

# Chapter 7: Constructing a Foundational Body of Knowledge

## Initial Step: Assembling Accounting Competencies

Recommendation 4 advocates creation of a task force, led by educators and including broad representation across disciplinary areas and practice, to engage the community in defining the foundational body of knowledge for accounting. This would be a first step to organizing constructs that can serve as a starting point for faculty working to build vibrant accounting programs and curricula across educational institutions and institutional missions.

During 2011, a Pathways Commission Task Group collected and organized core competency and skills models from across a number of accounting organizations to inform the Commissions' discussions of curriculum and professional development. This work is included here as a starting point for conversations about development of an accounting body of knowledge.

### Collation of Core Competencies Across Accounting Organizations

#### Overview

Virtually everyone and every organization is a user of accounting information. Users include the general public relying on publicly available information, investors or shareholders evaluating financial results, creditors making lending decisions, management making business decisions, and regulators responsible for oversight. Some users are also employers. They may be privately or publicly owned businesses, not-for-profit entities, governmental bodies, or public accounting firms. While the specific organization and type of information may vary, the reliability of its accounting information is dependent upon the quality of the people who work within the accounting profession.

Accountants typically hold vital positions of trust with professional responsibilities to both internal and external users. Fulfilling those responsibilities requires technical competency and professional integrity. Competence entails more than technical knowledge. To be competent, an accountant must possess both technical knowledge and professional skills, such as the ability to

apply knowledge in making reasoned judgments and to communicate effectively. Additionally, accountants must act with integrity by recognizing their broad professional responsibility to all users of financial information and by making ethical decisions in conjunction with that responsibility. Integrity demands ethical action based on professional values. These characteristics of technical knowledge, professional skills, and integrity form the framework of competency needed by current and future accountants.

## Accountants—Paraprofessionals and Professionals

Accounting information is prepared, evaluated, interpreted, attested to, and communicated by a wide variety of people from different educational backgrounds. Some enter the field as paraprofessionals with little formal training. Others may have graduate degrees and extensive education. They may be accounting staff, operational accountants, auditors, tax accountants, regulators, or chief financial officers. The roles are diverse, and a variety of skills are needed.

Accounting paraprofessionals can be generally defined as those working within the accounting field who do not hold, at a minimum, a college or university degree that meets the accounting profession's requirements. Some paraprofessionals have earned a two-year associate's degree or other accounting-related certificate, and others may have no advanced education. Work can range from bookkeeping to more advanced accounting assistance to being an accounting professional. Accounting professionals may be licensed CPAs who generally have 150 hours of college or university education meeting specific content criteria. Other degreed professionals may choose to become certified internal auditors, certified management accountants, certified government financial managers (CGFMs), or one of the other specialized certifications. Some accountants may hold multiple certifications, and others may not hold any.

The CPA license is issued and regulated by the state boards of the 50 states plus the four territories and the District of Columbia and are coordinated through the National Association of State Boards of Accountancy (NASBA). Although CPA regulations are established by each jurisdiction's legislature, the Uniform Accountancy Act (UAA) serves as a model act to promote common standards. The UAA is jointly developed and maintained by NASBA and the AICPA, and educational requirements are included through UAA rules. In addition, CPAs auditing publicly traded companies are subject to oversight by the Public Company Accounting Oversight Board (PCAOB).

Other certifications do not require a license and are earned from independent credentialing organizations. Specific competencies vary among the designations. However, all accounting professionals and paraprofessionals should meet standards for technical knowledge, professional skills, and ethical behavior founded on integrity, responsibility, and commitment to the public interest.

# Competencies

In evaluating accounting competency, the Pathways Commission reviewed information from multiple sources, including the IFAC, NASBA, AICPA, the IMA, and the IIA, among others. A complete listing appears at the end of this section. Various research papers, articles, and certification exam content were consulted. The information was accumulated, compared, and used as a foundation to develop recommendations for the components of accounting competency in three divisions: technical knowledge, professional skills, and professional integrity, responsibility, and commitment. A table is presented for each division, and each listed item is followed by number(s) within parentheses. These numbers identify the specific source summarized in the “competency information from sources” section.

## Technical Knowledge

Knowledge topics for accounting can be diverse given the many possible areas of specialization. All of the reviewed sources included multiple topics of technical knowledge, and a comprehensive listing is not practicable. Therefore the following table of technical knowledge is not intended to be fully inclusive of all possible topics. It is intended, however, to be a guide for topics considered technical knowledge.

(Parenthetical numbers reference sources in the “Competency Information from Sources” section)

### **Financial Accounting and Reporting (2, 4, 5, 8, 9, 13, 14, 17)**

- Knowledge of ever-evolving regulations and standards
  - Accounting principles and rules (2, 8, 9, 13, 14, 17)
  - Financial reporting complexity...globalization of accounting standards (4, 5, 9)
  - External reporting needs (4, 8, 9, 13)
  - Specialized industry knowledge (5, 8)
  - Fair value accounting and measurement (5, 8, 9)
- Internal controls methods...fraud control (5, 8, 9, 13, 14)
- Research skills (identify, gather, measure, verify, analyze, and interpret) (3, 8)
- Compilation and review services (8, 9)
- Judgment in the application of accounting principles (9)
- Legal/regulatory perspective
  - Knowledge of evolving regulatory framework (2, 4)
  - Legislative and regulatory requirements (2, 3, 8, 9, 14)

### **Operational/Management Accounting (2, 4, 5, 6, 7, 8, 9, 14, 15, 17)**

- IT skills (2, 4, 6/7, 17)
  - Understand ERP and IT systems (4)
  - Apply appropriate IT systems and tools to business and accounting problems (17)
  - Apply controls to systems (17)

- In depth business knowledge
  - Business/legal knowledge (9, 14)
  - Ability to document business purposes/processes and flow of information (9)
- Financial discipline
  - Cost accounting principles and systems (6/7, 15)
  - Planning, budgeting, and forecasting (6/7, 13, 15)
  - Customer and product/services profitability (6/7)
  - Product and services costing (6/7)
  - Financial and economic analysis (6/7, 15, 17)
  - Project management (6/7)
  - Process improvement and performance management (6/7, 9, 15)
- Quality systems and controls (6/7, 15)
- Risk analysis and management/ERM (4, 5, 8, 14, 15)
- Internal audit (14)
- Performance evaluation...organization, process, people (6/7)
- Mergers and acquisitions (6/7)
- Corporate finance (15)
- Investments (6/7, 15)

#### **Governmental Accounting and Reporting (8, 9, 11, 12, 14)**

- Governmental environment (14)
- Governmental accounting, financial reporting, and budgeting (14)
- Governmental financial management and control (14)
- Key issues:
  - Financial disclosure (9, 12)
  - Accounting and auditing issues (9, 11, 12)
  - Fund accounting (9, 12)
  - Recognition of economic impact on communities (12)

#### **Auditing and Attest services (8, 9, 19)**

- Audit of historical information at an advanced level (9, 19)
  - Best practices (19)
  - Appropriate auditing standards (9, 19)
  - Relevant current issues and developments (19)
  - Internal controls (8, 9)
- Financial accounting and reporting at an advanced level (9, 19)
  - Financial accounting and reporting processes and practices (9, 19)
  - Applicable financial and reporting standards (9, 19)
  - Relevant current issues and developments (9, 19)
- Information technology (19)
  - IT systems for financial reporting (9, 19)
  - Frameworks for evaluating controls and assessing risks (9, 19)
  - Relevant current issues and developments (9, 19)

## Other areas

- Taxation—federal, state, local, and international (9, 17)
- Corporate governance—know appropriate and inappropriate governance structures within an organization (9)
- Independence and professional standards (8, 9)
- Nonprofit accounting and reporting (9, 12)
  - Recognition of economic impact on communities (12)
- Strategic planning (6/7, 14)
- Business law (9, 17)
- Specialized industry requirements
- Forensic accounting (25)
- Decision modeling (2, 8)
- Globalization
  - Knowledge of changes in global economic markets (8, 9, 14)
  - Impact on the business environment and financial reporting (9, 14)

The technical component of knowledge is constantly changing. New accounting standards may be adopted, laws altered, and new technologies developed. As a result, various components of knowledge are likely to become obsolete or outdated over time. To remain competent, individuals must maintain the currency of their knowledge. Therefore, competency also requires a commitment to lifelong learning.

## Professional Skills

Effectively applying knowledge requires professional skills. Sources classify skills in different ways, but all consider practice skills as important to building competency. Some of these skills can be learned in the classroom. Others may be best learned in a practice setting.

