would be different. Also, if the schools chosen for the interview were visited in person as opposed to via the telephone, maybe those results of that research would be different or at least gave a different perspective than the one obtained.

All of these challenges are valid and applicable to the nature of the research project. Yet the methodologies chosen for the project are also valid for an explorative

inquiry and at least provides us with information that be used to offer recommendations to HBCUs and for similar research in this field. The research of HBCU web sites is relatively new and as technology continues to increase exponentially, future research may not experience the same challenges or yield the same results as this project experienced. The next section provides recommendations for HBCUs and follows with suggestions for future research of HBCU web sites.

Recommendations For HBCUs

The research observed in this project shows that HBCUs have not embraced information technology to the point where they are providing ideal institutional web sites, distance education programs/online courses, and implementing strategic plans addressing the Digital Divide. Three recommendation areas are provided based on the results of the research:

- utilizing available financial support

- supporting leadership

- embracing technology and tools aimed specifically for assisting HBCUs.

Regarding the recommendation area of financial support, more money is being appropriated now from the federal government than ever before. The Bush (George W.) Administration's budget plan for fiscal year 2003 proposes approximately $264 million for HBCUs (Paige 2002). That averages to about $2.5 million dollars per HBCU.

HBCUs should be sure to allocate a potion of this money to enhance technology. If these resources are used to build new multi-cultural centers or student life centers, for example, and not used for increasing IT on campuses, HBCUs may not have enough students for the new centers to benefit.

On February 12, 2002, President George W. Bush assembled a Presidential Advisory Board for HBCUs, which includes sitting presidents of the colleges, representatives, of private foundations and other educational institutions, business and financial leaders and high school administrators. The President charged the panel of HBCU leaders to submit an annual report with recommendations on advancing HBCUs in terms of their academic performance, *use of technology,* financial planning and development (Paige 2002).

There are a number of resources HBCUs can reference to provide a model of an ideal institutional web site and an effective distance education programs. As stated in this research project, Howard University's Distance Learning Lab and the Executive Leadership Foundation's Technology Transfer Project are just two examples of pilot programs aimed specifically at addressing information technology at HBCUs. Even applied research projects by Luedtke (1999), Solis (2000), and Spencer (2001) provide empirical evidence to address issues such as distance education programs and the Digital Divide, respectively.

All of these resources are available to HBCUs and must be taken advantage of to address the future of HBCUs. These schools must also focus on plans that turn traditional classrooms of chalkboards, desks, and lecture podiums into virtual classrooms of online chat rooms and bulletin boards, instant messaging, and virtual syllabuses where

students worldwide can participate in and promote the teaching learning process all

institutions strive to achieve.

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Appendix A. List of the 60 largest HBCUs (by enrollment) and Web Site URL addresses.

Historically Black Colleges and Universities		
School	**Size of enrollment**	**Web Site URL**
University of The District of Columbia	11,578	www.udc.edu
Southern University A&M College	10,548	www.subr.edu
Howard University	10,105	www.howard.edu
Texas Southern University	10,045	www.tsu.edu
Florida A&M University	9,915	www.famu.edu
Norfolk State University	8,652	www.nsu.edu
North Carolina A&T State University	7,973	www.ncat.edu
Tennessee State University	7,590	www.tnstate.edu
Grambling State University	7,533	www.gram.edu
Jackson State University	6,203	www.jsums.edu
Prairie View A&M University	5,849	www.pvamu.edu
Hampton University	5,759	www.hamptonu.edu
North Carolina Central Univ.	5,635	www.nccu.edu
Alabama A&M University	5,543	www.aamu.edu
South Carolina State Univ.	5,071	www.scsu.edu
Alabama State University	5,037	www.alasu.edu
West Virginia State University	4,896	www.wvsc.edu
Morgan State University	4,693	www.morgan.edu
Southern Univ., New Orleans	4,650	www.suno.edu
Clark Atlanta University	4,500	www.cau.edu
Bowie State University	4,189	www.bowiestate.edu
Fayetteville State University	4,032	www.uncfsu.edu
Lincoln University (MO)	4,032	www.lincolnu.edu
Langston University	3,800	www.lunet.edu
Univ. of Ark. at Pine Bluff	3,616	www.uapb.edu
Tuskegee University	3,598	www.tusk.edu
Xavier University of Louisiana	3,304	www.xula.edu
Central State University	3,261	www.centralstate.edu
Albany State College	3,106	www.argus.asurams.edu
Interdenominational Theo. Ctr.	2,990	www.itc.edu
Morehouse College	2,990	www.morehouse.edu
Delaware State University	2,935	www.dsc.edu
Bluefield State College	2,931	www.bluefield.wvnet.edu
Alcorn State University	2,919	www.alcorn.edu
Savannah State University	2,872	www.savstate.edu

