



**American Institute of Certified Public Accountants  
Revisions to CPA Examination  
In-Depth Interview Research**

**(Accounting Faculty from Historically Black Colleges and Universities  
and Other Predominantly Minority Institutions)**

**June 2002**

# Table of Contents

Executive Summary	1
Results	3
Recommendations	11
Appendix A Research Methodology	13
Appendix B Selected Comments	15
Appendix C Study Participation Invitation letter	21
Appendix D Discussion Guide	23
Appendix E Participating Schools	25

# **REVISIONS TO CPA EXAMINATION**

## ***In-Depth Interview Research***

### **EXECUTIVE SUMMARY**

#### **Background**

Diversified Communications Group (DCG), an independent diversity consulting research firm, conducted in-depth interviews among accounting faculty and administrators at Historically Black Colleges and Universities (HBCU), other predominantly minority institutions and smaller schools to gain an understanding about how they perceive the proposed revisions to the CPA examination and how their curriculums, students and technology requirements might be impacted.

#### **General Knowledge about the CPA Examination Changes**

Many respondents knew that the CPA examination was changing through information garnered as a result of participation in professional organizations; however, many did not know exactly how the new examination would be structured and what changes were now needed to prepare their students to successfully take this examination.

#### **Knowledge about the Structure and Content Changes**

The respondents who were aware of the structure and content changes felt positive about them, especially those that deal with ethics and integrity. They welcomed having the students use their critical thinking skills. Some respondents felt that some students would perceive the examination to be too difficult thus reducing the number of students who will take it. Also, some respondents questioned whether or not they could make the curriculum changes needed quickly so as to support the students taking this examination.

Most respondents agreed that the Business Environment and Concepts section is valuable especially now as ethics plays such a major role in the accounting profession. The report also looked at the need to incorporate more business communications, case analysis and written summaries, and research assessment skills into the curriculum. Although schools have started doing this, the respondents reported that more needed to be done to enhance these skill sets. When asked how the students will be impacted by the incorporation of case-based simulations in the CPA examination, there was no clear consensus from the respondents; however, they agreed that there is a need to create more exams that use case-based simulations.

## **Students' Current use of Technology**

There was consensus that the students know how to use the computer to write papers and conduct research; however, the idea of taking computer-based exams is new for many of the students. In fact, most respondents rated students low (between 1 and 2) on their ability to proficiently take computerized tests. The educators feel that some students have the perception that preparing for this examination will be more difficult than the previous examination. Part of that perception comes from a lack of access to accurate information about what's necessary to prepare for this examination and how much support they can expect from the schools. The students will need knowledge about how to use the technology in test taking situations, access to the technology, and computer software research materials needed to prepare for this examination.

## **Other**

The extent to which these changes will affect the accounting and business curriculum varies; however, the changes most frequently stated involve updating textbooks and reference material and encouraging technology-based research. Currently, larger schools have the technology foundation needed to support the changes to the examination while the smaller schools do not. Most schools, both large and small, require more funds to develop their technology facilities and gain access to the accounting reference materials.

# Results

## Introduction

The AICPA engaged Diversified Communications Group (DCG), an independent diversity consulting research firm, to conduct in-depth interviews among accounting faculty at Historically Black Colleges and Universities (HBCUs), other predominantly minority institutions and smaller colleges and universities. The purpose of the research was to gain an understanding about how accounting faculty and administrators at these institutions perceive the proposed revisions to the CPA examination and how their curriculums, students and technology requirements might be impacted.

For this study, DCG contacted public and private HBCUs and other smaller institutions to provide the insights needed. These schools were targeted in order to understand the potential or perceived challenges of minority and smaller institutions regarding the changes in the structure, content and delivery of the CPA examination.

What follows is an analysis of each interview question. The analysis is based on the participant's perceptions. These perceptions may not always reflect reality but are critical to the process of understanding perceived barriers to the changes to the CPA examination.

## General Knowledge about the CPA Examination Changes

### **1. How familiar were you with the proposed revisions to the Uniform CPA Examination before you were contacted about this research project?**

All but one 97% of the respondents, through various forms of communication, had knowledge that the CPA examination was going to be changed; however, they were less familiar with the specific details of the content changes to the examination. A minority of respondents were very familiar with the changes and reported that they had to aggressively search for information on the specific changes. Finally, one respondent did not know that changes were going to be made and referred DCG to another colleague in his department that he believed was more knowledgeable.