(Parenthetical numbers reference sources in the “Competency Information from Sources” section)

- Critical thinking, problem solving (1, 2, 4, 8, 10, 21, 23, 24, 25, 26)
  - Ability to identify and solve unstructured problems (1, 2, 14, 19, 21)
  - Capacity for inquiry, research, logical and analytical thinking (2, 19, 21)
  - Professional skepticism and ability to think independently (9)
  - Ability to effectively deal with difficult issues (11)
- Judgment and decision making (2, 4, 8, 11, 19, 21)
  - Reasons carefully and thinks effectively (8, 19, 21)
  - Analyzes impact of potential actions on all stakeholders (8, 11)
  - Considers contingencies and future developments (8)
  - Considers ethical, professional, and legal issues (2)
  - Considers global consequences (8, 14)

- Communications/collaboration (1, 2, 4, 8, 11, 14, 22, 23, 24, 25, 27)—demonstrates the following:
  - Oral and written communication skills (1, 2, 4, 8, 10, 11, 24, 25, 27)
  - Teamwork skills (2, 14, 23, 24, 25, 27)
  - Interpersonal communication skill for facilitating effective interaction/works collaboratively (1, 8, 22, 27)
  - Negotiation skills (1, 2, 4, 14)
  - Ability to withstand and resolve conflict (19)
  - Ability to effectively deal with difficult people (11)
  - Stakeholder management, including external shareholders (11)
- Leadership skills (2, 4, 8, 11, 14, 22, 23, 25)
  - Strategic planning (2, 8, 14, 22, 25)
  - Able to develop, motivate, and mentor talent (2, 8, 14, 23)
  - Seeks to identify and resolve conflict situations (11)
  - Recognizes current and potential crisis situations and resolves them effectively (11)
  - Business development (23)
- Managerial skills (2, 4, 8, 13, 14, 21, 22, 23)
  - Ability to select and assign priorities within restricted resources (2, 22, 23)
  - Meets deadlines and budgets (4, 8, 23)
  - Exercises due care in the performance of work (9, 13, 14)
  - Integrates diverse areas of knowledge and skills (21)
- Technology skills (8, 17)
  - Leverages technology to solve business and accounting problems (17)
  - Leverages technology to develop and enhance technical knowledge (8)
- Commitment to learning...both a skill and an attitude (2, 8, 9, 22)
  - Self-direction to manage personal learning and work (2)
  - Accepts professional development as a lifelong process (8)
  - Objectively considers others' professional criticism or evaluation (8, 9, 22)
- People skills and personality (1, 2, 5, 8, 11, 22, 24)—possesses the following characteristics:
  - Demonstrates cross-cultural skills and language abilities (2, 5, 8)
  - Professional demeanor (8)
  - Multitasking (1, 11, 27)
  - Receptive to ideas of others (8, 11)
  - Ability to anticipate and adapt to change (2, 8, 25)
  - Creativity and innovation (8, 22, 27)
  - Reliability, responsibility, timeliness, courtesy, and respect (18, 25)
  - Entrepreneurial mindset (22)
  - Positive attitude (22)
  - Work ethic (24)
  - Initiative (24)
  - Copes with pressure (1, 25)

## Professional Integrity, Responsibility, and Commitment

Most sources include a requirement relating to ethics, values, or integrity. IFAC's International Accounting Educations Standards Board includes a component titled "professional values, ethics, and attitudes" (International Federation of Accountants 2009). In International Education Standard (IES) 4, IFAC stated:

Professional values, ethics, and attitudes need to be treated in their own right within the education framework. If future professional accountants are to perceive professional values, ethics, and attitudes as important to their work, it is essential that they do not perceive the treatment of professional values, ethics, and attitudes as peripheral to their main education programs.

The Pathways Commission expands this concept to more broadly recognize that ethical behavior is also founded on integrity, responsibility, and commitment to the profession's broad societal and economic purposes. Education can enhance these characteristics and build skills in ethical decision-making and responsible judgment.

(Parenthetical numbers reference sources in the "Competency Information from Sources" section)

- Ethical knowledge—principles and issue recognition (1, 2, 3, 5, 9, 13, 19, 20, 21)
  - Fundamentals of traditional ethical concepts and principles (1, 13, 20)
  - Understands the environment that influences decisions (20)
    - Relevant standards and codes (20)
    - Expectations of ethical and professional conduct (20)
  - Awareness of personal and social values (1, 2)
  - Identifies situations that might be unethical or a violation of professional standards (9, 21)
  - Recognizes potentially unethical behavior and its consequences (9, 19)
- Ethical reasoning and judgment (1, 2, 3, 9, 11, 13, 15, 20)
  - Identifies ethical issues (2, 9, 20)
  - Considers potential impacts on all stakeholders (11, 20)
  - Performs research and consults as appropriate (9)
  - Develops alternative courses of action leading to an ethical resolution (1, 13, 20, 21)
  - Skilled in making ethical judgments (1, 2, 20)
- Professional and legal responsibilities (2, 9, 13, 20)
  - Maintains current knowledge of professional standards, legal issues (13)
  - Recognizes professional and legal responsibilities in decision making (9)
  - Commitment to ethical behavior (20)
  - Acts in accordance with professional and legal responsibilities (13, 20)

- Behavior/attitude consistent with core values (2, 3, 4, 8, 9, 11, 13, 14, 19, 25, 27)
  - Integrity/honesty (3, 9, 13, 14)
  - Objectivity and freedom from conflict of interest (3, 8, 9, 13, 14)
  - Independence, where applicable (3, 9, 11, 13, 14)
  - Professional skepticism (2, 3, 9, 25)
  - Professional competence and due care (9, 13, 19)
  - Confidentiality (4)
  
- Commitment to the accounting profession's broad societal and economic purposes (the public interest) (2, 8, 9, 13)
  - Identifies and analyzes the social costs and benefits of relevant decisions in the global marketplace/environment (2)
  - Accountability and public expectations (13)
  - Sensitive to social responsibilities (13)
  - Relationship among laws, regulations, and the public interest (13)
  - Considers the implications of professional values, ethics, and attitudes in decision making (8)
  - Identifies the importance of adhering to rules and standards by licensing boards and standard-setting bodies (9)

## Future Outlook

As accounting and business evolve, the required knowledge and skills will also change. Adoption of more principle-based standards will require more judgment. More judgment may lead to a wider variability in decisions and, possibly, increase the risk of litigation. At the same time, pressures to conform to economic forces may increase. Measurement issues and fair value calculations may enhance financial reporting, but they are also more subject to manipulation. Therefore, responsible judgment becomes even more important as does ethical behavior consistent with the accounting profession's responsibilities.

Complex business transactions and globalization continue to change the business environment. Additionally, technology's rapid development introduces new opportunities and challenges. Enhanced technological skills are increasingly important for businesses' success and, therefore, for future accountants. Fraud control, risk management, and specialized skills will be needed. Regulation will certainly evolve and be complicated by global operations. All of these changes increase the need for both knowledge and skills that meet the changing environment. As a result, the importance of lifelong learning is magnified.

Some of the factors increasing the need for professional skills also increase the demand for the skilled professional. Globalization, complexity of information, and enterprise risk are only a few of those factors. Clearly, the strength of the economy is a primary determinant of need. As the economy grows, the need for accountants will grow as well. Additional opportunities for accountants could arise from the increasing scrutiny on business, triggering a greater focus on transparency and accountability.

The Department of Labor predicted a much-faster-than-average growth in employment in its *Occupational Outlook Handbook (2010-2011)*:

**Employment change.** Employment of accountants and auditors is expected to grow by 22 percent between 2008 and 2018, which is much faster than the average for all occupations. This occupation will have a very large number of new jobs arise, about 279,400 over the projections decade. An increase in the number of businesses, changing financial laws and corporate governance regulations, and increased accountability for protecting an organization's stakeholders will drive job growth (U.S. Department of Labor 2011).

The opportunities may be further enhanced for those with certification(s), advanced degrees, and specialized expertise (U.S. Department of Labor 2011).

## Reflections

While the purpose of this section is to identify competencies needed by future accountants, specific competencies will depend on the specific role(s) held by each individual. Further, the desired performance level for the competency varies by role. For example, managerial skills are more important for someone managing an engagement than for a member working on the engagement team. Although identifying competencies and desired performance levels for alternative career paths are beyond the scope of this report, the development of such a competency map would benefit both accountants and their employers. Accounting education, whether in the classroom or postgraduation, could be better targeted for the desired goal.