Winston-Salem State Univ	2,817	www.wssu.edu
Coppin State College	2,578	www.coppin.edu
Kentucky State University	2,541	www.kysu.edu
Fort Valley State College	2,537	www.fvsu.edu
Shaw University	2,,504	www.shawuniversity.edu
University of the Virgin Isl.	2450	www.uvi.edu
University of Maryland – Eastern Shore	2,400	www.umes.edu
Bethune Cookman College	2,301	www.bethune.ccokman.edu
Mississippi Valley State Univ.	2,221	www.mvsu.edu
Elizabeth City State University	2,130	www.ecsu.edu
Lawson State Comm. College	2,042	www.ls.cc.al.us
Morris Brown College	2,030	www.morrisbrown.edu
Spelman College	2,026	www.spelman.edu
Harris Stowe State College	1,978	www.hssc.edu
St. Augustine's College	1,745	www.st-aug.edu
Dillard University	1,625	www.dillard.edu
Virginia Union University	1,548	www.vuu.edu
Cheyney Univ. of Penn.	1,519	www.cheyney.edu
Florida Memorial College	1,500	www.fmc.edu
Johnson C. Smith University	1,391	www.jcsu.edu
Oakwood College	1,334	www.oakwood.edu
Benedict College	1,234	www.benedict.edu
Lincoln University (PA)	1,234	www.lincoln.edu
Lemoyne-Owen College	1,132	www.lemoyne-own.edu
Tougaloo College	1,131	www.tougaloo.edu

Appendix B. Best practice examples of HBCU web sites that provide ideal information for institutional web sites.

WELCOME CENTER | CALENDARS | DIRECTORIES | SITE MAP | SEARCH | CONTACTS

HOWARD
U N I V E R S I T Y

Enrollment
Registration, Admission, Scholarships, …

Academics
Courses\Classes, Schools & Colleges, …

Administration
Administrative Offices, Support Units, …

Research

Library System
Indexes/Fulltext Article Sources, Catalog, …

Computing & Technology
Help Desks, iLab, Virus Alerts, …

Howard Life
Student Activities, Art@Howard, Athletics, …

ANNOUNCEMENTS
- **Franklin D. Raines' Charter Day Convocation Address**
- Summer Enrichment Programs 2002
- Charter Day 2002
- Parking and Shuttle Announcements
- Banner 4 Installation and Training
- Strategic Framework for Action II
- HUH Legacy of Leadership
- Attention Current & Prospective students!

The Campaign for Howard

Information for:

Current Students	Faculty
Prospective Students	Parents/Family
Alumni/Friends	Staff

134th Commencement
10 a.m., May 11, 2002

BISONWEB
Fall & Summer 2002
Schedule of Courses

Check for **Student Financial Validation Status**

News & Events   More News >>

Campus Happenings   More >>

• EEO Unveils New Website Read on…

• Divinity Hosts National Faith Leaders Training Institute Read on…

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• Fulbright Distinguished Chair Award Applications Due May 1 [Read on...](#)

• Fourth Jenkins Pediatrics Lecture Scheduled (05/07/02) [Read on...](#)

Appendix C. Best practice examples of HBCU web sites that provide ideal information for relating to distance education programs and online courses.

South Carolina State University
Distance Education

Overview of Distance Education	Summer 2002 Course Schedule	Letter from the Director
Web-Based Instruction		Distance Education Student Handbook
Southern Regional Education Campus (SREC)		Undergraduate Application (WORD 97)
Graduate Recertification Application		Graduate Application (WORD 97)
Miller F. Whittaker Library		Financial Aid Information
What's New	SCSU Home Page	Faculty/Staff Directory

Appendix D. Best practice examples of HBCU web sites that provide information regarding strategic planning for information technology.

TSU Strategic Plan 2000-2005

For the 2000-2001 year, the University will initiate, or augment, a number of goals designed to increase its services and efficiency. One primary emphasis will be responding completely to recommendations and suggestions made as a result of the reaffirmation of accreditation visit conducted April 2000.

1. **Tennessee State University will focus on achieving greater visibility as a major provider of educational services in its Middle Tennessee service area.**
   (TBR Initiatives: Articulation, Workforce Development, Access)

    1. **Employ a more structured approach to all phases of enrollment management with a particular emphasis on attracting and retaining undergraduate minority students.**
       *Benchmark***: Establish an Office of Enrollment Management by fall, 2002.**

    2. **Increase the University's utilization of mediated instruction, including participation in the TBR plan for expanded distance education.**
       Benchmark: **Increase the number of courses offered through or supported by mediated instruction by a minimum of two courses per year for each year of the cycle.**
    3. **Continue to showcase the University's diverse and multi cultural environment through academic offerings, outreach and service programs, and cultural activities.**
       *Benchmark***: University publications will reflect the University's diverse and multi-cultural environment.**
       *Benchmark***: At least one major student activity will emphasize the University's diverse and multi-cultural environment.**

    4. **Expand and enhance the University's land grant mission through increased extension and research services directed to urban and rural populations, with a focus on the changing nature of family and State needs.**
       *Benchmark***: Increase the number of counties served by the extension program by at least one (1) additional county each year of the cycle.**

    5. **Update and expand articulation agreements.**
       *Benchmark***: Have in place articulation agreements with all TBR community colleges by fall 2001.**