

**A CHANGE WILL DO YOU GOOD: ADVICE FOR
STUDENTS AND FACULTY ON THE NEW CPA EXAM**

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ABSTRACT

Beginning with the April 2017 testing window the CPA exam will undergo significant changes, predicted to make the exam more difficult and test higher levels of learning and application than the current CPA exam, but also provide a more accurate measure of whether CPA candidates are ready for a career in accounting. These changes will pose a challenge to students seeking to pass the exam, but provide accounting faculty and accounting programs an opportunity to adjust course delivery and learning objectives to effectively close gaps between education, the CPA exam and profession. In this paper, we survey the literature on student preparedness for careers in accounting and then specifically discuss the changes to the CPA exam. We provide guidance for accounting faculty and accounting program directors for addressing those changes and working to close the expectations gap between academia and the profession through classroom content and out-of-class support to students. We also offer best practice tips for students as they prepare for the CPA exam.

Keywords: CPA exam, document review simulation, case studies, writing across the curriculum, accounting education, exam strategies

INTRODUCTION

Mary Shelley once said, “Nothing is so painful to the human mind as great and sudden change.” Accounting faculty know this to be true, as we often encounter complaints from students when our courses do not follow what they have been accustomed to from other professors. Beginning in April 2017, our students and recent graduates will face a significant change in the form of the new CPA exam. Recent accounting graduates still in the process of completing the exam will be forced to develop new study strategies from what equaled success in the past, while current students might feel uncertain and lost about what resources to consult for study tips and strategies. For some, this might mean attempting to pass the exam before the April 2017 deadline; others might choose to wait and see how the new format works out for other test-takers. In addition, the new testing focus on the exam makes it probable that there will be a significant drop in first-time pass rates.

In short, the new form of the CPA exam will focus more heavily on higher order cognitive skills at the highest level of Bloom’s Taxonomy – a shift to analysis and evaluation away from the current focus of memorization and understanding. These higher order cognitive skills are already front and center in many accounting classrooms based on demand from employers, so this new format should close the gap between what is currently tested on the CPA exam and what employers expect out of newly minted CPAs.

Accounting faculty must be aware of these changes and develop strategies to communicate to and help prepare students for the new format of the CPA exam. As in the past, CPA exam prep courses and books will be the primary way that students prepare to take the exam, but they often reach out to accounting faculty for advice, insight and support. Thus, faculty should be able to supplement traditional classroom instruction with discussions about changes to the format of the exam and important cognitive skills that students should focus on developing in conjunction with accounting skills. We do not recommend that faculty design classes specifically to ‘teach to the CPA exam.’ We do think that the shift in focus on the exam away from memorization and toward cognitive skills will provide a significant opportunity for accounting faculty to make adjustments to classroom content delivery to better prepare accounting students for a job in accounting by developing both technical and cognitive skills.

In this paper, we will describe the changes forthcoming on the April 2017 CPA exam and offer suggestions for best practices to prepare for these changes. We first discuss the literature investigating student preparedness for the accounting profession. Next, we describe specifically the changes to the exam and provide an example of a Document Review Simulation. We then discuss best practices for both accounting faculty and students to implement to ensure that students are adequately prepared for the increased demands of the exam. In the last section of the paper we summarize and conclude.

LITERATURE REVIEW: STUDENT PREPAREDNESS FOR THE ACCOUNTING PROFESSION

How often do you hear the complaint from employers that accounting students and recent graduates can't write a memo or an email? Or think critically to solve tricky accounting or tax problems? Or interact with clients via oral or written communication? Though many faculty and administrators will argue that this is a recent phenomenon, the inability of accounting students to master basic skills – essential to success in the profession - has been a topic of discussion for several decades. In 1991, Albin and Crockett surveyed professional accounting associations and found that accounting graduates need strong skills in both oral and written communication, technical application skills, and technological and interpersonal skills.

Further, Lafrancols (1992) demonstrated that the most marketable CPA candidates were those with strong written and communication skills, and Bonk and Smith (1998) showed that memorization does not suffice to perform successfully as a professional. Ashbaugh and Johnstone (2000) found that many of the professional performance gaps presented in other research can be eliminated through the use of short cases that relate to emerging accounting issues. Accounting faculty were listening - for at least a decade, many have discouraged students from memorization and instead focused on active and student-centered learning in the classroom in conjunction with encouraging critical thinking and higher-level learning through application, analysis and communication. Conversely, despite research showing the importance of these skills to professional success, they are not significantly tested on the CPA exam, which has long been

considered an exam where students can succeed purely through intense memorization.

The revamp and computerization of the CPA exam in 2004 was expected to create an exam that was aligned with professional expectations and would better prepare graduates for entry into the accounting profession. At the time, the CPA vision project was designed to compare education framework to core competencies to suggest where change was needed on the exam - Bolt-Lee and Foster (2003) provide evidence that there were calls for a change in both accounting education and testing, as graduates are rarely prepared for successful entry into the accounting profession. Despite this, the computerization of the exam did little to change the learning objectives, which primarily focus on 'remembering' from Bloom's Taxonomy (AICPA 2016).