- Respondents knew about the technology changes in the examination but did not know the details of what the content changes entailed
- Most of the respondents indicated that they heard about the proposed changes from other professors, at conferences, or AICPA communications (e.g., *AICPA Newsletter*)
- Most respondents were not generally knowledgeable of the timing for the examination changes
- An interviewee, which represented a smaller institution, had not heard of the changes

## **Knowledge about the Structure and Content Changes**

### **2. What are your thoughts about the proposed structure and content changes?**

Although the majority of the respondents (94%) did not have detailed knowledge of the CPA examination changes, they were, in general, positive about them. Most respondents reported that based on what they knew, the examination would more closely reflect the knowledge and skills that are required for accounting professionals. Several respondents also mentioned that the changes would make it essential for faculty to teach students to think critically and utilize these critical thinking skills across different accounting classes. Some respondents felt that many students will be discouraged from taking the examination because the “bar” has been raised significantly.

For the minority of respondents that had more in-depth knowledge about the changes, there was a reported concern that more time will be needed to prepare faculty and students for the new examination.

- Respondents reported that they were pleased with the structural and content changes, which allow students to think on a higher level, which is a better use of their knowledge and skills.
- The way they have to use research and communication skills will prepare students for the challenges that they will face in their accounting careers.
- The professors will introduce whole system thinking into their classes instead of just thinking about their discipline.
- The perceived complexity of examination changes will discourage some students from taking the examination.
- The change in the examination is happening too soon and won't provide adequate time for schools to make curriculum changes to support students taking the examination.

### **3. How will the changes affect your accounting or business curriculum? How will these changes, if any, impact your department? Business school? Overall institution?**

Most of the respondents' answers were specific to how the changes will impact the accounting curriculum and these comments were generalized to the business curriculum and overall institution. Forty percent of the institutions reported that they have started to make changes in the curriculum such as integrating cases into the course work, requiring English Composition classes and encouraging technology-based research. However, more changes to the curriculum will be needed to fully address changes in the examination.

Several interviewees identified that faculty will need additional skills, particularly in technology, to make the curriculum changes. New textbooks will need to be identified that require use of additional reference materials and emphasize case-based learning.

- Some institutions have already begun the process of making curriculum changes.
- The changes will require updating textbooks and reference materials.
- Faculty will need to identify and develop new skills in order to implement the changes to the curriculum.

- The use of accounting reference materials will need to be incorporated into the course work.

#### **4. Will additional resources be needed to make the modifications to address the changes in the CPA examination?**

All of the larger schools reported that they have the technology foundation needed to support the changes to the examination. Seventy-five percent of the smaller schools reported that they needed more technology resources. Many of the schools have computer-based labs and classrooms. The most frequently cited concern was access to the accounting reference materials and the cost associated with keeping this software up to date for both small and large schools. Again, the need for more technologically skilled faculty was identified in small and large schools.

- Many schools have the necessary technology but do not have access to the accounting reference materials due to costs of materials.
- More financial and faculty skill development resources will be needed.
- Larger schools have more resources, and will not be impacted as much as smaller schools.

#### **5. In particular, what are your thoughts about the new Business Environment and Concepts section of the CPA examination and how will you address it in your curriculum?**

Eighty percent of respondents view the Business Environment and Concepts section as one that is covered in several general business and economic courses already taught and that it will require students to integrate their learning into all of their coursework. In addition, several respondents saw the need to incorporate more business ethics into the coursework to address this section.

- This section is needed and currently is taught by most of the institutions.
- This section will force the student outside the accounting box to incorporate other business disciplines into their thought process.
- In order to prepare students for this section they will need more exposure to ethics.

#### **6. How will the incorporation of more skills assessments (i.e., communications and research) into the examination impact the way you teach?**

Many of respondents indicated that they were aware that accounting curriculum needed to support the development and enhancement of good communication skills. Thirty-six percent of the institutions have started to address this issue by beginning to require writing and presentation skills courses and grading students on written assignments based on the content and writing. Many students need more direction on how to write an organized set of recommendations. There is a need to continue to develop course work to support development of communication skills in most accounting curriculum.

Thirty percent of schools have started the process of integrating research requirements into the accounting course work; however, several are just starting this process and need more support from the textbook material to enhance the integration.

- Students need to develop their written communication and verbal presentation skills
- More courses are needed to teach business communications (writing and presenting material clearly).
- Many of schools have incorporated research and communications skills considerations into their course work but indicated a need to do more
- More case analysis with written summaries is needed

#### **7. How do you think your students will be impacted by the incorporation of case-based simulations into the CPA examination?**

There was no clear consensus from the respondents on this question. The responses tended to differ based on the size of the school. Generally, the larger schools have begun the process of integrating cases into their course work although they have very limited use of case-based simulations. All respondents agreed that there is a need to use more case-based simulations into the course work. This limited use of case-based simulations is reported to potentially have a negative impact on students specifically when they take the CPA examination.

The 24% of respondents that reported using cases indicated that students generally work on the cases out of the classroom with a team of students. However, the respondents recognize that the process for the new examination will require the students to work independently within a short timeframe and that this new approach will need to be incorporated into how cases are used in future coursework.