Clearly, future accountants must learn more than technical knowledge. To be successful, accountants should develop professional skills and the ability to act ethically in difficult situations. It is the integration of knowledge, skills, and ethical action that form competency and fulfill the accounting profession's responsibility to society. The commission makes these statements understanding that not everyone who is an accountant is required to act ethically. It is a fact that there are very few consequences from the profession or regulators for those persons who act unethically and are not licensed or members of a professional body that have a code of ethics.

## References

International Federation of Accountants. "International Accounting Education Standards Board." 2009. <http://web.ifac.org/publications/international-accounting-education-standards-board>.

U.S. Department of Labor. "Bureau of Labor Statistics Occupational Outlook Handbook 2010-2011 Edition, 2010. <http://www.bls.gov/oco/ocos001.htm>.

## Competency Information from Sources

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<p><b>(I) IFAC–Competence-Based Approaches to the Professional Preparation of Accountants (June 1998)</b></p> <p>International Federation of Accountants. <i>Competence Based Approaches to the Preparation of Professional Accountants Discussion Paper</i>. NY: 1998. Print.</p>			
COMPETENCE is the ability to perform the tasks and roles expected of a professional accountant, both newly qualified and experienced, to the standard expected by employers and the general public.	X	X	X
Professional qualifications are a form of social contract between a profession and the general public. This contract confers certain privileges on the professional body and control over admission to membership and a publicly acknowledged distinction between members and nonmembers and in return for the guarantee of minimum standards (to protect the public from practitioners who may do them harm through incompetence or unethical behavior).			X
Many existing higher education programs promote only competence-referenced outcomes because their courses do not match the standards of the professional bodies. Competence-based outcomes require much more integration between higher education and work-based components of professional preparation than is commonly found in traditional programs. Competence-based qualifications are easier to implement when programs are underpinned by partnership arrangements between higher education and employers.		X	
Codified knowledge of concepts, theories, typologies, procedures, techniques, principles of practice, and so on. Its purpose is to provide students with the following:	X		
<ul style="list-style-type: none"> <li>• Some understanding of relevant disciplines and the social and economic context of professional work</li> </ul>	X		X
<ul style="list-style-type: none"> <li>• Conceptual frameworks and theories as cognitive resources</li> </ul>	X		
<ul style="list-style-type: none"> <li>• A technical base for future professional work</li> </ul>	X		
In-depth understanding, developed capability for problem solving		X	
Skills in written and oral communication, interpersonal skills		X	
Values education			X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Ethical principles, ethical reasoning, values awareness			×
Starting from competencies usually begins with the identification of relevant knowledge, skills, and attitudes. However, this tends to omit important areas of tacit knowledge and fails to address the problem of how to transform separate competencies into integrated performance at work.	×	×	×
Additionally, conditions of performance such as identifying needs, balancing speed and accuracy, balancing competing demands on available time, and so forth, can and do influence the outcome.		×	
At a higher level of organization, there is a critical difference between performing a set of tasks and performing a whole job and scheduling, prioritizing, negotiating with colleagues and clients, and so on. Coping with pressure and crowded offices and handling several ongoing assignments at once are usually important aspects of competence.		×	
<b>(2) IES 3—Professional Skills and General Education</b> International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education standard 3</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			
<b>Technical and Functional Skills</b>			
Numeracy (mathematical and statistical applications) and IT proficiency	×		
Decision modeling and risk analysis	×	×	
Measurement	×	×	
Reporting	×	×	
Compliance with legislative and regulatory requirements (also in Integrity section)	×		×
<b>General Education</b>			
An understanding of the flow of ideas and events in history, the different cultures in today's world, and an international outlook	×		
Basic knowledge of human behavior	×		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
A sense of the breadth of ideas, issues, and contrasting economic, political, and social forces in the world	X		
Experience in inquiry and evaluation of quantitative data		X	
The ability to conduct inquiry, carry out logical thinking, and understand critical thinking		X	
An appreciation of art, literature, and science	X		
An awareness of personal and social values and of the process of inquiry and judgment	X	X	X
Experience in making value judgments			X
Interpersonal and Communication Skills		X	
Work with others in a consultative process to withstand and resolve conflict		X	
Work in teams		X	
Interact with culturally and intellectually diverse people		X	
Negotiate acceptable solutions and agreements in professional situations		X	
Work effectively in a cross-cultural setting		X	
Present, discuss, report, and defend views effectively through formal, informal, written, and spoken communication		X	
Listen and read effectively, including a sensitivity to cultural and language differences		X	
Organizational and Business Management Skills		X	
Strategic planning, project management, management of people and resources, and decision making		X	
The ability to organize and delegate tasks, to motivate, and to develop people		X	
Leadership		X	
Professional judgment and discernment		X	X
Intellectual Skills		X	
The ability to locate, obtain, organize, and understand information from human, print, and electronic resources		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
The capacity for inquiry, research, logical and analytical thinking, powers of reasoning, and critical analysis		X	
The ability to identify and solve unstructured problems which may be in unfamiliar settings		X	
<b>Personal Skills</b>		X	
Self-management		X	
Initiative, influence, and self-learning		X	
The ability to select and assign priorities within restricted resources and to organize work to meet tight deadlines		X	
The ability to anticipate and adapt to change		X	
Considering the implications of professional values, ethics, and attitudes in decision making			X
Professional skepticism		X	X
<b>(3) NASBA–Education Summary and UAA Rules 5-1 and 5-2</b> National Association of State Boards of Accountancy, Uniform Accountancy Act. (2009). <i>UAA model rules</i> . Retrieved from <a href="http://www.nasba.org/862571B900737CED/F3458557E80CD8CA862575C3005DBD36/\$file/UAA_Model_Rules_April24_2009">http://www.nasba.org/862571B900737CED/F3458557E80CD8CA862575C3005DBD36/\$file/UAA_Model_Rules_April24_2009</a>			
Minimum number of hours from list of accounting and business classes	X	X	
Minimum requirement for communications		X	
Minimum requirement for research		X	
Include and emphasize ethical behavior and professional responsibility			X
Provide the highest quality instruction in subjects that clearly contribute to the knowledge, skills, and abilities necessary to meet the public’s expectations of a CPA.	X	X	X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
“Ethics” means a program of learning that provides students with a framework of ethical reasoning, professional values, and attitudes for exercising professional skepticism and other behavior that is in the best interest of the public and profession. At a minimum, an ethics program should provide a foundation for ethical reasoning and the core values of integrity, objectivity, and independence.			X
<b>(4) Grant Thornton–The Evolving Accounting Talent Profile: CFO Strategies for Attracting, Training, and Retaining Accounting Professionals (Summer 2010)</b> “The Evolving Accounting Talent Profile.” <i>Grant Thornton</i> . Grant Thornton, n.d. Web. 27 Dec 2010. < <a href="http://www.grantthornton.com/portal/site/gtcom/menuitem.8f5399f6096d695263012d28633841ca/?vgnnextoid=2112b2052c079210VgnVCM1000003a8314acR CRD">http://www.grantthornton.com/portal/site/gtcom/menuitem.8f5399f6096d695263012d28633841ca/?vgnnextoid=2112b2052c079210VgnVCM1000003a8314acR CRD</a> >			
Understanding and applying international accounting standards	X		
Understanding complex accounting and auditing standards	X		
Adapting to an evolving regulatory framework	X	X	
<b>Addressing new external reporting needs</b>	X		
Understanding ERP or IT systems and technological developments	X		
Employing quantitative risk management techniques	X		
Possessing specialized industry knowledge and understanding company’s nonfinancial business drivers	X		
Critical thinking and problem solving		X	
Negotiation and communication		X	
Leadership and managerial		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<p><b>(5) Robert Half International—Emerging Issues for Next Generation Accountants (Nov 23, 2010)</b>  “Emerging Issues for Next Generation Accountants.” <i>Workvine.com</i>. Robert Half, n.d. Web. 27 Dec 2010. &lt;<a href="http://www.workvine.com/fin_emerging.html">http://www.workvine.com/fin_emerging.html</a>&gt;.</p>			
IFRS	X		
Enterprise risk management	X		
Fair value accounting	X		
Fluency in multiple languages	X		
Fraud control	X		
Pervasive technology—learning to balance productivity advantages from IT with pitfalls, such as relying on IT rather than face to face communication to build relationships		X	
Globalization issues	X	X	
<p><b>(6/7) Management Accounting Quarterly (Siegel, Sorensen, Klammer and Richtermeyer)</b>  <b>The Ongoing Preparation Gap: A Call to Action (Spring 2010 Issue)</b>  Siegel, Gary, James Sorenson, Thomas Klammer, and Sandra Richtermeyer. “The Ongoing Preparation Gap: A Call to Action.” <i>Management Accounting Quarterly</i>. Spring 2010: 29-39. Print.  <b>The Ongoing Preparation Gap: A Guide for Change (Summer 2010 Issue)</b>  Siegel, Gary, James Sorenson, Thomas Klammer, and Sandra Richtermeyer. “The Ongoing Preparation Gap: A Guide for Change.” <i>Management Accounting Quarterly</i>. Summer 2010: 29-39. Print.</p>			
Planning and budgeting	X		
Decision support	X		
Product costing analysis	X		
Performance evaluation	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Customer and product profitability	X		
Process improvement	X		
Performance evaluation	X		
Long term, strategic planning	X		
Computer systems and operations	X		
Cost accounting systems	X		
Mergers, acquisitions, and investments	X		
Project accounting	X		
Financial and economic analysis	X		
Quality systems and controls	X		
• Educating the organization		X	
• Internal consulting		X	
<b>(8) AICPA Core Competencies</b> <i>AICPA Core Competency Framework. (n.d). Mapping of the AICPA Core Competency Framework to the Skills Tested on the CPA Exam. Retrieved from <a href="http://www.aicpa.org/InterestAreas/AccountingEducation/Resources/CurriculumDevelopment/CoreCompetencyFrameworkandEducationalCompetencyAssessmentWebSite/Pages/default.aspx">http://www.aicpa.org/InterestAreas/AccountingEducation/Resources/CurriculumDevelopment/CoreCompetencyFrameworkandEducationalCompetencyAssessmentWebSite/Pages/default.aspx</a></i>			
<b>Functional Competencies</b>			
Decision Modeling	X		
Identifies problems and potential solution approaches	X	X	
Uses quantitative techniques to determine relative importance and likelihood of alternative scenarios	X	X	
Employs model-building to quantify problems or test solutions	X		
Evaluates the cost/benefit of alternative solutions	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Organizes and evaluates information, alternatives, cost/benefits, risks, and rewards	X		
Links data, knowledge, and insights together for decision-making purposes	X		
Objectively identifies strengths, weaknesses, opportunities, and threats associated with a specific scenario, case, or business activity	X		
<b>Risk Analysis</b>	X		
Identifies risks of negative outcomes (including fraud)	X		
Evaluates controls that mitigate risk of negative outcomes through prevention or detection and correction	X		
Assesses and controls unmitigated risks through, for example, designing and applying tests	X		
Communicates the impact of identified risks and recommends corrective action		X	
<b>Measurement</b>	X		
Identifies what needs to be measured	X		
Determines an appropriate, relevant, and reliable measure for the intended use	X		
Measures items using appropriate methods of measurement	X		
Presents the measurement results objectively using applicable standards of disclosure or reporting	X		
Resolves ambiguities		X	
<b>Reporting</b>	X		
Prepares reports with objectivity, conciseness, and clarity	X		
Describes work performed and conclusions reached in a manner that enhances the reports' usefulness	X		
Employs appropriate media in report preparation and presentation	X		
<b>Research</b>	X		
Employs relevant research skills	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Accesses relevant standards, rules, and other information	X		
Evaluates different sources of information and reconciles conflicting or ambiguous data	X		
Analogizes from existing rules to problems not explicitly described	X	X	
Identifies relevant information such as industry trends, internal performance history, benchmarks, and best practices	X		
Leverage Technology to Develop and Enhance Functional Competencies	X		
Accesses appropriate electronic databases to obtain decision-supporting information	X		
