Performance of HBCUs on the CPA examination for the year 2010

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ABSTRACT

There are over one-hundred Historically Black Colleges and Universities (HBCUs) in the United States. The majority of these HBCUs are located in the southeast section of the United States. HBCUs are a major supplier of CPAs to the profession. Therefore, the performance of candidates from HBCUs should be of interest to various constituents including educators, employers, parents, students and other stakeholders. The purpose of this paper is to provide statistical performance of HBCUs on the CPA examination for the year 2010.

Keywords: HBCUs, CPA exam, passing percentage, ABC concept, overall ranking



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INTRODUCTION

There are over one-hundred Historically Black Colleges and Universities (HBCUs) in the United States. The vast majority of these institutions are located in Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, and Washington, D.C. Blacks represent around one percent of all Certified Public Accountants (CPAs). HBCUs are a major supplier of CPAs to the profession. Therefore, the performance of candidates from HBCUs should be of interest to various constituents including educators, employers, parents, students and other stakeholders.

The purpose of this article is to provide a statistical ranking of the performance of the top ten HBCUs on the CPA exam for the year 2010, the latest years available. Since, 1985 the National Association of State Boards of Accountancy (NASBA) has published statistical data on the performance of candidates by colleges and universities on the CPA exam. Starting 2010, NASBA revised how its statistical data will be presented. Previously, in order for an institution to be cited by name in the NASBA statistics, a minimum of five candidates must have sat for the CPA exam. Starting with the 2010 statistics, a minimum of forty (40) testing events must have sat for the CPA exam. A testing event refers to an attempt by a candidate to take a section of the CPA exam. The CPA exam consists of the following sections: Auditing and Attestation (AUD), Business Environment and Concepts (BEC), Financial Accounting and Reporting (FAR), and Regulation (REG). The source of all data presented is the NASBA's Candidate Performance on the Uniform CPA Examination: Reports and Commentary on the 2010 CPA Examination, 2011 Edition.

LITERATURE REVIEW

There has been limited research on the performance of candidates from HBCUs. In a 1991 article, Thompson cited specific HBCUs on their performance for the year 1990. In 1995, Thompson and Sykes published a follow-up article on the performance of HBCUs on the CPA exam for the period 1986 to 1993, again citing specific HBCUs. The results reflected when the CPA exam was administered in a paper and pencil format.

Beginning April 2004, the CPA exam changed to a computerized format. It is now administered continuously each quarter of the year. Many data collection issues had to be resolved to get reliable data on the performance of HBCUs on the CPA exam. Thus in 2011, Thompson and Marshall published an article on the performance of HBCUs for the years 2008 and 2009. For the year 2008, the top ten HBCUs were Florida A&M, Alabama A&M, Clark-Atlanta, Howard, Hampton, Tennessee State, North Carolina A&T, Bowie State, Jackson State and Southern-Baton Rouge. For the year 2009, the top ten HBCUs were Howard, Tennessee State, Florida A&M and Clark-Atlanta, Jackson State, Hampton, North Carolina A&T, Southern-Baton Rouge, Langston, and CUNY Medger Evers. However, the results only reflected the ten HBCUs with the largest number of candidates sitting for the CPA exam. Starting 2010, NASBA revised how its statistical data will be presented. This served as the foundation for this article.

THE CPA EXAM

Historical Overview

In the late 19th century, America society transformed from being primarily rural and agricultural to urban and industrial. This transformation led to two professional organizations, New York Institute of Accountants and the American Association of Public Accountants (now known as the American Institute of Certified Public Accountants- -AICPA), competing to create a framework for professional governance. In 1896, New York enacted legislation titled An Act to Regulate the Profession of Public Accountants, which recognized the licensing of certified public accountants, via a uniform examination.

Over a two-day period, the first CPA exam was administered by the Regents of the University of the State of New York on December 15 and 16, 1896. There were only three people that passed this first CPA exam. This Act also included a grandfathering clause that gave experienced practitioners one year to become CPAs without taking the examination. Under this provision, 108 CPA certificates were granted to these individuals with the numbering of the certificates based on the alphabetical order of the experienced practitioner last name. Therefore, Frank Broaker became the first CPA in the United States. Other notable firsts in the include Christine Ross who became the first woman to pass the CPA exam in 1898, and John W. Cromwell, Jr. who became the first Black to pass the CPA exam in 1921.