- Many schools have started to incorporate cases into their course work.
- Case-based learning is used on a limited bases
- Cases are analyzed by a team of students and done outside the classroom.
- Some smaller schools do not use cases.

#### **8. How will the incorporation of case-based simulations into the CPA examination impact the way you teach?**

Respondents cited specific changes that will need to be made regarding the way classes are taught. These changes include creating more in-classroom case-based simulation exams. In addition, the cases should use the same types of software used on the new CPA examination and require students to use technology-based reference materials.

- Need to create exams using case-based simulations
- Make the case-based simulations more like the CPA examination using Access/Excel
- Need to include more reference materials with work in and out of the classroom

## **Current Use of Technology in the Student Body**

### **9 On a scale of one to five please rate how comfortable/proficient your students will be with computer-based testing (One= low comfort/proficiency, Five=high comfort/proficiency)? Please explain your rating.**

All respondents reported that in general their students were highly proficient and comfortable using technology; the average rating for comfort and proficiency was between 4 and 5. However, when asked to report how comfortable and proficient students would be when taking a computerized test, the rating was much lower. Ninety-four percent of respondents reported that currently they are not using computerized tests in their courses. Generally respondents rated students to be between 1 and 2 on computerized test taking comfort and proficiency.

- Most respondents rated students very high (4-5) on their use of technology.
- Students were rated low (1-2) on their proficiency in taking tests using the computers.

### **10. How comfortable are your students using the various computer-based accounting reference materials (i.e., FASB and income tax regulations)?**

Respondents reported that the level of comfort with computer-based reference materials varies. The level of comfort was directly related to their access to these computer-based accounting reference materials and how frequently students were required to use these materials in their course work. Seventy-eight percent of the respondents, representing smaller schools, reported that they were not comfortable and do not currently integrate the use of computer-based reference materials into the course work. Many respondents cited that in order to effectively integrate the use of these reference materials more of the textbooks will need to require students to source these materials.

- Responses ranged from very comfortable to not comfortable at all.
- Some schools are very comfortable with materials because their courses require them to go online to access reference materials and these materials are easily accessible.
- Schools that reported students would not be comfortable with computer-based reference material do not require the materials in their coursework
- The reason for the variation in the use of reference materials is related to cost of reference material and textbooks used in various courses.

### **11. Are these computer-based reference materials currently used by your students?**

Twenty-one percent of the respondents reported student use of computer-based reference materials. Respondents stated that in the smaller institutions, students are not generally required to use the reference materials, while in the larger schools the materials are used and students are more familiar with how to access the information needed for their assignments.

- Computer based reference materials are used more frequently by larger schools than smaller schools

**12. How do students at your institution gain access to these reference materials (either electronic or paper-based), if at all?**

Most respondents reported students' access some of the accounting reference materials through paper or electronically-based methods. Many use the electronically based tax reference materials regularly, but have limited exposure to FASB and AICPA Standards. In larger schools that reported availability of electronically- based materials, electronic access was the most frequent method of accessing materials.

Nine percent of respondents reported that the students do not use either form of reference materials because their course work does not require referencing these materials.

- Students have limited exposure to FASB materials
- The use of paper-based reference materials is indicated for schools that have limited access to electronic materials
- Students are required to utilize the electronic-based materials for their tax and financial based accounting courses.

**13. Will the revised CPA Examination present specific technology issues that you perceive to be especially challenging for your department and institution? Why?**

The most frequently cited concern about the technology changes to the CPA examination was that many of the professors would need to develop new skills in technology. Comments indicated that developing a new set of skills will be a challenging endeavor because many of the faculty have taught using the same methodologies for a long time and are resistant to developing new skill sets. In addition, 81% of respondents from smaller schools reported that they would need more financial resources to invest in a more elaborate technology infrastructure. Larger schools have begun to make infrastructure as well as software investments.

- Smaller schools need more funding to invest in infrastructure.
- Larger schools have invested in T1 high-speed lines and new software.
- Professors will need to be more proficient with the use of technology.

**14. Will the proposed changes require an additional investment in technology at your institution? (add comments)**

Many of the schools stated that the need to invest additional resources in technology is ongoing and independent of the changes to the CPA examination. However, in general the larger schools interviewed reported needing less additional resources than the smaller schools.

- Larger schools will not require additional investment in infrastructure technology, specifically for the examination.
- Smaller schools will generally need an additional investment in technology resources.