More recently, Jackling and DeLange (2009) find that from an employer point of view, accounting students are not adequately prepared by accounting curriculum for success in an accounting career. Similarly, Yu and Churyk (2013) show that there are perception gaps between employers and academic programs as to what makes a successful accounting graduate. They suggest that employers and faculty members should work together to identify and close those perception gaps and to develop curricula that more closely align with employer needs.

Tempone et al. (2012) identify team-work and communication as two skills missing from the repertoire of accounting graduates. Even worse, Abayadeera and Watty (2014), find that accounting graduates lack generic skills, primarily due to lack of instructor confidence to teach many of these skills. The problem appears to be two-fold: accounting programs need to be refocused to include many basic skills, and accounting faculty need the professional development necessary to teach these skills properly.

Thus, the new CPA exam might finally provide the catalyst to fully implement curriculum changes that have been discussed for decades. The changes to the CPA exam in 2017 are the first significant changes since the switch to a computerized format in 2004, so accounting faculty and administrators should be willing to explore changes in course content, teaching methods, and delivery of content. Based on the AICPA Practice Analysis Final Report (2016), the new format of the exam will provide assessment measures similar to the short cases related to accounting issues –

recommended by Ashbaugh and Johnstone in 2000 – and testing higher order skills of Bloom’s Taxonomy such as application, analysis and evaluation.

Since these are skills that will serve students well on both the CPA exam and in their accounting careers, it is reasonable to align delivery of content to the exam, enhancing both student learning and exam performance and at the same time closing gaps between the academic experience, the CPA exam and professional practice. We next discuss these changes in detail before making suggestions for faculty and students.

CHANGES TO THE CPA EXAM

The most notable change to the CPA exam is the required level of mastery of the material. The new exam that will debut in April 2017 reduces the emphasis on memorization and understanding, while increasing emphasis on the ability of the CPA candidate to analyze and evaluate the material. The ability to analyze and evaluate is more consistent with skills that an employer would expect from a new college graduate and CPA, and the introduction of task-based simulations when the exam was converted to computer-based in 2004 was a first attempt to incorporate those skills into the exam. In fact, the AICPA website directly informs the CPA candidate that, “Task-based simulations are case studies that allow candidates to demonstrate their knowledge and skills by generating responses to questions rather than simply selecting an answer.” The AICPA tests these skills by requiring candidates to do some research on an issue or to use a spreadsheet to solve a problem rather than just selecting a multiple-choice answer.

The April 2017 changes go further in testing the principles of analysis and evaluation to determine whether or not a CPA candidate can associate learned elements with other blocks of learning to integrate, draw conclusions and make judgments. Specific questions and simulations will require the candidate to reconcile, conclude and evaluate. An increased focus on these skills has the potential to help close expectation gaps between employers and educators, and better prepare our students for the accounting profession (Bolt-Lee and Foster 2003; Bonk and Smith 1998; Jackling and DeLange 2009). In Tables 1 and 2 below, we provide the summary tables of the link between question and skill type on the current and new exams; full details and content for the new exam are contained in the AICPA Practice Analysis Final Report: Maintaining the Relevance of the Uniform CPA Exam (2016).

Table 1: Link Between Question and Skill Type on Current Exam

	AUD	FAR	REG	BEC
Remembering/Understanding	50-60%	50-60%	50-60%	80-90%
Application	40-50%	40-50%	40-50%	10-20%
Analysis				
Evaluation				

Table 2: Link Between Question and Skill Type on New Exam

	AUD	FAR	REG	BEC
Remembering/Understanding	30-40%	10-20%	25-35%	15-25%
Application	30-40%	50-60%	35-45%	50-60%
Analysis	15-25%	25-35%	25-35%	20-30%
Evaluation	5-15%			

More specifically, the new CPA exam will reduce the use and weight of multiple choice questions and increase in the number and variety of task-based simulations to strongly emphasize on higher-order thinking. Table 3 compares the breakdown of multiple choice (MC) questions to task-based simulations (TBS) and relative weights from the current exam to the 2017 edition of the exam. The BEC section of the exam will also contain assessments to measure written communication skills, which will be weighted at approximately 15%.

Table 3: Question Counts and Score Weightings for Current Exam and New Exam

	Current Exam	2017 Exam	Current Exam	2017 Exam
	<i>Weight – 60%</i>	<i>Weight-50%</i>	<i>Weight-40%</i>	<i>Weight 50%</i>
	MC	MC	TBS	TBS
AUD (Auditing)	90	72	7	8-9
FAR (Financial Accounting and Reporting)	90	66	7	8-9
REG (Regulation)	72	76	6	8-9
	<i>Weight – 85%</i>	<i>Weight- 50%</i>	<i>Weight-0%</i>	<i>Weight- 35%</i>
BEC (Business Environment and Concepts)	72	62	0	4-5

Another acronym to add to your vocabulary is DRS – Document Review Simulation. Originally slated to debut in April 2017, the AICPA announced in December 2015 that CPA candidates would encounter DRS

problems on the July 2016 exam. The DRS problems represent a “beefing up” of the task-based simulations, presenting “...a realistic task that simulates what a newly licensed CPA might do on the job” (AICPA 2016). These problems will provide the CPA candidate with source documents that require review and editing of certain key words and phrases. As an example, an examinee could be provided with a letter from a CPA to a client containing highlighted passages. When the examinee selects a highlighted passage, they would have the choice to keep the text as is, delete the text, or replace the text with other given options that are more appropriate. See Appendix A for a detailed example of an AUD DRS provided by the AICPA.