Over the years, there have been many changes and improvements implemented to the format of the CPA exam. However, the exam has remained extremely challenging based on its content. Initially, the CPA exam was nineteen and half hours long over two and half days. In 1994, the CPA exam was shortened to fourteen hours for all four parts over two days. Starting 2004, the CPA exam is administered in a computerized format and exam takers have an eighteen month rolling window to pass all four parts of the CPA exam. In addition, exam takers need to have a greater knowledge of economics, finance, not-for-profit accounting, and information technology topics. One thing that has remained constant with the CPA exam over the years is that an exam taker must have a score of seventy-five (75) on each part in order to pass the CPA exam.

In conclusion, there have been some significant changes to the format of the CPA exam over time, but this rigorous exam remains an important test to identify those individuals who processes the basic core competencies to be called a Certified Public Accountant (CPA).

QUANTITY VERSUS QUALITY

Testing Events

NASBA in 2010 changed its methodology for reporting its data on the performance of candidates on the CPA exam. Previously, an institution must have a minimum of five (5) candidates sitting for a section of the CPA exam to be cited by name. This applied to both "first-time" candidates and "repeat" candidates. First-time candidate is determined at the section level. If a candidate takes a section for the first time, that candidate is considered a first-time candidate for that section only. All subsequent taking of that section, that candidate would be considered a repeat candidate. Thus with the computerization of the examination, a candidate might be a first-time candidate for one or more sections and a repeat candidate for other sections.

This was replaced with a minimum of forty (40) testing events to be cited by name in the NASBA statistics. A testing event refers to an attempt by a candidate to take a section of the CPA exam. Thus, the starting point to analyze the performance of HBCUs on the 2010 CPA exam was to identify the HBCUs that met the minimum of forty (40) testing events to be cited by name in the NASBA statistics. The top ten "testing events" HBCUs are:

Performance of HBCUs

1Howard	270	6Tennessee State	85
2 Jackson State	158	7Clark-Atlanta	80
3Florida A&M	155	8Texas Southern	68
4Hampton	142	9Alabama A&M	59
5North Carolina A&T	130	9North Carolina Central	59

Howard was the clear leader with 270 testing events, followed by Jackson State and Florida A&M with 158 and 155 respectively. Only seventeen (17) HBCUs met the minimum of forty (40) testing events to be cited by name. However, the top ten testing events universities constituted 78.6% of the total HBCUs cited.

Unique Candidates

To become a CPA, a candidate must first sit for the CPA exam. The starting point was to identify the top ten HBCUs with the largest number of candidates sitting for the CPA exam. The top ten "unique candidate" HBCUs are:

1Howard	108	6Clark-Atlanta	38
2Florida A&M	62	7Tennessee State	37
3 Jackson State	55	8Texas Southern	30
4Hampton	49	9North Carolina Central	22
5North Carolina A&T	48	10Southern-Baton Rouge	21

Again, Howard was the clear leader with 108 unique candidates, followed by Florida A&M and Jackson State with 62 and 55 respectively. Nine of the universities listed in the "total events" category were also listed in the "unique candidates" category in their relative rank order. The only change was the inclusion of Southern-Baton Rouge to replace Alabama A&M in the tenth ranking. These top ten unique candidate universities constituted 80% of the total of all HBCUs cited.

Total Events Pass Rate

The above results of "total events" and "unique candidates" are consistent at 78.6% and 80% respectively. However, taking a testing event is not the same as passing a testing event. Again, a testing event refers to an attempt by a candidate to take a section of the CPA exam. A unique candidate is an individual sitting for the CPA exam. This is the dichotomy between quantity versus quality. The top ten "total events pass rate" HBCUs are:

1North Carolina A&T	38.5%	6Clark-Atlanta	30.0%
2North Carolina Central	37.3%	6Howard	30.0%
3Morehouse	35.7%	8Prairie View	27.3%
4Southern-Baton Rouge	34.5%	9Jackson State	27.2%
5Florida A&M	31.0%	10-Delaware State	25.5%

North Carolina A&T and North Carolina Central were ranked five and nine in the two previously cited categories respectively. However, in this ranking, these two universities are one and two respectively. Morehouse was not listed in the previous categories, but is number third in pass rates. Morehouse has a smaller quantity of students taking the CPA exam, but higher quality of students passing the CPA exam. The other universities cited in the two previous categories and this category are Southern-Baton Rouge, Florida A&M, Clark-Atlanta, Howard and Jackson State. Prairie View and Delaware State complete the top ten HBCUs.