## **Recommendations for how to best implement changes**

### **15. Are there specific issues that are unique to your institution and student body that would make it difficult to assure that your students are prepared for the revised CPA examination?**

Each interviewee cited unique issues for their student body and institution that are beyond the scope of this study. However, DCG identified several common themes in the respondents' comments that form the basis for recommendations. The themes include:

#### **Funding**

All schools commented on their need for additional dollars to purchase reference materials. Smaller schools generally needed more financial assistance in building a technology infrastructure and purchasing software.

#### **Student Examination Perceptions**

Fewer students are taking the examination because of additional requirements and the perception that the examination is more difficult.

#### **Faculty**

Faculty will need to develop a new skill set to accommodate the exam changes.

### **16. Do you have any suggestions about how to overcome any potential obstacles you identified?**

Ninety-one percent of the respondents recommended that additional financial resources would be needed to purchase materials for the new CPA examination. Respondents suggested that funding could be generated from AICPA and various corporate sponsors.

- Corporate sponsorship was identified as a strategy for addressing resource considerations.
- The AICPA should make computer-based accounting reference materials available to institutions with limited resources.

### **17. What media would you prefer for tutorials or practice materials developed for the revised examination (i.e., CD-ROM, via Internet, hard copy)?**

Ninety-one percent of the responses indicated that the examination preparation materials would be most effective in CD-ROM. However, respondents also agreed that students would also value having access to Internet and hard copy exam materials. Many of the interviewees also indicated that they would prefer to receive instructor materials in hard copy as well as CD-ROM. The respondents suggested that hard copy would be easier to review.

- CD-ROM is the first choice for convenience.
- Internet and hard copy are second choices.
- Professors want examination preparation materials to be in hard copy and CD-ROM

## **18. Is there anything you would like to comment on that we did not ask about?**

The majority of the comments suggested that AICPA should provide or assist in gaining additional funding to make the transition needed to prepare for the exam. Most respondents wanted more information about the examination changes and ways to prepare their students to be successful when taking this examination.

Comments from the respondents also acknowledged that revising the exam is a major undertaking and that professors will also need help to prepare to teach using new methodology. Other comments indicated that there is a sense of excitement about the possibility of keeping the accounting profession competitive with other professions. It was felt that the public would perceive the accounting profession as one that keeps pace with the times.

- AICPA should assist in providing additional financial resources to make the changes needed to support the new exam
- Make information on exam changes more available to a wider audience of academic stakeholders
  - Professors need help to prepare for the exam changes
  - The changes in the exam will improve the public's perception of the accounting profession's willingness to change

# Recommendations

- 1. Financial assistance is needed to help the smaller schools make the necessary purchases of hardware and software to prepare for the new CPA examination.**

Many of the smaller institutions with limited resources indicated that additional financial resources would be needed. DCG recommends the AICPA consider ways to assist smaller schools with purchasing computers and financial/accounting software.

- 2. Communications about the changes to the CPA examination need a more expansive rollout.**

Information sessions and demonstrations of the new examination should be held to inform schools about the changes in the CPA examination. For example, this could be accomplished through regional meetings of colleges and universities. This would insure that professors and students within each of the regions have the opportunity to see the new examination and hear first hand the details of the changes.

- 3. Convene a curriculum advisory committee to make recommendations on how to modify accounting curriculums to support the changes in the CPA examination.**

The committee needs to include representation from larger and smaller schools. The recommendations would serve to expedite the planning process that each institution will need to determine the curriculum modifications.

- 4. In order to support the communication rollout of the CPA examination changes for students and faculty, the AICPA web site should be enhanced to make it more accessible and easier to navigate.**

A dedicated user-friendly site for faculty and students with information about the new examination and other critical information is recommended.

- 5. Consider pushing the date for implementing the changes for the CPA examination.**

Most of the faculty interviewed reported that they knew about the examination changes; however, they reported limited knowledge of the specific changes in the examination. More time is needed to widely communicate the specific changes so that faculty and students will have a better understanding of what is needed to prepare for the changes.

**6. Student CPA examination preparation materials need to include CD-ROMs. Preparation materials need to be developed for faculty in paper form as well as on CD-ROMs.**

Many faculty reported that although they believe that the best medium for preparation materials for students is CD-ROM, they would prefer instructor materials in both paper and CD-ROM format.

**7. Incorporate case-based simulations into the course work.**

Ensure that case-based simulations are used uniformly so that students have exposure to these regularly in their classrooms. This can be accomplished through the proposed curriculum advisory committee.

# Appendix A

## Research Methodology

### Methods of Research

For this report, DCG conducted over 41 telephone interviews in March and April with accounting faculty from over 33 Historically Black Colleges and Universities (HBCUs) and other predominantly minority institutions and smaller colleges and universities provided by the AICPA.