In addition, other task-based simulations will contain considerably more pieces of data than on the current exam. These will also require that the candidate sort and analyze the data to determine what is relevant and irrelevant in completing the task or answering the question. To accommodate the increase in task-based simulations, total testing time will increase by two hours – from 14 to 16 hours – with an additional hour each for REG and BEC.

A final change to the exam will be implemented in 2018, when the spreadsheet package currently used on the exam will be replaced by Excel to more closely mimic what CPAs use in practice. The current software package does not have the functionality of Excel, so the switch is to ensure that the spreadsheet functions tested on the exam are as consistent as possible with future job tasks. Though the exam will not specifically test skill level in Excel, candidates will be expected to have enough familiarity with Excel to conduct extensive analysis of data as part of task-based simulations.

TIPS FOR FACULTY MEMBERS AND ACCOUNTING PROGRAM DIRECTORS

We do not advocate or practice ‘teaching to the CPA exam,’ though we know that some faculty members and accounting programs have implemented this strategy with the goal of increasing exam pass rates of accounting graduates. Perversely, given the limited practicality of the current exam to the profession, this practice may be a contributor to some of the expectation gaps between the academic community and the profession (Yu and Churyk 2013).

As discussed above, the upcoming changes to the CPA exam are designed to add practicality and reliability to the exam so exam performance is a better measure of a student's ability to be successful in the accounting profession (AICPA 2016). This is a golden opportunity for accounting faculty members to better link classroom instruction and curriculum to the exam, ideally resulting in success on the exam and in the profession. Our suggested best practices for faculty members and accounting program directors are from two decades of experience as accounting and taxation faculty members and instructor experience for a national CPA exam review course. We also draw from accounting and education research and provide suggestions for additional reading.

Implement Case Studies And Writing Across The Curriculum

We first recommend that accounting program directors integrate cases and written assignments across all levels of accounting courses, as does Rich Gallagher, director of content for the AICPA Examinations Team. In a recent interview with the Journal of Accountancy, Gallagher suggested that since the task-based simulations on the CPA exams are basically small case studies, creating real-life scenarios for cases in the classroom and asking students to solve problems using that method will be valuable preparation for both the exam and the accounting profession (Tysiac 2016).

Consistent with the objectives of the new CPA exam, cases require students to use application, analysis and evaluation skills (those at the highest levels of Bloom's Taxonomy) more frequently than the typical homework problem assigned from a textbook (Ashbaugh and Johnstone 2000). Though cases may seem daunting to an undergraduate student, careful selection of more compact cases in the early stages of accounting education will lay a groundwork that will have significant value at more advanced stages (der Merwe 2013). Assigning students to teams serves a dual purpose of making the material more approachable and developing 'generic skills' of communication and teamwork that many accounting students lack when they graduate (Albin and Crockett 1991; Abayadeera and Watty 2014).

What do we mean by case study? By design, a case study would require students to sift through information about a scenario and determine what information is relevant to solving the accounting or taxation problem. A good case study would require deliverables in the form of written communications such as work paper memos, tax file memos or client letters, simulating a realistic work assignment while simultaneously developing a student's writing and communication skills. Another case study might require a project to be completed using Excel at a more advanced level – i.e., creating pivot tables and using the *VLOOKUP* function – or requiring students to create a set of work papers or financial statements using Excel, once again simulating a realistic work assignment while providing students with exposure to Excel. Both types of case studies should improve student performance on both the task-based simulations and document review simulations on the CPA exam.¹

One key to the success of this method is to ensure that all classes in the accounting curriculum are using case studies or writing assignments, beginning in the first introductory accounting course. All students, not just accounting majors, can benefit from exposure to Excel or from more business writing. A curriculum-wide syllabi review on a regular basis – perhaps done in conjunction with accreditation or another evaluation – could ensure that students can draw common themes in learning objectives across classes rather than seeing each class as an island, thus reinforcing the importance of developing the skills to be successful in an accounting *career*, not just an accounting *class*. Appendix B provides an example of what the accounting department at Duquesne University is doing to prepare students for the updated exam, excerpted from an article published on the AICPA website (Williams et al. 2015).

Of course, it is much easier to make suggestions than it is to implement them. An accounting program director would do well to first solicit feedback from accounting faculty – preferably anonymously through an online survey tool – regarding their questions and concerns. It might be more helpful to guide the discussion by first bringing up some of the common concerns and asking for ideas to address them rather than simply providing a forum for negativity and complaints (Andreoni 1995). Soliciting positive outcomes that might result from curriculum changes is a positive way to reframe the discussion. In addition, framing the changes as

¹ See recent articles by Rackliffe and Ragland (2016) and Nellen et al. (2016) for some suggestions for using Excel in an accounting classroom.

something that will be useful to students and contribute to their long-term success should convince most faculty members of its value (Mayo and Larke 2011; Muller et al. 2008; Brustein 2007). That said, we have suggestions for responding to some of the common concerns related to implementing case studies and writing across an accounting curriculum.