Assesses the risk of technology and automated business processes	X		
Uses technology-assisted tools to assess and control risk and document work performed	X		
Builds appropriate models and simulations using electronic spreadsheets and other software	X		
<b>Personal Competencies</b>		X	
<b>Professional Demeanor</b>		X	
Cultivates growth in personal conduct and capabilities		X	
Diagnoses the need for change and takes appropriate action to gain competencies		X	
Measures oneself against evolving standards and meets or exceeds those standards		X	
Accepts professional development as a lifelong process		X	
Performs reliably under changing demands		X	
Evaluates information in a manner free of distortions, personal bias, or conflicts of interest		X	X
Recognizes situations where professional ethical standards apply and behaves accordingly			X
Conducts oneself with honesty			X
Respects confidentiality			X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Commits to quality and efficiency		×	
Manages stress and adapts to unusual demands with composure		×	
Objectively considers others' professional criticism or evaluation		×	
Adheres to a level of personal appearance appropriate to the environment		×	
Identifies and prioritizes career and personal goals and is accountable/learns from mistakes		×	×
<b>Problem Solving and Decision Making</b>		×	
Makes valid and reliable evaluations of information		×	
Uses experience and comparison in forming opinions		×	
Evaluates the significance of evidence or facts		×	
Synthesizes novel or original definitions of problems and solutions as circumstances dictate		×	
Adapts to new contexts and promotes constructive change		×	
Verifies information for problem definition and solution		×	
Proposes and evaluates alternative solutions		×	
Seeks consensus where appropriate		×	
Considers contingencies and future developments		×	
Reasons carefully and thinks effectively in abstract terms or generalizations		×	
Analyzes the impact of potential actions		×	
Considers unconventional approaches and solutions to problems		×	
Knows when to follow directions, question plans, or seek help		×	
<b>Interaction</b>		×	
Recognizes the value of working within diverse, cross-functional teams		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Interacts and cooperates productively and maturely with others		×	
Facilitates free expression and constructive activities of others		×	
Coaches or mentors in appropriate circumstances		×	
Commits to achievement of common goals when working on a team		×	
Accepts suggestions and guidance of team leaders and other members		×	
Recognizes and accommodates the protocols and expectations of teams		×	
<b>Leadership</b>		×	
Motivates others to achieve excellence		×	
Rallies the support of others to accomplish objectives		×	
Chairs teams or volunteers for projects		×	
Values inputs and points of view of others and responds appropriately		×	×
Facilitates development of consensus or compromise as appropriate		×	
Persuades others to a course of action by reasoning or incentive		×	
Practices principles of effective governance		×	×
<b>Communication</b>		×	
Organizes and effectively displays information so that it is meaningful to the receiving party		×	
Expresses information and concepts with conciseness and clarity when writing and speaking		×	
Receives and originates direct and indirect messages as appropriate when listening, reading, writing, and speaking		×	
Uses interpersonal skills to facilitate effective interaction		×	
Places information in appropriate context when listening, reading, writing, and speaking		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Selects appropriate media for dissemination or accumulation of information		×	
<b>Project Management</b>		×	
Determines project goals		×	
Prioritizes and delegates as needed		×	
Allocates project resources to maximize results		×	
Effectively manages human resources that are committed to the project		×	
Effectively facilitates and controls the project process		×	
Measures project progress		×	
Takes corrective action as needed		×	
Sees projects through to completion or orderly transition		×	
Realistically estimates time and resource requirements		×	
Recognizes situations where prompt and determined actions are needed and responds accordingly		×	
<b>Leverage Technology to Develop and Enhance Personal Competencies</b>		×	
Exchanges information using appropriate communication technologies, such as e-mail, discussion boards, and video conferencing		×	
Explores new technologies and their application to business and accounting scenarios		×	
Acquires skills through technology-based learning modules when available and appropriate		×	
Addresses privacy, intellectual property rights, and security issues related to electronic communications		×	
<b>Broad Business Perspective Competencies</b>		×	
<b>Strategic/Critical Thinking</b>		×	
Articulates the principles of the strategic planning process		×	
Identifies strengths, weaknesses, opportunities, and threats associated with a specific scenario, case, or business activity		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Identifies and gathers data from a wide variety of sources to provide insightful interpretations for decision-making		×	
Transfers knowledge from one situation to another		×	
Analyzes and prepares strategic information (e.g., market share, customer satisfaction, competitor actions, product innovation, etc.)		×	
<b>Industry/Sector Perspective</b>		×	
Identifies the economic, broad business, and financial risks of the industry/sector		×	
Articulates an organization's key competitive advantages and disadvantages		×	
Recognizes market forces that make a given organization a candidate for merger, acquisition, and/or strategic alliance		×	
Communicates the financial and nonfinancial performance of an organization's operational processes		×	
<b>International/Global Perspective</b>		×	
Analyzes the cultural and financial impacts of moving into new markets and expanding existing markets		×	
Considers global consequences of human and financial resource management		×	
Analyzes global customer demographics		×	
Identifies and analyzes the social costs and benefits of relevant decisions in the global marketplace/environment			×
<b>Resource Management</b>		×	
Articulates how resource availability affects the organization's business functions, processes, and administrative procedures		×	
Identifies both traditional and nontraditional performance criteria and measurement methods by selecting appropriate success factors and measures of their achievement (See functional competencies.)		×	
Articulates how organizations make decisions to allocate scarce resources, including recognition of both quantitative and qualitative constraints on these decisions (Specific examples include decisions regarding capacity and resource utilization.)		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Identifies and addresses the social costs and benefits of business decisions and evaluates the fiduciary performance of public sector and not-for-profit management		X	
Identifies the effects of market forces on organizations' costs of capital, labor, commodities, etc.		X	
Analyzes the implications of an organization's lack of access to supply sources, financial markets, and intellectual capital (barriers to entry, expansion, or survival)		X	
Facilitates analysis of the organization and the application of continuous improvement principles to the organization		X	
<b>Legal/Regulatory Perspective</b>		X	
Describes the legal and governmental/regulatory environment in which entities operate and the significant costs and benefits of regulation	X		
Analyzes potential threats and opportunities for the organization from changing legal requirements	X	X	
Identifies and explains the political and environmental forces impacting both the accounting standard-setting process and the regulation of the profession	X	X	
Recognizes the dynamic nature of political and environmental forces and their implications for organizations and the ways in which they operate	X	X	
<b>Marketing/Client Focus</b>		X	
Identifies factors that motivate internal and external customers to enter into relationships or continue doing business with an organization		X	
Recognizes and understands employer/client protocol and expectations		X	
Builds good working relationships		X	
<b>Leverage Technology to Develop and Enhance a Broad Business Perspective</b>		X	
Recognizes commonly used information architectures		X	
Recognizes business opportunities and risks associated with electronic commerce		X	
Mines electronic data sources for business and industry information		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Uses technology to develop and present strategic information		×	
<b>(9) AICPA content/skill specifications for the Uniform CPA Examination</b> AICPA, (2009). <i>Content and skill specifications for the Uniform CPA Exam</i> . Retrieved from <a href="http://commons.aahq.org/files/5fa57ab6b8/2011CSOs-SSOs-Final-Release-Version-effective-01-01-2011.pdf">http://commons.aahq.org/files/5fa57ab6b8/2011CSOs-SSOs-Final-Release-Version-effective-01-01-2011.pdf</a>			
<b>AUD</b>			
Demonstrate an awareness and understanding of the process by which standards and professional requirements are established for audit, attestation, and other services performed by CPAs, including the role of standard-setting bodies within the U.S. and those bodies with the authority to promulgate international standards	×		
<ul style="list-style-type: none"> <li>Differentiate between audits, attestation, and assurance services, compilations, and reviews</li> </ul>	×		
<ul style="list-style-type: none"> <li>Differentiate among the professional standards for issuers and non-issuers</li> </ul>	×		
<ul style="list-style-type: none"> <li>Identify situations that might be unethical or a violation of professional standards, perform research and consultations as appropriate, and determine the appropriate action</li> </ul>			×
<ul style="list-style-type: none"> <li>Recognize potentially unethical behavior of clients and determine the impact on the services being performed</li> </ul>			×
<ul style="list-style-type: none"> <li>Demonstrate the importance of identifying and adhering to requirements, rules, and standards that are established by licensing boards within their states, and which may place additional professional requirements specific to their state of practice</li> </ul>			×
<ul style="list-style-type: none"> <li>Appropriately apply professional requirements in practice, and differentiate between unconditional requirements and presumptively mandatory requirements</li> </ul>		×	
<ul style="list-style-type: none"> <li>Exercise due care in the performance of work</li> </ul>		×	×
<ul style="list-style-type: none"> <li>Demonstrate an appropriate level of professional skepticism in the performance of work</li> </ul>		×	×
<ul style="list-style-type: none"> <li>Maintain independence in mental attitude in all matters relating to the audit</li> </ul>			×
<ul style="list-style-type: none"> <li>Research relevant professional literature</li> </ul>	×		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>FAR</b>			
Identify and understand the differences between financial statements prepared on the basis of accounting principles generally accepted in the United States of America (U.S. GAAP) and International Financial Reporting Standards (IFRS)	X		
<ul style="list-style-type: none"> <li>• Prepare and/or review source documents, including account classification, and enter data into subsidiary and general ledgers</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Calculate amounts for financial statement components</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Reconcile the general ledger to the subsidiary ledgers or underlying account details</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Prepare account reconciliation and related schedules; analyze accounts for unusual fluctuations and make necessary adjustments</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Prepare consolidating and eliminating entries for the period</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Identify financial accounting and reporting methods and select those that are appropriate</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Prepare consolidated financial statements, including balance sheets, income statements, and statements of retained earnings, equity, comprehensive income, and cash flows</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Prepare appropriate notes to the financial statements</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Analyze financial statements including analysis of accounts, variances, trends, and ratios</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Exercise judgment in the application of accounting principles</li> </ul>		X	
<ul style="list-style-type: none"> <li>• Apply judgment to evaluate assumptions and methods underlying estimates, including fair value measures of financial statement components</li> </ul>		X	
<ul style="list-style-type: none"> <li>• Produce required financial statement filings in order to meet regulatory or reporting requirements (e.g. Form 10-Q, 10-K, Annual Report)</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Determine appropriate accounting treatment for new or unusual transactions and evaluate the economic substance of transactions in making the determinations</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Research relevant professional literature</li> </ul>	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>REG</b>			
<ul style="list-style-type: none"> <li>Identify situations that might be unethical or a violation of professional standards, perform research and consultations as appropriate, and determine the appropriate action</li> </ul>			×
<ul style="list-style-type: none"> <li>Recognize potentially unethical behavior of clients and determine the impact on the tax services being performed</li> </ul>			×