These results are not a definitive indicator of the overall quality of the accounting program at any HBCU. A quality program produces graduates that are technically knowledgeable, but also processes analytical skills, communication skills and interpersonal skills to be successful in an increasingly complex business world. Passing the CPA exam is just one indicator of quality.

Average Score

Another indicator of the quality of the candidates from HBCUs is the average score on the CPA exam for events taken. The top ten "average score" HBCUs are:

1North Carolina A&T	70.5%	6Florida A&M	65.1%
2Morehouse	68.9%	7Hampton	64.6%
3Southern-Baton Rouge	66.7%	8North Carolina Central	64.4%
4Morgan State	65.7%	9Norfolk State	64.3%
5 Jackson State	65.2%	10-Howard	64.2%

Again, North Carolina A&T was ranked number one, followed by Morehouse and Southern-Baton Rouge. The other universities cited in the "total event pass rate" are Jackson

State, Florida A&M, North Carolina Central and Howard. Morgan State, Hampton and Norfolk State complete the top ten HBCUs.

To interpret these results, please note that the number of unique candidates taking a testing event varied upon HBCUs. Computerization of the examination allows a candidate to take one or more testing events at a time. This variation was consistent across all HBCUs, thus the rankings were not weighted to reflect these differences.

The above results clearly reflect that HBCUs have accounting programs that prepares students to be successful on the CPA exam. However, of greater concern is the issue of quantity. To remain relevance to its various stakeholders, HBCUs must increase the number of candidates sitting for the CPA exam.

There are many programs devoted to increasing the number of accounting majors. For example, scholarships are offered by the American Institute of CPAs, various state societies, Becker CPA Review, and the National Association of Black Accountants. All of these efforts and others must be supported financially and current CPA must mentor the next generation of CPAs.

THEORY VERSUS PRACTICE--AUD-BEC-FAR-REG

Auditing and Attestation- -AUD

The Auditing and Attestation --AUD section of the CPA exam tests knowledge and understanding of professional standards related to auditing, attestation and assurance engagements, and accounting and review services. This section also tests candidate knowledge of professional responsibilities of CPAs including ethics and independence. In addition, candidates are required to demonstrate the skills required to apply that knowledge in performing auditing and attestation tasks as CPAs. The top ten "AUD" HBCUs are:

1Delaware State	80.0%	6Morehouse	Performance of HBCUs 38.5%
2North Carolina A&T	62.1%	7Howard	37.7%
3Alabama A&M	45.5%	8 Morgan State	37.5%
4Norfolk State	41.7%	9Prairie View	36.4%
5Hampton	39.4%	10-North Carolina C	Central 33.3%
		10-Tennessee State	33.3%

The national passing percentage for the Auditing and Attestation--AUD section of the CPA exam was 47.8%. Delaware State and North Carolina A&T performances were above the national passing percentage. The remaining HBCUs pass rate varied from 45.5% for Alabama A&M to 33.3% for Tennessee State. This is a clear indicator that HBCUs candidates are passing this section of the CPA exam on a consistent basis in relationship with their peer institutions. However, there is significant room for improvement and HBCUs must improve their pass rates.

Business Environment and Concepts--BEC

The Business Environment and Concepts--BEC section of the CPA exam tests knowledge and skills necessary demonstrate an understanding of corporate governance; economic concepts essential to understanding the global business environment and its impact on an entity's business strategy and financial risk management; financial management processes; information systems and communications; strategic planning; and operations management. In addition, candidates are required to apply that knowledge in performing audit, attest, financial reporting, tax preparation, and other professional responsibilities as CPAs. The top ten "BEC" HBCUs are:

1Morehouse	50.0%	6 Jackson State	26.2%
2Florida A&M	40.0%	7Howard	26.0%
3North Carolina Central	36.8%	8North Carolina A&T	23.3%
4Clark-Atlanta	31.8%	9Hampton	21.7%
5Southern-Baton Rouge	28.6%	10-Delaware State	20.0%
		10-Prairie View	20.0%

The national passing percentage for the Business Environment and Concepts--BEC section of the CPA exam was 47.3%. Morehouse was the only HBCU above the national passing percentage. The remaining HBCUs pass rate varied from 40.0% for Florida A&M to 20.0% for Delaware State and Prairie View. This twenty (20) point differential is a point of concern that HBCUs must address in its preparation of candidates for the CPA exam. HBCUs pass rates must increase.