Faculty Concern #1: “Creating cases and writing assignments takes time, I don’t have time to prep one more thing!”

The best answer to this concern is to use existing resources to limit prep time:

- a. *Phone a faculty friend.* Chances are, someone in THE department or college is already using case studies. These can be adapted to suit accounting courses. Then, contact faculty at other universities – take advantage of the AAA commons and AAA section case sharing and syllabi sharing mechanisms. Attend meetings and go to the teaching sections. Most faculty are happy to share their cases or writing assignments – especially if they put in many hours of work to perfect them!
- b. *Use publications for something other than a line on your CV.* Many accounting faculty have published cases in their specialized areas – a quick Google search yields dozens of sources for cases and writing assignments, and most already have answer keys and rubrics.²
- c. *Ask alumni and firms to contribute.* Work with alumni and firms that recruit on campus to create customized cases to be used in class for some of the assignments. This collaboration is a potential solution to address some of the expectation gaps between faculty and firms (Yu & Churyk 2013). Even better, the direct involvement of alumni involved in the campus recruiting process can build firm relations and ensure the cases

² Just a few options for published cases: Journal of Accounting Education, Issues in Accounting Education, Advances in Accounting Education, Journal of Case Studies in Education, Harvard Business Review, IMA Educational Case Journal, Accounting Education, American Journal of Business Education, International Journal of Teaching and Case Studies, Global Perspectives on Accounting Education.

address the issues most important to firms likely to employ graduates of the university.

Faculty Concern #2: “I want course relief if I have to put in the extra time to create cases and writing assignments!”

Faculty who volunteer to re-tool courses or develop cases and writing assignments might ask for course relief or extra pay for taking on extra work. The time and resource commitment to self-design cases or redesign curriculum can be prohibitive to many programs, but if employers with campus and alumni relationships see tangible benefits to the quality of student hired from the respective program, they may be willing to contribute financial resources as well as access to data and professional staff to assist in the preparation of cases. Also, choosing cases and writing assignments that can be easily tweaked and then recycled in future semesters (evergreen because they self-renew) will save time, frustration and the cost of re-prepping every few months.

Faculty Concern #3: “I don’t have time in class to teach the accounting material and the soft skills!”

- a. *Use technology wisely.* Technology can be an effective measure to address both retention and performance issues in an introductory accounting course or upper level courses. (Spiceland et al. 2015). Effective use of online homework management tools and videos can manage delivery of some mechanical content and create time in class to cover cases and writing assignments.
- b. *Consider a flipped classroom.* Using technology to shift the learning of some accounting mechanics to outside of the classroom to allow time in class for discussion, casework, and writing is a “flipped” classroom. Phillips and Trainor (2014), explain how a flipped classroom can be effective in an accounting course. More specifically, Diaz (2016), examines how and active learning/flipped classroom environment has been effective in an audit class. Gainor et al. (2014) further show how these principles can be used for the teaching of internal controls.

Faculty Concern #4: “Grading cases and writing assignments takes too much time!” or “In a coordinated course, the grading will not be fair if it is subjective!”

- a. *Create and use rubrics.* Put simply, a rubric is an objective answer key to help you consistently grade subjective assignments. A rubric saves time, maintains consistency across course sections and across semesters, and makes it easy to respond to student concerns about grading. Rubrics are now used extensively at the K-12 levels so many undergraduate students are used to seeing them and might even request to see the rubric for each assignment. Schaefer and Stevens (2016) discuss using rubrics for assessing accounting learning goals and provide excellent examples and suggestions for rubric design. In addition, the online resource RCampus (www.rcampus.com) provides a free, interactive tool for creating rubrics.
- b. *Enlist the help of teaching and research assistants.* A good rubric should mean that *anyone* can grade assignments – so utilize the help of teaching or research assistants to tackle grading for large assignments or large numbers of submissions. Many universities offer training to teach TAs or RAs how to grade, check to see if your school has those resources. Often, graduate students from other disciplines could be enlisted for help with feedback on writing assignments despite lack of familiarity with the technical material.

Faculty Concern #5: “We have tried these types of programs in the past. Momentum is good in the beginning, then the program isn’t monitored for effectiveness and is eventually forgotten.”

Unfortunately, the ghosts of past program failures will always haunt future program endeavors. First, look to programs that have been successful in your university and talk to the person in charge to find out the secret to success. This will vary based on organization, so it is difficult to give one-size-fits-all advice here. However, a program that has measurable and attainable objectives that are monitored on a yearly basis will certainly be more likely to succeed. Soliciting feedback from students and alumni on the effectiveness (and ineffectiveness!) of the curriculum directly involves the affected

stakeholders and will keep faculty focused on the main objective, which is ensuring the success of accounting graduates. An attitude of “don’t want to” and “you can’t make me” is always a possibility. It is difficult to address this other than through performance reviews or peer pressure³.

Accounting Major = CPA

In conjunction with adjusting the accounting curriculum to more closely represent a professional environment and the soft skills that will be tested on the exam, faculty should foster an environment that focuses on the importance of the exam to an accounting graduate’s career and provide resources to help tackle the exam. First and foremost, all accounting faculty and students should be aware of the value of the CPA designation. A recent Journal of Accountancy article analyzing the value of a CPA designation found that a CPA who passes the exam at age 22 and works until age 65 will net an additional \$129,449 over non-designated peers (Krippel 2016). If money isn’t a big enough motivator, here are additional practices that have worked well in our respective universities.