DCG conducted telephone interviews with 41 accounting faculty and administrators from 33 schools the, participants were business school deans, department chairpersons and tenured professors from the list of schools, which was provided by the AICPA. Each interview was taped and an interview protocol was followed for each of the interviews. The interview guide used to conduct the study is presented in Appendix D

Responses to the interview questions were analyzed to identify response themes for each question. In addition, DCG selected sample comments for each of the response themes. All of the material presented in this report is based on participant perceptions. Their perceptions may or may not accurately reflect reality. Selected quotations are included for each of the interview questions in the results section of this report, and audiotapes of the conversations, were delivered to the AICPA.

### Process for Selecting Participants

- DCG sent an e-mail communication explaining the research objectives, the proposed changes to the CPA examination and a request to participate in the study to professors on the list of contacts from the schools identified by the AICPA.
- Follow-up phone calls were made to each professor to request their participation and make appointments for a telephone interview (approximately 45 minutes).
- The telephone interviews were conducted and taped for each of the participants in the study.
- In some cases, participants preferred to provide a written response rather than a telephone interview. These written responses were followed up with telephone discussions, where necessary.

### Results

The interviews consisted of 18 questions about the proposed changes related to the structure, content and delivery of the CPA examination. The questions asked participants to provide their feedback and perceptions on the following areas:

- General knowledge about the CPA examination changes
- Knowledge about the structure and content changes
- Students current use of technology
- Recommendations for how to best implement changes

# Appendix B

## Selected Comments

### General Knowledge about the CPA Examination Changes

#### 1. How familiar were you with the proposed revisions to the Uniform CPA Examination before you were contacted about this research project?

- *I was reasonably familiar with the revisions because of programs I have attended at AAA and APLG meetings.*
- *Last year I attended a conference held by the AICPA and the Uniform CPA examination was discussed in one of the sessions. I have to say that before I was contacted about this survey, I had only limited knowledge about the examination.*
- *I only have general knowledge of the proposed changes from journal articles and what my associates have shared.*
- *I have not seen the new examination so I don't really know what the specific changes will be to the content. I do know that it will be computerized.*
- *I was aware that the CPA examination was going to be computerized. I was not aware that the sections were going to be changed and that simulations were going to be used.*

### Knowledge about Structure and Content Changes

#### 2. What are your thoughts about the proposed structure and content changes?

- *I approve these changes to a more practice-oriented examination. The new structure and content will be closer to our curriculum than before. I see no impact on what we do, because, frankly, we have been ahead of the examination till now.*
- *In order to prepare our future graduates for the examination we need to start immediately to change the way we teach accounting. I think that the new structure and content will better test the knowledge and skills of the candidates.*
- *It seems that the CPA examination will use more technology than the traditional way the examination was given.*
- *The content tends to be more broad and general rather than just accounting issues and this is more like the real work world.*
- *The changes are good but more students will decide not to take the examination.*
- *It will take about two years to make the curriculum changes that will be needed. I think the examination change date should be pushed back to 2004.*

**3. How will the changes affect your accounting or business curriculum? How will these changes, if any, impact your department? Business school? Overall institution?**

- *Our school and department have curriculum review every two years. In our current curriculum, we have put major emphasis on students' oral and written communication skills along with other skills such as technology, critical thinking, research and team work.*
- *We will need to incorporate more simulations and case studies into the course work and the textbooks we use currently do not reflect the changes to the examination.*
- *Our faculty has taught one way for so long. I am not sure they can make the changes needed to support changes in the curriculum.*
- *We will not need additional resources, because we already employ business integration and simulation exercises in our program.*
- *The CPA examination changes will require changes in the accounting curriculum. Additional assignments will need to be added and some computer-based testing will need to be done. Additional research resources will have to be acquired as well as software for computer-based testing.*

**4. Will additional resources be needed to make the modifications to address the changes in the CPA examination?**

- *Our school has technology resources and a great infrastructure but we don't have access to many of the reference materials. It can be expensive to frequently update.*
- *We have no idea where resources will come from to make the changes that will be needed.*
- *AICPA should make funds available to assist smaller institutions to address resource needs that will result from these changes.*
- *The FASB database or on-line access will have to be purchased. This is a resource that the library will acquire upon our request. This will need to be reasonably priced.*
- *We need a lot more resources, acquisition of new skills and more time in faculty development. Resources will be needed in technology and research.*
- *The revised CPA Examination will not challenge our department or institution technologically. No new investment in technology is needed, only routine maintenance and upgrades.*
- *I believe that additional resources to help faculty development are very important. Faculty first needs to be updated on these changes so that students can benefit.*

**5. In particular, what are your thoughts about the new Business Environment and Concepts section of the CPA examination and how will you address it in your curriculum?**

- *We currently are addressing this in our curriculum; it is critical.*
- *I think the undergraduate education should provide students with a broad and general knowledge about the world and business environment.*
- *The Enron case has highlighted the need for ethics in our profession and we need to be able to bring ethics into the curriculum.*