<ul style="list-style-type: none"> <li>Demonstrate the importance of identifying and adhering to requirements, rules, and standards that are established by licensing boards within their state, and which may place additional professional requirements specific to their state of practice</li> </ul>			×
<ul style="list-style-type: none"> <li>Apply business law concepts in evaluating the economic substance of client transactions, including purchase agreements, loans and promissory notes, sales contracts, leases, side agreements, commitments, contingencies, and assumption of liabilities</li> </ul>	×	×	
<ul style="list-style-type: none"> <li>Evaluate the legal structure of an entity to determine the implications of applicable laws and regulations on how a business is organized, governed, and operated</li> </ul>	×		
<ul style="list-style-type: none"> <li>Evaluate the tax implications of different legal structures for business entities.</li> </ul>	×		
<ul style="list-style-type: none"> <li>Apply analytical reasoning tools to assess how taxes affect economic decisions related to the timing of income/expense recognition and property transactions</li> </ul>		×	
<ul style="list-style-type: none"> <li>Consider the impact of multijurisdictional tax issues on federal taxes</li> </ul>	×		
<ul style="list-style-type: none"> <li>Identify the differences between tax and financial accounting</li> </ul>	×		
<ul style="list-style-type: none"> <li>Analyze information and identify data relevant for tax purposes</li> </ul>	×		
<ul style="list-style-type: none"> <li>Identify issues, elections, and alternative tax treatments</li> </ul>	×		
<ul style="list-style-type: none"> <li>Research issues and alternative tax treatments</li> </ul>	×		
<ul style="list-style-type: none"> <li>Formulate conclusions</li> </ul>		×	
<ul style="list-style-type: none"> <li>Prepare documentation to support conclusions and tax positions</li> </ul>	×		
<ul style="list-style-type: none"> <li>Research relevant professional literature</li> </ul>	×		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>BEC</b>			
<ul style="list-style-type: none"> <li>• Demonstrate an understanding of globalization on the business environment</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Distinguish between appropriate and inappropriate governance structures within an organization (e.g. tone at the top, policies, steering committees, strategies, oversight, etc.)</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Assess the impact of business cycles on an entity's industry or business operations</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Apply knowledge of changes in the global economic markets in identifying the impact on an entity in determining its business strategy and financial management policies, including managing the risks of: inflation, deflation, commodity costs, credit defaults, interest rate variations, currency fluctuation, and regulation</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Assess the factors influencing a company's capital structure, including risk, leverage, cost of capital, growth rate, profitability, asset structure, and loan covenants</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Evaluate assumptions used in financial valuations to determine their reasonableness (e.g. investment return assumptions, discount rates, etc.)</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Determine the business reasons for and explain the underlying economic substance of transactions and their accounting implications</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Identify the information systems within a business that are used to process and accumulate transactional data, as well as provide monitoring and financial reporting information</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Distinguish between appropriate and inappropriate internal control systems, including system design, controls over data, transaction flow, wireless technology, and internet transmissions</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Evaluate whether there is appropriate segregation of duties, levels of authorization, and data security in an organization to maintain an appropriate internal control structure</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Obtain and document information about an organization's strategic planning processes to identify key components of the business strategy and market risks</li> </ul>	X		
<ul style="list-style-type: none"> <li>• Develop a time-phased project plan showing required activities, task dependencies, and required resources to achieve a specific deliverable</li> </ul>		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<ul style="list-style-type: none"> <li>Identify the business and operational risks inherent in an entity's disaster recovery/business continuity plan</li> </ul>	X		
<ul style="list-style-type: none"> <li>Evaluate business operations and quality control initiatives to understand its use of best practices and the ways to measure and manage performance and costs</li> </ul>		X	
<p><b>(10) Skilled for Success?: Raising a 21<sup>st</sup> Century Workforce (21<sup>st</sup> Century Skills: Learning for Life in Our Times)</b>            Skilled for success? Raising a 21st century workforce. (2010, November 23). <i>The Huffington Post</i>, Retrieved from <a href="http://www.huffingtonpost.com/charles-fadel/skilled-for-success-raisi_b_787394.html">http://www.huffingtonpost.com/charles-fadel/skilled-for-success-raisi_b_787394.html</a></p>			
Critical thinking		X	
Communication		X	
Collaboration		X	
Creativity/Innovation		X	
<p><b>(11) Governmental Competencies (Mississippi)</b>            State of Mississippi, State Personnel Board. (n.d.). <i>Competencies template</i>. Retrieved from <a href="http://www.spbrez.ms.gov/_rootlnk/sampcom.pdf">http://www.spbrez.ms.gov/_rootlnk/sampcom.pdf</a></p>			
<b>Technical Proficiency:</b>			
<ul style="list-style-type: none"> <li>Reads, comprehends, evaluates, interprets, and implements federal, state, and local laws, policies, mandates, and regulations relating to professional and technical environmental engineering work</li> </ul>	X		
<ul style="list-style-type: none"> <li>Exhibits a knowledge and understanding of laws, regulation, policies, and procedures relating to applicable accounting responsibilities</li> </ul>	X		
<ul style="list-style-type: none"> <li>Knowledgeable of the applicable state forms, reports and systems</li> </ul>	X		
<ul style="list-style-type: none"> <li>Prepares and maintains various financial records and fiscal reports within accepted accounting standards</li> </ul>	X		
<ul style="list-style-type: none"> <li>Exercises supervision and directs the accounting activities of an accounting division</li> </ul>	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
▶ Reviews various financial records and reports prepared by lower-level staff	X		
▶ Participates in the development and modification of accounting systems	X		
• Plans, prepares, and conducts various auditing functions	X		
• Compiles and verifies data for various financial and fiscal reports	X		
• Possesses knowledge of proper accounting procedures to perform a variety of functions such as budget preparation, purchasing documents, payroll, grants tracking, financial entry preparation for GAAP packet, and fund accounting	X		
▶ Ensures that staff complies with accounting policies and procedures	X		
▶ Maintains internal accounting and auditing systems	X		
▶ Understands and analyzes financial information	X		
Demonstrates the ability to complete written communications which address all relevant material and information in logical fashion		X	
Exhibits the ability to identify alternatives and make technical decisions; if the situation requires, makes the best decision based on incomplete and conflicting information		X	
• Organizational ability		X	
Organizes resources (human, fiscal, and material) in an effective manner needed to provide services to the stakeholders		X	
Recognizes current and potential crisis situations and uses flexibility, creativity, and common sense to reach a workable solution		X	
• Workflow management		X	
• Problem solving/decision-making		X	
Exercises sound reasoning		X	
Seeks to identify and resolve conflict situations		X	
Seeks to identify and address conflict situations		X	
Effectively deals with difficult issues and people		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Effectively develops and utilizes teams to solve problems		×	
Accumulates sufficient evidential matter; using Commission and professional standards and judgment to render a conclusion/opinion to meet the objectives of the assignment, and, if not, documents the reasons why		×	
Exhibits the ability to be receptive to ideas of others		×	
Displays the ability and willingness to work with other officers or other divisions in order to collectively complete assigned tasks or problems as they arise		×	
Analyzes the effects of decisions on all stakeholders		×	×
Orchestrates multiple activities at once to accomplish goals		×	
Assumes responsibility for making financial decision within the agency		×	
<ul style="list-style-type: none"> <li>• Reviews complex fiscal decisions and makes decisions based on sound policies</li> </ul>		×	
<ul style="list-style-type: none"> <li>• Maintains independence in fact and appearance from licensees and other industry representatives as appropriate</li> </ul>			×
▶ Stakeholder relations		×	
▶ Planning		×	
▶ Support services		×	
<b>(12) Journal of Public Budgeting, Accounting &amp; Financial Management (July 1, 2005)</b> <b>A Survey of Governmental Accounting Education Studies</b> Henry, Byron. "A Survey of Governmental Accounting Education Studies." <i>Journal of Public Budgeting, Accounting &amp; Financial Management</i> (2005): n. pag. Web. 27 Dec 2010. < <a href="http://www.allbusiness.com/education-training/curricula/13482321-1.html">http://www.allbusiness.com/education-training/curricula/13482321-1.html</a> >			
Understanding of governmental accounting and auditing issues	×		
Improve financial disclosure practices	×		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Fund accounting	X		
Recognition of social and economic impact on communities of governmental and nonprofit entities			X
<b>(13) CGFM Exam Content Specifications</b> "CGFM Certification." AGA. Advancing Government Accountability, n.d. Web. 27 Dec 2010.			
<b>Governmental Environment</b>			
Organization, structure, and authority of government	X		
Legal and other aspects of the government environment	X		
Understanding of government management systems	X		
Governmental financing process	X		
Public accountability (also under integrity section)			X
Role of ethics in government and ethical practice (also under integrity section)			X
Financial management responsibilities and skills (also under integrity section)			X
Governmental accounting, financial reporting, and budgeting			
<b>General Knowledge</b>	X		
State and local financial accounting and reporting	X		
Federal financial accounting and reporting	X		
Governmental financial management and control			
Internal controls	X		
Internal and external auditing	X		
Performance reporting	X		
Financial and managerial analysis techniques	X		
Financial and managerial	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>(14) CIA exam content specifications</b> "Certified Internal Auditor." <i>The Institute of Internal Auditors</i> . N.p., n.d. Web. 20 Dec 2010. <a href="http://www.theiia.org/certification/certified-internal-auditor/cia-exam-content/">http://www.theiia.org/certification/certified-internal-auditor/cia-exam-content/</a>			
<b>Part I: Role in Governance, Risk, and Control</b>	X		
Attribute standards	X		
Purpose, authority, responsibility of the internal audit activity			X
Independence and objectivity			X
Due professional care			X
Continuing professional development			X
Quality assurance and improvement			X
Risk-based plan	X		
Role in organizational governance	X		
Other roles and responsibilities	X		
Governance, risk, and control knowledge	X		
Planning	X		
<b>Part II: Conducting Audit Engagements</b>			
Conduct engagements	X		
Fraud investigation	X		
Risk and control self-assessment	X		
Monitor engagement outcomes	X	X	
Fraud knowledge elements	X		
Engagement tools	X		
<b>Part III: Business Analysis and Information Technology</b>	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Business processes	X		
Financial accounting and finance	X		
Managerial accounting	X		
Regulatory, legal, and economics	X		
Information technology	X		
<b>Part IV: Business Management Skills</b>	X		
Strategic management	X		
Global business environments	X		
Organizational behavior	X		
Motivation	X		
• Communication		X	
• Performance		X	
• Structure		X	
<b>Management Skills</b>		X	
Group dynamics		X	
Team building		X	
Leadership skills		X	
Personal time management		X	
Negotiation		X	
• Conflict resolution		X	
• Added value negotiating		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>(15) CMA exam curriculum</b> "CMA Certification." IMA. Association of Accountants and Financial Professionals in Business, n.d. Web. 20 Dec 2010. < <a href="http://www.imanet.org/cma_certification/about_the_cma.aspx">http://www.imanet.org/cma_certification/about_the_cma.aspx</a> >			
<b>Part I: Financial Planning, Performance, and Control</b>			
Planning, budgeting, and forecasting	X		
Performance management	X		
Cost management	X		
Internal controls	X		
Professional ethics			X
<b>Part II: Financial Decision Making</b>			
Financial statement analysis	X		
Corporate finance	X		
Decision analysis and risk management	X		
Investment decisions	X		
Professional ethics			X
<b>(16) IES Framework for international standards for professional accountants</b> International Federation of Accountants, International Accounting Education Standards Board. (2009). <i>Framework for international education standards for professional accountants</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			
<b>Definition of competency</b>			