1. *Mention the exam early and often.* Accounting majors should be thinking about their path to CPA as soon as they declare the major. Since many firms now will not hire unless students have the requisite hours and have started taking the exam, it is no longer something accounting majors or accounting faculty can ignore until senior year. For students who don’t want to work in public accounting, provide examples of usefulness of the CPA credential in other sectors.
2. *Be the bridge from classroom to CPA and professional practice.* Tie classroom activities directly to what types of thinking will be tested on the CPA exam and necessary for success in public practice. Be explicit about what you are doing so students can make the connection. See Appendix B for an example of what the Accounting department at Duquesne University has implemented.
3. *Partner with prep courses for reduced rates and scholarships.* It is no longer enough to rely on future employers to pay for prep courses for our accounting graduates. Many private and governmental accounting

³ For further reading, we suggest a book by Douglas B. Reeves (2009) entitled “Leading Change in Your School. How to Conquer Myths, Build Commitment, and Get Results.”

jobs have never provided that perk, while public firms are now more likely to expect students to already be studying and taking the exam before interviewing. We will not endorse one company over another, but suggest that you research options for your university and your students. There are multiple products on the market now, with most companies offering reduced rates to students and alumni, products for use in the classroom, and scholarships to help students who cannot afford to pay for a prep course.

4. *Start a CPA club.* For most of their educational lives, students work in groups – in class, on projects and while studying for exams. When the CPA exam was offered only twice a year, many of us took advantage of that comradery – or competition – to motivate us to study for and pass the exam. There was no way to hide whether you passed or failed, and senior colleagues knew when it was time for CPA candidates to study for the exam. The advent of the regularly offered, one part at a time, computerized exam has changed that environment. Many students now express that they feel alone in their study process and find it hard to carve out time for studying when friends or colleagues aren't studying, too.

One solution – start a CPA club on campus where students can be accountable and find support. The club doesn't have to be University sanctioned as long as the department can provide space for the club to meet. For example, the club on one of our campuses meets four times a week – one night for each part of the exam. The club members decide on a date to take each individual part, and everyone works toward that goal. Students attend the club on the nights that apply to them, where they would report study progress and hash out any issues they had with the current week of study material. Current and former students should be responsible for running the club and making their own rules, but some faculty involvement and encouragement is likely warranted. Faculty could step in and “teach” a concept that is difficult, or just be a friendly face passing by to provide support.

5. *Recognize success.* Email and social media provide a multitude of ways to provide encouragement to CPA exam candidates and to recognize success. Announcing upcoming exam sittings and reporting passing grades via Facebook, Twitter, email, alumni newsletters or some other department-wide communication keeps students and

faculty engaged and involved in the common goal of success on the exam.

TIPS FOR STUDENTS

As mentioned above, we don't advocate teaching to the exam, and we believe that preparation for the CPA exam is (and always has been) more than faculty efforts of integrating the exam into the classroom. Though the new exam does allow increased opportunity for integrating preparation for the exam into the classroom, the key to student success is their understanding of both the mental and emotional preparation necessary for success on the exam. Faculty members are often the first people students consult when beginning their journey to CPA, so we have an important role to play in advising our students on a plan of attack to manage both the material and the emotional stress of the exam.

Per the AICPA, first time pass rates between 2012 and 2015 average anywhere from 45 to 55%, with BEC yielding the highest pass rates and FAR yielding the lowest. These rates have been consistent since the exam moved from a paper based exam to computer-based exam in 2004. Prior to the 2004 conversion, pass rates averaged between ten percent and twenty percent (Howell and Heshizer 2008).

Decide Which Part to Take First

Passing the first part of the exam is extremely important in building confidence, and there is no doubt that confidence is big contributor to success on the CPA exam. Confidence allows the CPA candidate to better focus as they study and as they sit in the examination room (Hembree 1988). Thus, we suggest that each student start with the part of the exam that will be EASIEST for *that student* to pass and then complete each part of the exam in succession from easiest to hardest. The reasoning here is simple: sitting for the easiest part of the exam first yields the greatest chance of passing on the first try, resulting in an 'I can do it' attitude. The student will be motivated and more emotionally prepared to tackle the next, slightly more difficult part. By the time the CPA candidate reaches that last and most difficult part, confidence and the memory of how it feels to pass allows a focus only on the current material, without the burden of thinking of the remaining parts.

This means that each CPA candidate should think carefully about which part to sit for first. There is not one concrete “hard” or “easy” part - it depends strictly on the background and experience of the student, so each student should first carefully examine the content of all exam parts and be realistic about accounting successes and failures from college. While many might suggest starting with the most difficult part to “get it out of the way,” the most common outcome in this scenario is often failure, lost confidence, and significantly delayed completion of the exam. Worse, lost confidence could increase the probability that the student will never complete the exam (Hembree 1988).