Financial Accounting and Reporting--FAR

The Financial Accounting and Reporting--FAR section of the CPA exam test knowledge and understanding of the financial reporting framework used by business enterprises, not-for-profit organizations, and governmental entities. In addition, candidates are required to demonstrate the skills required to apply that knowledge in performing financial reporting and other tasks as CPAs. The top ten "FAR" HBCUs are:

Performance of HBCUs

1North Carolina A&T	41.9%	6Florida A&M	26.2%
2North Carolina Central	33.3%	7Prairie View	25.0%
3Southern-Baton Rouge	31.3%	8Clark-Atlanta	23.5%
4Howard	30.2%	9Tennessee State	22.6%
5Texas Southern	30.0%	10-Alabama A&M	20.0%

The national passing percentage for the Financial Accounting and Reporting--FAR section of the CPA exam was 47.8%. No HBCUs were above the national passing percentage.

The top HBCU was North Carolina A&T at 41.9% and the lowest HBCU was Alabama A&M at 20.0%. The differential is twenty-two (22) points that should be of great concern to HBCUs. Traditionally, the "FAR" section of the CPA exam is deemed to be the most difficult, thus the results are understandable but unacceptable. HBCUs must increase their academic rigor in this topical area to increase their pass rates.

Regulation--REG

The Regulation--REG section of the CPA exam tests knowledge and understanding of ethics, professional and legal responsibilities, business law, and federal taxation. In addition, candidates are required to demonstrate the skills required to apply that knowledge in performing their responsibilities as CPAs. The top ten "REG" HBCUs are:

Performance of HBCUs

1Southern-Baton Rou	uge 54.5%	6Clark-Atlanta	33.3%
2North Carolina Cen	tral 43.8%	6North Carolina A&T	33.3%
3Jackson State	38.1%	6Tennessee State	33.3%
4Morehouse	36.4%	9Prairie View	30.0%
5Morgan State	36.4%	10-Howard	29.3%

The national passing percentage for the Regulation--REG section of the CPA exam was 50.7%. Southern-Baton Rouge was the only HBCU above the national passing percentage. The remaining HBCUs pass rate varied from 43.8% for North Carolina Central to 29.3% for Howard. The differential is fourteen and half (14.5). Traditionally, the "REG" section of the CPA exam is deemed to be least difficult to pass, thus the results are unacceptable. HBCUs must increase their academic rigor in this topical area to increase their pass rates.

The ABC Concept

To improve the performance of all HBCUs on the CPA exam, the author recommends the adoption of the ABC concept of teaching accounting courses. The ABC concept focuses on teaching accounting theory and practice. It is imperative that students are able to learn new concepts using a consistent framework. This allows students to comprehend new material without getting bogged down into the weeds of details rules and procedures. The meaning of this acronym is:

"A" is for Allocation;

"B" is for Book valuation; and

"C" is for Classification.

The "A" (allocation) concept is used to explain the relationship between the balance sheet and the income statement. Students are first taught that all items on the balance sheet will be allocated to the income statement at some future date. For example, inventory and cost of goods sold are similar and building and depreciation are similar. These are costs that must be allocated

from the balance sheet to the income statement under the accrual basis of accounting. Thus FIFO and LIFO are just the mechanics of completing this allocation process. The same can be said of straight-line and double-declining balance methods of depreciation. The goal is to teach students the allocation concept and not the mechanics. Afterward, students can apply "allocation" concept to the other balance sheet and income statement accounts without getting bogged down into the weeds of details rules and procedures. Thus students are able to learn more theoretical concepts themselves and use technology to solve practice problems more effectively.

The "B" (book valuation) concept is used to explain that the valuation bases used to measure transactions is either historical cost or fair value. Accounting textbooks use terms such as historical cost, amortized cost, present value, discounted cash flows, and fair value as separate valuation basis. Students are often confused and mislead into thinking that these are different valuation basis and not just a variation of historical cost or fair value. Once students understand the book valuation concept, students can easily applied it to other measurements without further explanation, thus students are able to learn more theoretical concepts themselves without getting bogged down into the weeds of practice problems.