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<p><b>(17) IES 2 Content of Professional Accounting Education Programs</b></p> <p>International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education standard 2</i>. Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a></p>			
<b>Purpose and Scope</b>			
The primary knowledge part of professional accounting education programs is shown under three major headings:			
Accounting, finance, and related knowledge	X		
Organizational and business knowledge	X		
Information technology knowledge and competencies	X		
<b>Introduction</b>			
<b>Life-long Learning</b>			
Financial accounting and reporting	X		
Management accounting and control	X		
Taxation	X		
Business and commercial law	X		
Audit and assurance	X		
Finance and financial management	X		
Professional values and ethics			X
History of the accountancy profession and accounting thought	X		
Content, concepts, structure, and meaning of reporting for organizational operations, both for internal and external use, including the information needs of financial decision makers and a critical assessment of the role of accounting information in satisfying those needs	X		X
National and international accounting and auditing standards	X		
Regulation of accounting	X	X	X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Management accounting, including planning and budgeting, cost management, quality control, performance measurement, and benchmarking	X		
Concepts, methods, and processes of control that provide for the accuracy and integrity of financial data and safeguarding of business assets	X		
Taxation and its impact on financial and managerial decisions	X		
Knowledge of the business legal environment, including securities and companies law, appropriate for the role of the profession in the particular country	X		
Nature of auditing and other assurance services, including risk assessment and fraud detection, and the intellectual and procedural bases for performing them	X		
Knowledge of finance and financial management, including financial statement analysis, financial instruments, capital markets—both domestic and international, and managing resources	X		
Ethical and professional responsibilities of a professional accountant in relation to both the professional and wider public environment			X
Governmental and not-for-profit accounting issues	X		
Use of non-financial performance measures in business	X		
Economics	X		
Business environment	X		
Corporate governance	X		
Business ethics			X
Financial markets	X		
Quantitative methods	X		
Organizational behavior	X		
Management and strategic decision making	X		
Marketing	X		
International business and globalization	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Knowledge of macro- and micro-economics	X		
Knowledge of business and financial markets and how they operate	X		
Application of quantitative methods and statistics to business problems	X		
Understanding of the role of the professional accountant in corporate governance and business ethics	X		X
Understanding of organizations and of the environments in which they operate, including the major economic, legal, political, social, technical, international, and cultural forces and their influences and values	X		X
Understanding of environmental issues and sustainable development	X		
Understanding of interpersonal and group dynamics in organizations, including the methods for creating and managing change in organizations	X		
Understanding of personnel and human resource issues, managing people, project management, and marketing	X		
Understanding of decision support and strategy, including business advice, strategic management, and general management	X		
Understanding of organizational and operational risk	X		
Basic knowledge of international trade and finance and the ways in which international business is conducted, as well as the processes of globalization	X		
Ability to integrate the above components in accomplishing strategic objectives		X	
<b>General knowledge of IT</b>	X		
IT control knowledge	X		
IT control competencies	X		
IT user competencies	X		
One of, or a mixture of, the competencies of the roles of manager, evaluator, or designer of information systems	X	X	
Apply appropriate IT systems and tools to business and accounting problems	X		