- *The business environment and concepts section should cover basic business principles. These topics are covered in the core curriculum courses. No additional changes should be required.*
- *We already address the business environment and concepts section of the examination with 15 semester hours of integrated business courses in our business core requirements.*

**6. How will the incorporation of more skills assessments (i.e., communications and research) into the examination impact the way you teach?**

- *We have numerous assignments that require both verbal and written communication skills. The students must write term papers and research tax topics. We may have to add more assignments that require them to research GAAP and GAAS standards.*
- *We are incorporating the communications and research issues throughout our curriculum. We need to continue this effort.*
- *Our students need to know how to write and verbally communicate more effectively. They learn theory but can't present well.*
- *It will require less lecture time and more time in the lab.*
- *Most of our accounting classes feature communications and research skill assignments.*

**7. How do you think your students will be impacted by the incorporation of case-based simulations into the CPA examination?**

- *Case-based simulations help to develop professional skills and hone in on areas that multiple-choice questions cannot. We use cases in our courses and students work in a team to analyze them.*
- *Most of the cases are done in the last year of school and include spreadsheets and formulas.*
- *The case-based simulations on the examination may surprise our students because they do not have much experience with them.*
- *The case-based simulations will impact the students. These types of assignments will need to be added to their course requirements.*
- *We already have students complete cases and conduct research assignments. We may increase the number of cases and/or the type of cases that we use. I don't see how the changes will or could affect the Business School or University.*
- *Faculty will need to add case-based simulations to their classes. We will have to teach the students how to complete these types of cases and that will require additional class time.*
- *Case-based simulations should not adversely impact our students. They're accustomed to these.*

**8. How will the incorporation of case-based simulations into the CPA examination impact the way you teach?**

- *Cases are analyzed by a team of students and done outside the classroom; students need practices taking tests with the case-based simulations.*

- *It will require more time for students to work on the cases and less lecture time. This is a change for many of our faculty.*
- *I will look for supplementary materials that have case-based simulations using the same technology as the examination for my students to use in the courses that I will be teaching.*
- *It will require less lecture time and more time associated with case-based simulations.*

## **Current Use of Technology in the Student Body**

**9. On a scale of one to five please rate how comfortable/proficient your students will be with computer-based testing? (1=low comfort/proficiency, 5=high comfort/proficiency) Please explain your rating.**

- *Students get high marks on their ability to navigate on their computers. They know how to get whatever information they want. I would rate them 4 on their use of technology.*
- *Our students have not been exposed to any great extent to computer-based testing. So I would rate them very low. I have heard from students taking the GMAT that this is difficult.*
- *Our students basically have not been exposed to any great extent to this form of test taking yet.*
- *At this point, our students would rate a one on computer-based testing. We have not done any computer-based testing yet*
- *Our students are very familiar with computer based testing; we use the blackboard course management system, which gives students a certain level of comfort and familiarity.*

**10. How comfortable are your students using the various computer-based accounting reference materials (i.e., FASB and income tax regulations)?**

- *Our students are comfortable using these materials because they are computer literate.*
- *Textbooks will need to be rewritten to incorporate reference materials.*
- *Reference materials are too expensive and we don't have the resources to constantly update these materials.*
- *We have one machine with this material available on campus.*
- *Students are not comfortable using the various computer-based accounting reference materials because of limited exposure, faculty shortages and time constraints.*

**11. Are these computer-based reference materials currently used by your students?**

- *Income tax material is used frequently in our courses.*
- *In our institution, most students commonly use the search engine techniques to conduct research. Students use a variety of secondary sources as references.*
- *Students use standard reference materials as a starting point and then frequently rely on secondary reference sources to get relevant information.*
- *Our students are not currently using any computer-based reference materials.*

**12. How do students at your institution gain access to these reference materials (either electronic or paper-based), if at all?**

- *Any access to the reference materials is primarily gained via the web or!*
- *The students use the materials provided in their textbooks.*
- *Many students use the internet but they are challenged at times gaining access*
- *Many students use library reference materials*
- *Students are registered for the checkpoint program they are assigned a code number which permits them access.*
- *Students are not comfortable using the various computer-based accounting reference materials because of limited exposure to those areas. Faculty shortages and time constraints are the reasons for this limited exposure.*
- *Most students use secondary sources rather than authoritative sources, which they access electronically.*

**13. Will the revised CPA Examination present specific technology issues that you perceive to be especially challenging for your department and institution? Why?**

- *Yes, given the limited resources available, it will be especially challenging for our department.*
- *We have very current technology now. So the technology probably will not be an issue in the short term. But in the long run, we need to keep updated.*
- *To be honest, I am concerned about the technical skills of our faculty not the students.*
- *The revised CPA examination will not challenge our department or institution technologically.*