Remember, there is pressure to pass all four parts of the exam and to do so within the 18-month window or risk losing parts that were already passed. If a CPA candidate is unsuccessful in passing a part after sitting twice in a row, we recommend that the student move on to another part. Passing another part of the exam can help build confidence before the candidate attempts the previously troublesome part. If the troublesome part is the last part left, we recommend the CPA candidate try a different method of study, discussed more next.

Find a Program of Study

As illustrated in Table 3, the approach to testing content on the CPA exam going forward will be significantly different than on past exams. Currently, many exam candidates utilize the strategy of exclusive focus on multiple-choice questions and memorizing as many concepts as possible. A high score on multiple-choice questions used to mean that it was possible to focus very little on simulations and still pass the exam. After April 2017, this will no longer be true and strong performance on task-based simulations and document review simulations will be crucial in earning a passing score.

The AICPA provides sample exams and blueprints on its website to ensure students understand the new format of the exam questions. We also advise students to pick an exam prep course and stick with it. As mentioned above, there are many options for students as far as provider, and most providers offer formats ranging from in-class to online instruction. Students should choose what works for *them*, not what works for their friends or colleagues, and pick the program that will allow for success rather than just the cheapest option. Faculty have a role to play in helping student sort

through the options – either by partnering with a specific company or discussing pros and cons of different study methods with the student.

Block off Time to Study

How many accounting professors have heard the following after the first exam – “I studied SO hard for this exam, it isn’t fair that I failed! I spent fifteen hours studying!” – generally from a teary-eyed student? Rather than disbelieve the claim of time spent, we should ask HOW it was spent - typically, fifteen hours means an all day and all night cram session the day before the exam. However, there is significant academic education research showing that the all-nighter approach does not work (Credé and Kuncel 2008). Even students with a strong attention span are unlikely to sit at a desk for fifteen hours and absorb material in a meaningful way.

Many students might cruise through school with these study habits, but this will not lead to success on the CPA exam (Tracy 2006). In fact, successful CPA exam candidates routinely state that they set aside two or three short blocks of time to study each day, rather than one long block a few days a week. CPA prep courses stress this approach, too - so advise students to follow this practice, and to mark those study blocks in a calendar as BUSY! All CPA candidates live different lives with varying commitments, but we suggest a study schedule that looks similar to this one:

1. *The early bird gets the CPA designation.* Research shows that alertness and focus is the highest in the morning, so CPA candidates should set the alarm clock 60 minutes earlier in the morning and spend an hour reviewing and practicing the most difficult questions - most likely the simulations and document reviews (Dun et al. 2002).
2. *Alternatively, the night owl gets the CPA designation.* Mornings are the most common time for alertness. However, if a CPA candidate has a habit of accomplishing significant work in the evenings, then setting aside an hour after dinner when roommates and significant others are otherwise occupied or sleeping is a good strategy here.
3. *Go on a study diet.* A common practice in many public accounting firms is lunch with the team. While socializing is important, we suggest that CPA candidates limit this to one day per week and bring

a brown bag the other days. On those days, spend 15-20 minutes eating lunch and then spend the next 45 minutes reviewing concepts and answering more practice questions. During this abbreviated time period, focus on multiple-choice questions.

4. *Be the last to leave.* Before heading home, the CPA candidate should spend one more hour on review. Review at this stage can be a blend of task-based simulations, document review simulations or multiple-choice, depending on where the most effort is needed. If the office is not a viable option for evening study, we recommend a visit to a quiet coffee shop or the library before going home.

Following this pattern five or six days a week will yield a CPA candidate around 3 hours per day to study - 18 hours per week - in small blocks that better allow for focus and absorption of the material. Again, discussions with both successful and unsuccessful CPA candidates have shown that this approach is consistently more effective than sitting for two or three long periods of study during the week. This schedule also allows for time on the weekend to relax and unwind or review additional material, if necessary. Mental relaxation is very important to information absorption, so saving the weekends to relax or setting a maximum amount of hours per day to study is key to success (Tracy 2006). Finally, the CPA candidate should be realistic about when to take the exam – in the middle of busy season is probably not the best strategy!

Be Accountable to Yourself and to Someone Else

Most successful people will say that accountability is key to results. After finding a program of study and setting a schedule to study, the CPA exam candidate has to actually *study*. Again, picking an appropriate time of year where there is time to study is important, but being honest about effort and focus while studying is also important. Some students are internally motivated and only need that little voice in their head to push them to succeed. But the vast majority of students are externally motivated and will do well to have outside encouragement.

A tried and true strategy is for the CPA candidate to take the exam at the same time as a classmate, colleague or friend that can study with the. We suggest picking a partner carefully – make sure they are serious about passing! Newer strategies could include joining a CPA club or using social

media so to be accountable to others. CPA exam candidate boards (like <http://www.another71.com/cpa-exam-forum/>) are also popular and allow for accountability, venting, strategizing, commiserating and celebrating with thousands of other candidates. Once the exam is over, the CPA candidate should plan a reward of time off, dinner out, or a nice massage!

Manage the Exam

CPA candidates schedule the exam far in advance of sitting for it, and often don't really think much about the actual day until it arrives. However, recent research suggests that planning for and visualizing a big event – like an exam or a race – leads to greater success. The first step is to pick a testing location close to home or close to overnight accommodation to avoid the stress of traffic and public transportation. If this isn't possible, allow double the amount of time estimated to get to the testing center. Scoping out the exam location in advance is a good idea, too.