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Demonstrate an understanding of business and accounting systems	X		
Apply controls to personal systems	X		
<b>(18) IES 4 Professional Values, Ethics, and Attitudes</b> International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education standard 4</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			
Framework of professional values, ethics, and attitudes for exercising professional judgment and for acting in an ethical manner that is in the best interest of society and the profession			X
<b>Commitment to:</b>			
The public interest and sensitivity to social responsibilities			X
Continual improvement and lifelong learning			X
Reliability, responsibility, timeliness, courtesy, and respect			X
Laws and regulations			X
<b>Should include:</b>			
The nature of ethics			X
Differences of detailed rules-based and framework approaches to ethics, their advantages, and drawbacks			X
Compliance with the fundamental ethical principles of integrity, objectivity, commitment to professional competence, due care, and confidentiality			X
Professional behavior and compliance with technical standards			X
Concepts of independence, skepticism, accountability, and public expectations			X
Ethics and the profession: social responsibility			X
Ethics and law, including the relationship among laws, regulations, and the public interest			X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Consequences of unethical behavior to the individual, to the profession, and to society at large			×
Ethics in relation to business and good governance			×
Ethics and the individual professional accountant: whistle blowing, conflicts of interest, ethical dilemmas, and their resolution			×
<b>(19) IES 8 Competency Requirements for Audit Professionals</b> International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education standard 8</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			
<b>Definitions of Capabilities and Competency</b>			
<b>Knowledge Content</b>			
The knowledge content within the education and development program for audit professionals should include the following subject areas:			
Audit of historical financial information at an advanced level (refer to paragraph 36)	×		
Financial accounting and reporting at an advanced level (refer to paragraph 38)	×		
Information technology (refer to paragraph 40)	×		
The knowledge content of the audit of historical financial information subject area should include the following at an advanced level:			
Best practices in the audits of historical financial information, including relevant current issues and developments	×		
International Standards on Auditing (ISAs) and International	×		
<b>Auditing Practice Statements (IAPs)</b>			
Any other applicable standards or laws	×		
The knowledge content of the financial accounting and reporting subject area should include the following at an advanced level:			

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Financial accounting and reporting processes and practices, including relevant current issues and developments	X		
International Financial Reporting Standards (IFRSs) <sup>4</sup>	X		
Any other applicable standards or laws	X		
<b>The knowledge content of the information technology subject area should include the following:</b>			
Information technology systems for financial accounting and reporting, including relevant current issues and developments	X		
Frameworks for evaluating controls and assessing risks in accounting and reporting systems as appropriate for the audit of historical financial information	X		
<b>Professional Skills</b>			
<b>The skills requirement within the education and development program for audit professionals should include:</b>			
Applying the following professional skills in an audit environment:		X	
• Identifying and solving problems		X	
• Undertaking appropriate technical research		X	
• Working in teams effectively		X	
• Gathering and evaluating evidence		X	
• Presenting, discussing, and defending views effectively through formal, informal, written, and spoken communication		X	
Developing the following professional skills at an advanced level in an audit environment:		X	
• Applying relevant audit standards and guidance		X	
• Evaluating applications of relevant financial reporting standards		X	
• Demonstrating capacity for inquiry, abstract logical thought, and critical analysis		X	
• Demonstrating professional skepticism		X	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
• Applying professional judgment		×	
• Withstanding and resolving conflicts		×	
<b>Professional Values, Ethics, and Attitudes</b>			
Individuals should be able to apply the required professional values, ethics, and attitudes in an audit environment before taking on the role of an audit professional.			
Audit professionals, like all professional accountants, are expected to apply the professional values, ethics, and attitudes outlined in IES 4 throughout their professional careers. During their period of practical experience, they should receive guidance on the:			
Professional approach to ethics			×
Practical application of the fundamental principles			×
Consequences of unethical behavior			×
Resolution of ethical dilemmas			×
These fundamental principles are essential to the development of the profession and society as a whole. The IFAC Code of Ethics for Professional Accountants sets out these fundamental principles:			
Integrity			×
Objectivity			×
Professional competence and due care			×
Confidentiality			×
Professional behavior			×
<b>(20) IESP I Approaches to developing and maintaining professional values, ethics, and attitudes</b> International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education practice statement 1</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>Ethical decision-making requires choosing from a number of alternatives, each with its own consequences for stakeholders</b>			
Enhancing ethics knowledge			X
Developing ethical sensitivity			X
Improving ethical judgment			X
Maintaining an ongoing commitment to ethical behavior			X
<b>Stage 1: Enhancing Ethics Knowledge</b>			X
<b>Stage 1 of the EEC teaches fundamental knowledge on matters concerning professional values, ethics, and attitudes. It focuses on developing an understanding of:</b>			
The environment that influences decisions, including:			X
• Relevant standards and codes			X
• Expectations of ethical and professional conduct			X
The fundamental theories and principles of:			X
• Ethics			X
• Virtues			X
• Individual moral development			X
Competence in this area will be demonstrated by an understanding of traditional ethical concepts and theories, and of those relating to the professional accountant's work.			X
<b>Stage 2: Developing Ethical Sensitivity</b>			X
Students need to develop ethical sensitivity, which is the (a) ability to recognize an ethical threat or issue, (b) awareness of alternative courses of action leading to an ethical solution, and (c) knowledge of the effects of each alternative course of action on stakeholders.			X
Competence in this area will be demonstrated by the ability to identify and to discuss ethical issues and threats, as well as the ability to apply ethics knowledge in the functional disciplines of accounting.			X
<b>Stage 3: Improving Ethical Judgment</b>			X