**14. Will the proposed changes require an additional investment in technology at your institution?**

- *We are currently in good shape but to maintain the facilities we will always need to invest in technology that is independent of the changes to the CPA examination.*
- *These changes will definitely require an additional investment in technology for our college.*
- *Without a question, yes we will need additional resources.*
- *The cost of updating the computer based reference materials is an ongoing cost that we just cannot afford. .*

**Recommendations for How to Best Implement Changes**

**15. Are there specific issues that are unique to your institution and student body that would make it difficult to assure that your students are prepared for the revised CPA examination?**

- *We will need additional financial resources, it takes money that we do not currently have to make many of the changes that will be needed*

- *The primary issues have to do with lack of resources such as technology and faculty.*
- *We generally have good students. Their biggest challenge is that they frequently have full-time jobs before they graduate. This factor will greatly impact how much time they have to prepare for the examination.*
- *Many of our students are in remedial classes.*
- *Some of our faculty have taught the same course for the past 25 years and have not incorporated technology.*

**16. Do you have any suggestions about how to overcome any potential obstacles you identified?**

- *We need to pursue grants and corporate partnerships to address our limited resources problem.*
- *The national firms must balance their university support between the elite schools that they have traditionally supported and smaller schools that graduate the majority of African-American students. Otherwise it will lead to further erosion of the numbers of minority students entering the profession*
- *AICPA should take a more formal approach to make sure financial assistance is available to the smaller schools.*

**17. What media would you prefer for tutorials or practice materials developed for the revised examination (i.e., CD-ROM, via Internet, hard copy)?**

- *I think that most students would prefer CD-ROM because it is portable. Some of the books they use weigh several pounds.*
- *Internet access is critical for my students.*
- *I would prefer my material in hard copy form. I end up printing out documents because I find it easier to review the materials in hard copy than on my computer screen.*

**18. Is there any additional comments you would like to add?**

- *We need additional funding to support this change.*
- *More symposiums like the one in DC and Atlanta should be offered throughout the year for students and professors to walk through the examination.*
- *I'm excited about the new examination format. It now propels the accounting profession into the new technology arena with other professions. It should have happened years ago. It improves the public's perception of the profession as being able to adapt to our changing society.*
- *In the past we received samples of the CPA examination. I would like to receive a sample copy of the new examination.*
- *Unfortunately, many professors are technologically challenged and many schools including mine will need to recruit new faculty that have these skills.*

# Appendix C

## Study Participant Invitation

Date

Name of Assessment Participant  
Academic Institution  
Address

Dear:

On behalf of the AICPA Board of Examiners (BOE), I am writing to ask you to participate in an in-depth interview research project among accounting faculty. The feedback from the interviews will provide us with needed information from accounting faculty about their views on the proposed changes in the structure, content and delivery of the Uniform CPA Examination.

As you might know, the BOE is the AICPA committee with overall responsibility for the preparation and grading of the CPA examination. As a part of its responsibility, the BOE has undertaken various forms of research to understand the potential impact of the proposed revisions to the CPA examination on its various constituencies. Your participation in this research project is essential to helping the BOE better understand how the proposed revisions to the CPA examination might impact colleges and universities, accounting faculty and students.

The AICPA has engaged Diversified Communications Group (DCG), an independent diversity consulting research firm, to conduct in-depth interviews among accounting faculty at Historically Black Colleges and Universities (HBCUs), other predominantly minority institutions and smaller colleges and universities. The purpose of the research is to gain an understanding about how accounting faculty and administrators at these institutions perceive the proposed revisions to the CPA examination and how their curriculums, students and technology requirements might be impacted.

DCG will be conducting approximately 50 in-depth interviews between late-March and mid-April. Interviews will last approximately 45 minutes, but will depend on the extent of the issues raised and responses from the participants. Results of the interviews will be compiled into a final report. I hope that you will agree to participate in this important research effort. For your information, attached is a summary document outlining the significant proposed revisions to the CPA examination and the questions that will be asked during the interview. Please confirm your participation directly with Dexter Bridgeman of DCG at (212) 828-4157 or via email at [dab@idcg.net](mailto:dab@idcg.net).

*The Uniform CPA Examination is one of the world's leading high-stakes licensing examinations, and the AICPA takes seriously its responsibility to provide a high-quality, reliable examination that protects the public interest. It is also committed to understanding the academic-related issues and challenges you anticipate in preparing your students for the computer-based CPA examination.*

Again, I urge you to participate in this important project. If you are not the appropriate person at your institution to receive this information, I would appreciate you forwarding it to that person. Please contact me at (201) 938-3376 or via e-mail at [gjohnson@aicpa.org](mailto:gjohnson@aicpa.org) if you have any questions.