Most important for success – NO CRAMMING in the days before the exam. For the 48 hours leading up to the exam, students are advised to not study or review anything (Tracy 2006). In fact, the candidate should take the day or two and do something fun away from the typical daily routine unrelated to the exam. Going into the exam room relaxed will help the candidate focus on the task at hand. Faculty should advise students to get plenty of sleep in the week leading up to the exam since they won't really sleep the night before, but adrenaline should help with performance on exam day. We would also give other motherly advice like “eat a good breakfast!” and “bring a sweater!”

Once in the exam room, the CPA candidate should focus on one question at a time and remember that not all questions are graded on the exam. There are a percentage of questions on each part of the exam that are being ‘tested’ for difficulty and viability by the examiners, so when a student sees a question that is very difficult and inconsistent with CPA prep material, the probability is high that the question will not be graded. Students who are well-prepared but nervous exam-takers would be helped by focusing on memories of success while studying and comforted by knowing that they prepared to the best of their abilities.

CONCLUSION

Deepak Chopra once said, “All great changes are preceded by chaos.” The CPA exam is about to undergo a significant change, shifting to more accurately gauge the conceptual readiness of students to meet the skillset demands for entry-level hires in the accounting profession for entry-level hires. Many professionals and educators have historically argued that the CPA exam is a necessity but not an accurate measure of accounting aptitude, and identified many gaps in expectations of academics, examiners and employers.

With the new exam better aligned to the skills desired for the profession, accounting programs should look at overall program design, course content, and delivery of content to realign coverage and delivery in a manner consistent with the level of aptitude required in the accounting profession and now for passing the CPA exam. This linkage between the classroom, the exam and profession can only make the path to success more clear for students.

Of course, this is all easier said than done and will take dedication on the part of accounting program coordinators, faculty and students. Accounting programs that currently boast the highest pass rates will have to adapt to the new exam, while accounting programs that desire to increase pass rates for their students now have a good opportunity to evaluate their programs and work within their departments, alumni in the profession, and employers who recruit on campus to develop innovative ways to modify and deliver content to improve both exam and on-the-job performance.

In a recent interview with the Journal of Accountancy, the AICPA Vice President-Examinations Michael Decker said that he believes that the Examinations team will conduct a practice analysis to determine adjustments to the exam every two years as needed to keep up with a rapidly changing business environment. Decker also told JofA that, “Because the rate of change in business and the profession is so great, we really need to make sure the exam stays on par with that evolution.” As accounting educators, we should strive to ensure that the accounting curriculum does the same.

APPENDIX A – EXAMPLE OF AUD DOCUMENT REVIEW SIMULATION (DRS) PROBLEM (AICPA 2016)

DRS Sample Question

Scroll down to complete all parts of this task.

A CPA firm is preparing for the year 6 audit of Hiver Co., a calendar-year-end nonissuer. An audit staff member used the year 5 audit request list for Hiver as the basis for drafting the year 6 request list. Additional client information was obtained during the audit planning meeting with the client.

As the audit senior for this engagement, it is your responsibility to review and revise the year 6 request list for Hiver, as needed. Use the additional client information in the Resources tab to revise the draft request list, correcting any errors and removing any inappropriate or unnecessary items, given the overall context and purpose of the list. Ensure that the year 6 list is appropriate, given the information provided.

The materiality for the year 6 audit has been set at \$55,000.

To revise the Audit Request List, click on each segment of underlined text below and select the needed correction, if any, from the list provided. If the underlined text is already correct in the context of the document, select [Original text] from the list. If removal of the entire underlined text is the best revision to the document as a whole, select [Delete] from the list.

Hiver Co.

Year ended December 31, year 6

Audit Request List (DRAFT)

Please have the materials listed below ready when we arrive on site. Unless a different date is specifically stated, these documents should be as of and for the year ended December 31, year 6.

- Final trial balance
- Bank reconciliations for March, September and December, year 6.
- Bank statements for December, year 6 and January, year 7
- Property, plant and equipment roll-forward
- Edgewater industrial estate sale contract 
- Furniture and fixtures purchase documentation 
- New motor vehicle purchase agreement 
- Accounts receivable aging analysis
- Documentation supporting the 2% general allowance calculation for doubtful accounts 
- Accounts payable aging analysis
- Finished inventory detail
- WIP inventory detail
- Raw material inventory detail
- Trading securities valuation at year end 

Each item in blue is part of the question. When examinees click on the underlined text, they will have to decide whether to keep, delete or replace the underlined text by choosing one of the five options, as illustrated in the sample answer below.

DRS Sample Answer Choices

Please have the materials listed below ready when we arrive on site. Unless a different date is specifically stated, these documents should be as of and for the year ended December 31, year 6.