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Core ethical values are the foundation of professional judgment. Making choices consistent with the fundamental principles set out in the IFAC Code of Ethics requires ethics knowledge and ethical sensitivity.			×
<b>Stage 3 is an application stage, where students and professional accountants learn how to integrate and apply ethics knowledge and ethical sensitivity to form reasoned and well-informed decisions. This stage is designed to assist individuals in applying a well-founded process for making ethical decisions.</b>			×
At Stage 3, IFAC member bodies should consider developing ethics education programs that focus on improving professional judgment by sharpening ethical decision-making skills through the application of ethical theories, social responsibilities, codes of professional conduct, and ethical decision-making models.			×
Competence in this area will be demonstrated by the ability to make ethical judgments and decisions based on an understanding and application of ethics knowledge and ethical sensitivity.			×
<b>Stage 4: Maintaining an Ongoing Commitment to Ethical Behavior</b>			×
Competence will be demonstrated through an understanding of organizational and situational contexts and the application of ethical knowledge, sensitivity, and judgment into ethical behavior in accordance with the IFAC Code of Ethics.			×
<b>(21) IES 6 Assessment of professional capabilities and competencies</b> International Federation of Accountants, International Accounting Education Standards Board. (n.d.). <i>International education standard 6</i> . Retrieved from <a href="http://web.ifac.org/publications/international-accounting-education-standards-board">http://web.ifac.org/publications/international-accounting-education-standards-board</a>			
<b>Candidates need to be able to demonstrate that they:</b>			
Have a sound technical knowledge of the specific subjects of the curriculum	×		
Can apply technical knowledge in an analytical and practical manner		×	
Can extract from various subjects the knowledge required to solve many-sided or complex problems		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Can solve a particular problem by distinguishing the relevant information from the irrelevant in a given body of data		×	
Can, in multi-problem situations, identify the problems and rank them in the order in which they need to be addressed		×	
Appreciate that there can be alternative solutions and understand the role of judgment in dealing with them		×	
Can integrate diverse areas of knowledge and skills		×	
Can communicate effectively with users by formulating realistic recommendations in a concise and logical fashion		×	
Can identify ethical dilemmas			×
<b>(22) Robert Half Small Business Guide</b> Robert Half, (2010). <i>Post recession leadership strategies: a small business guide to hiring, managing, and retaining staff.</i> (RH-0310-0063)			
<b>Entrepreneurial mind-set</b>			
Think creatively, innovate, prioritize across different areas		×	
<b>Team spirit</b>			
Work collaboratively, listen to other viewpoints		×	
<b>Complementary personality</b>			
Positive attitude		×	
<b>Focus on customer service</b>			
Honest, hard-working, personable		×	×
<b>Engagement</b>			
Interested in and committed to bigger picture		×	
Understands correlation between individual effort and company success		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<b>(23) AICPA – PCPS – CPA Firm Competency Model</b> AICPA, Private Company Practice Section. (2007). <i>CPA firm competency model</i> .			
<b>Core Competencies:</b>			
<b>Chargeable Hours/Productivity</b>			
Helps manage and develop the business to ensure improved profitability in the short and long term. Manages and develops personal goals in line with firm objectives		×	
<b>Technical Knowledge/Firm Systems</b>			
Thorough knowledge and understanding of an area of expertise to add value to clients on a practical level. Able to analyze problems, design, and implement practical solutions	×	×	
<b>Client Service</b>			
Responsible for client relationships—proactively works to establish and maintain effective client relationships and continually looks for ways to add value. Manages projects for quality and profitability.		×	
<b>People Development and Teamwork</b>			
Contributes to and supports the development of the team—continually builds and shares knowledge, and engages in ongoing personal career growth.		×	
<b>Business Development</b>			
Identifies client needs and opportunities to sell additional services—engages in effective marketing, business development, and networking activities to drive sales.		×	
<b>(24) National Association of Colleges and Employers – Top Skills for Job Candidates</b> <i>NACE top skills for job candidates</i> . (2010, December 2). Retrieved from <a href="http://www.nacweb.org/Press/Releases/Top_Skills_for_Job_Candidates.aspx?referral=pressroom&amp;menuid=104">http://www.nacweb.org/Press/Releases/Top_Skills_for_Job_Candidates.aspx?referral=pressroom&amp;menuid=104</a>			
Verbal communication skills		×	
Strong work ethic		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Teamwork skills		×	
Analytical skills		×	
Initiative		×	
<b>(25) AICPA FVS Section – Characteristics and Skills of the Forensic Accountant</b> <b>Davis, Charles, Ramona Farrell and Suzanne Ogilby.</b> <i>Characteristics and Skills of the Forensic Accountant.</i> AICPA FVS Section. July 2010. Retrieved from: <a href="http://www.aicpa.org/InterestAreas/ForensicAndValuation/Resources/PractAidsGuidance/DownloadableDocuments/ForensicAccountingResearchWhitePaper.pdf">http://www.aicpa.org/InterestAreas/ForensicAndValuation/Resources/PractAidsGuidance/DownloadableDocuments/ForensicAccountingResearchWhitePaper.pdf</a>			
Note: An asterisk denotes top 5 CPA rankings for characteristics/skills for a FA.			
<b>Characteristics</b>			
Analytical*		×	
Detail-oriented*		×	
Ethical*			×
Responsive		×	
Insightful		×	
Inquisitive*		×	
Intuitive*		×	
Persistent		×	
Skepticism*		×	×
Evaluative		×	
Functions well under pressure		×	
Generates new ideas and scenarios		×	
Confident		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
Makes people feel at ease		×	
Team player		×	
Adaptive		×	
<b>Skills</b>			
Effective oral communicator*		×	
Simplifies the information		×	
Critical/strategic thinker*		×	
Identifies key issues		×	
Auditing skills		×	
Investigative ability*		×	
Effective written communicator*		×	
Investigative intuitiveness*		×	
Synthesizes results of discovery and analysis		×	
Thinks like the wrongdoer		×	
Understands the goals of a case		×	
Tells the story		×	
Sees the big picture		×	
Organizes an unstructured situation		×	
Solves unstructured problems		×	
Research skills		×	
Solves structured problems		×	

	Technical Knowledge	Professional Skills	Int./Resp. Commitment
<p><b>(26) The CPA Journal – Charting the Future of the Accounting Profession: Recruiting and Retaining the Next Generation</b>  “Charting the Future of the Accounting Profession: Recruiting and Retaining the Next Generation”. <i>The CPA Journal</i>. June 2008. Retrieved from: <a href="http://www.nysscpa.org/cpajournal/2008/608/essentials/p65.htm">http://www.nysscpa.org/cpajournal/2008/608/essentials/p65.htm</a></p>			
Emphasis on interpersonal skills		×	
Critical thinking skills		×	
Oral and written communication		×	
<p><b>(27) The CPA Journal – Recruiting and Managing the ‘Why?’ Generation: Gen Y (April 2008)</b>  “Recruiting and Managing the ‘Why?’ Generation: Gen Y”. <i>The CPA Journal</i>. April 2008. Retrieved from: <a href="http://www.nysscpa.org/cpajournal/2008/408/essentials/p68.htm">http://www.nysscpa.org/cpajournal/2008/408/essentials/p68.htm</a></p>			
<b>Current Attributes/Skill Sets of Gen Y</b>			
Strong sense of morality			×
Goal and achievement oriented		×	
Digital natives		×	
Value intelligence and innovation		×	
Value family/work balance		×	
Multitaskers		×	
Group work and collaboration		×	