The "C" (classification) concept is used to explain that accounting information would be meaningless to creditors, investor and others without proper classification. Proper classifications enhance the decision-making process for users. Students are taught to initial classify accounts into the following categories: asset, liability, equity, revenue (gain), and expense (loss). Thus, when a new account is introduce in the textbook, students are taught to immediately classify that account. For example, if an account is classified as an asset or liability, students know immediately that the account would be on the balance sheet and subject to the allocation concept. In addition, students are further instructed to sub-classify these assets or liabilities. For example, assets can be further divided into the following classifications: current, investments, operational, intangibles and others. Liabilities can be sub-classified into current and long-term liabilities. A similar classification is taught for revenue and expense accounts using the multiple-step format of classification. Thus again, when students are able to understand the classification concept, students are able to learn more conceptual material themselves and use technology to solve practice problems more effectively.

The acronym continues with the "Big D" for disclosure. Accounting information should not mislead creditors or investors in their decision making process. To insure transparency to all parties, students are taught that all significant allocation, book valuation, and classification issues must be disclosed.

In short, to pass the CPA exam, a candidate must have a solid foundation in acceptable accounting theory. In addition, a candidate must be able to apply that theory to accounting practices using technology effectively. With limited resources and other constraints, HBCUs should adopt the ABC concept of teaching accounting courses to improve their pass rate on the CPA exam.

OVERALL RANKING

The HBCUs ranking listed in the above four sections (AUD--BEC--FAR--REG) of the CPA exam constitute 97.6% of all unique candidates taking the CPA exam and 97.2% of the total events taken of all HBCUs cited in the NASBA statistics. Thus these HBCUs constitute the majority of all HBCUs sitting for the CPA exam and an overall indicator of all HBCUs.

The determination of the overall ranking of HBCUs on the CPA exam presents challenges. The size of institutions varies, the number of accounting majors varies, the number of students taking the exam also varies, and their financial resources. The above differences do not take into consideration the quantity and quality of the faculty. Thus the author assumes that these differences were randomly distributed upon the HBCUs.

In determining the overall ranking, the author sums the individual ranking per each section (AUD--BEC--FAR--REG) of the CPA exam. The results were listed from low to high, with low representing the best overall performance. Thus for the year 2010 the overall ranking of HBCUs on the CPA exam are:

Top Tier

Performance of HBCUs

1North Carolina Central	17.5
2North Carolina A&T	18.0

Upper Middle Tier

3Southern-Baton Rouge 4Howard 5Morehouse Lower Middle Tier	25.0 OUTNAI 27.5 28.0 E
6Florida A&M	33.0
7Clark-Atlanta	34.0
8Delaware State	35.5
8Prairie View	35.5
10-Jackson State	37.0
11-Morgan State	37.5

38.5

Lower Tier

12-Tennessee State

41.0
44.5
46.5
48.0

For the year 2010, North Carolina Central was ranked number one and followed very closely by North Carolina A&T in the top tier. In 2010, these two HBCUs separated themselves from the others. The upper middle tier of HBCUs consists of Southern-Baton Rouge, Howard, and Morehouse. Collectively, these five HBCUs must be commended for setting an acceptable performance standard on the CPA exam. The lower middle tier and lower tier HBCUs must improve their performances to remain viable.

CONCLUSION

The CPA certificate offers unlimited opportunity for success in an increasingly complex business world. There have been some significant changes to the format of the CPA exam over time, but this rigorous exam remains an important test to identify those individuals who processes the basic core competencies to be called a Certified Public Accountant (CPA). HBCUs are a major supplier of CPAs to the profession now and in the future. Statistical ranking of performance were presented for the year 2010. Statistics were presented in the following categories: testing events, unique candidates, total events pass rate, and average score. In addition, statistics were presented on the pass rate on the various sections (AUD--BEC--FAR--REG) of the CPA exam.

In summary, for the year 2010, North Carolina Central was ranked number one and followed very closely by North Carolina A&T for their performance on the CPA exam. Other HBCUs performed well on the CPA exam. However, HBCUs need to increase the number of candidates sitting for the CPA exam and increase their passing rate to remain viable. The author recommends that HBCUs adopt the ABC concept for teaching accounting theory and practice. In short, HBCUs must improve their performance on the CPA exam to remain as a major supplier of CPAs to the profession.

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