Sincerely,

Gregory Johnson, CPA  
Director, CPA Examination

Enclosures

cc: Education Task Force  
Olivia Kirtley  
William Holder

# Appendix D

## Discussion Guide

Thank you for agreeing to participate in the interview. The AICPA -- the professional association that develops and grades the Uniform CPA examination will be converting the CPA examination to a computerized format. A tremendous amount of planning and research regarding the CPA examinations content, structure, and delivery has been done, and this interview is a means of gathering additional information.

The purpose of this interview is to identify, with your help, the issues, challenges and potential barriers that you or your institution may face in the process of preparing your student body for the changes in the new CPA examination.

My name is \_\_\_\_\_ and I am with the firm Diversified Communications Group (DCG) an independent diversity consulting research firm that has been hired by the AICPA to facilitate this research.

I would like to encourage you to express your opinions and share your insights and thoughts relating to the interview questions.

The interview will be recorded, which will assure us that we will not miss any of your important points and answers. The time allotted for this interview will be approximately forty-five minutes.

Your input will be used to assist us in understanding the potential effects of the changes in the CPA examination on students and institutions. Before, we begin, do you have any questions or concerns?

### **General**

➤ How familiar were you with the proposed revisions to the Uniform CPA Examination before you were contacted about this research project?

### **Structure and Content**

Are the changes to the CPA examination going to have an effect either positive or negative on your institutions teaching philosophy in the accounting program? Please explain?

What changes if any do you foresee regarding structural changes to the CPA examination relating to your curriculum?

- What are your thoughts about the proposed structure and content changes?
- How will the changes affect your accounting or business curriculum? How will these changes, if any, impact your department? Business school? Overall institution?

- Will additional resources be needed to make the modifications to address the changes in the CPA examination?
- In particular, what are your thoughts about the new Business Environment & Concepts section of the CPA examination and how will you address it in your curriculum?
- How will the incorporation of more skills assessments (i.e., communications and research) into the examination impact the way you teach?
- How do you think your students will be impacted by the incorporation of case-based simulations into the CPA examination?
- Will the incorporation of case-based simulations into the CPA examination impact the way you teach?

### **Technology**

In your professional opinion, are your students familiar with computer reference guides and can you explain how your students are using the guides? Does your institution have any technology challenges that are either unique to your department or specific to the institution?

- On a scale of one to five please rate how comfortable/proficient your students will be with computer-based testing? (One= low comfort/proficiency, Five=high comfort/proficiency) Please explain your rating.
- How comfortable are your students using the various computer-based accounting reference materials (i.e., FASB and income tax regulations)?
- Are these computer-based reference materials currently used by your students?
- How do students at your institution gain access to these reference materials (either electronic or paper-based), if at all?
- Will the revised CPA Examination present specific technology issues that you perceive to be especially challenging for your department and institution?
- Will the proposed changes require an additional investment in technology at your institution?

### **Other**

Does your institution have any unique challenges or potential barriers that would present obstacles to your students in preparing for the revised CPA examination?

- Are there specific issues that are unique to your institution and student body that would make it difficult to assure that your students are prepared for the revised CPA examination?
- Do you have any suggestions about how to overcome any potential obstacles you identified?
- What media would you prefer for tutorials or practice materials developed for the revised examination (i.e., CD-ROM, via Internet, hard copy)?
- Is there anything you would like to comment on that we did not ask about?

This concludes our questions. I appreciate your time, which we regard as extremely valuable. Your answers will assist the AICPA in its efforts to computerize the Uniform CPA Examination and meets its public protection mandate. If you have any questions about the CPA examination or this research, please call Gregory Johnson, Director, CPA Examination at 201-938-3376 or via email at [gjohnson@aicpa.org](mailto:gjohnson@aicpa.org).

# Appendix E

## Participating Schools

### Colleges and Universities Interviewed

1. Albany State University
2. Barber Scotia College
3. Bluefield State College
4. Bowie State University
5. College of Business
6. Dillard University
7. Florida International University
8. Johnson C. Smith University
9. Fort Valley State University
10. Jackson State University
11. Georgia State University
12. Howard University
13. Kentucky State University
14. South Carolina State University
15. Johnson C. Smith University
16. Langston University
17. Lincoln University
18. Morehouse College
19. Morgan State University
20. North Carolina A&T State University
21. Oakwood College
22. Prairie View A&M University
23. Rust University
24. Talladega College
25. Texas Southern University
26. University of Alabama at Birmingham
27. University of Arkansas at Pine Bluff
28. University of Hawaii, Manoa
29. University of Maryland Eastern Shore
30. University of Texas Brownsville
31. Virginia State University
32. West Virginia State University
33. Wilberforce University