- Final trial balance
- Bank reconciliations for March, September and December, year 6.
- Bank statements for December, year 6 and January, year 7
- Property, plant and equipment roll-forward
- Edgewater industrial estate sale contract
- Furniture and fixtures purchase documentation

Choose an option below:

- [Original text] Furniture and fixtures purchase documentation
- [Delete Text]
- Furniture and fixtures sale documentation
- Office equipment purchase documentation
- Office equipment sale documentation

Reset Cancel Accept

To assist examinees in answering the question, documents of varying number and style will be provided under separate tabs. Here is an example of a partial document available for the above simulation:

DRS Sample Document for Review

Comparative Trial Balance:

Hiver Co.					
Year Ended December 31, year 6					
Unadjusted Trial Balance					
Account Number	Account Description	Year 6		Year 5	
		Debit	Credit	Debit	Credit
1010	Bank account no. 001039673	5,136,000		5,735,000	
1012	Bank account no. 001035821	25,400		31,250	
1014	Bank account - deposit	1,200,000		2,100,000	
1050	Bank account - payroll	12,635		21,760	
1200	Accounts receivable	3,264,500		2,975,800	
1205	Allowance for doubtful accounts		(456,250)		(82,000)
1300	Prepaid expenses	7,200		8,100	
1401	Finished goods inventory	780,500		725,300	
1405	WIP inventory	72,850		82,450	
1408	Raw materials inventory	203,640		197,350	
1600	Office equipment	175,000		175,000	
1601	Accumulated depreciation - office equipment		(62,500)		(36,500)
1650	Furniture & fixtures	201,500		201,500	
1651	Accumulated depreciation - furniture & fixtures		(153,150)		(112,000)
1700	Vehicles	-		36,500	

APPENDIX B – DUQUESNE AS A CASE STUDY FOR ACCOUNTING CURRICULUM CHANGES

Excerpted from “How one accounting department is preparing students for the updated CPA Exam,” by Williams, Nagle, Rau, Kollar, Yurko, Kannan, Menk, and Morris, all accounting faculty at Duquesne University.

We are giving students more opportunities to practice MS Excel...students in managerial/cost accounting courses use advanced Excel skills in exercises such as constructing a comprehensive budget for a company while allowing for continuous changes to their assumptions.

Students in the Accounting Information Systems and Auditing courses undertake a major project that develops their problem-solving, analytical, technology, and communication skills...students are exposed to Oracle PeopleSoft, NetSuite, and Microsoft Dynamics ERP software, which they use to create their own virtual company, process transactions, and analyze results...

Students are asked to verbally present unique transactions, demonstrate how they are processed through the ERP, and discuss which business professionals would process them and why they are relevant. They also improve their ability to troubleshoot during this project, as, often, they make errors that cause transactions to be processed incorrectly...they are also encouraged to determine how an effective accounting control could have either prevented or detected an error. For example, if a transaction is processed with the wrong accounting date, the students quickly realize that restricting the ERP calendar will prevent this error and aid in issuing accurate financial statements.

Taxation classes emphasize the application of tax topics to real-world situations...students are taught tax concepts and are then required to apply these theoretical ideas to the completion of numerous tax returns. These returns increase in difficulty as the semester progresses. The preparation of the multiple returns allows the students to become comfortable with the forms and increases their confidence in their abilities and skills. Students are also required to research a current tax technical issue and then prepare a memo discussing the topic and providing a recommendation to a client. These research memos should help the students in completing the simulation

exercises on the exam, as they encourage students to interpret a real-life scenario and apply tax theory to make an appropriate recommendation.

In Auditing, the capstone course of the major, students perform an integrated audit of a fictitious publically traded company. They must assess the adequacy of internal controls as well as opine upon the accuracy of the company's financial statements. The students work in groups as audit teams to interview key employees (faculty members or video simulations) to understand the work process. This exercise enhances their critical thinking, as they are forced to comprehend each interviewee's answers, determine whether controls are designed appropriately and functioning as intended, and identify missing controls.

Throughout the project the students learn to prepare written documentation as they collect and analyze audit evidence. For example, they perform an analytical review of the financial statements, calculate materiality, and determine the risk areas and sample sizes. They need to exercise professional judgment when determining what accounts should be selected for confirmation and what follow-up procedures are necessary once a customer responds.

At the end of the project, students further enhance their communication and critical thinking skills by presenting the outcome of their integrated audit to a mock audit committee, which is comprised of public accounting firm partners and managers as well as local CFOs, controllers, and university faculty.

We have also historically expected our students to comprehend analytical questions similar to the ones that will likely appear on the updated CPA Exam. On managerial/cost accounting exams, for instance, students are faced with unfamiliar scenarios. To resolve problems, they will need to incorporate multiple concepts, thus testing their understanding and critical thinking skills. For example, one such exam question might be:

Patterson Company's variable expenses are 55% of sales. At a \$400,000 sales level, the degree of operating leverage is 5. If sales increase by \$30,000, what will the new degree of operating leverage be?

This question requires full understanding of the effect of changes in sales on contribution margin, profits, and degree of operating leverage. To answer it,

students must determine the original contribution margin and profits, thus calculating the original degree of operating leverage. After that, they need to determine the new contribution margin and net operating income (after calculating fixed costs), thus recalculating the degree of operating leverage.

Published November 10, 2015 and full-text is available online at:
<http://www.aicpa.org/InterestAreas/AccountingEducation/NewsAndPublications/Pages/duquesne-accounting-program-cpa-exam.aspx>

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