

Tenth Edition

# Accounting & Auditing Research

## Tools & Strategies



Thomas R. Weirich | Thomas C. Pearson  
Natalie T. Churyk

Weirich | Pearson | Churyk

Accounting & Auditing Research

Tenth Edition

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ACCOUNTING & AUDITING RESEARCH

TENTH  
EDITION

TOOLS & STRATEGIES

**Thomas R. Weirich**

*Central Michigan University*

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# PREFACE

The coronavirus epidemic of 2020 illustrates that monumental changes can occur to the business environment. Data analytics, artificial intelligence, Robotic Process Automation, and blockchain are just a few examples of other important topics impacting the environment. The Sustainability Accounting Standards Board is also stressing the need for sustainability reports for businesses to be included in their financial statements. However, these standards are not considered authoritative standards and are only recommendations.

Accounting standards have changed faster than ever, mastery of international financial reporting standards, and new tax laws have become important, auditing standards at the PCAOB continued to evolve in new directions, a “clarity project” reformed many auditing standards for nonpublic companies, authorities that accountants must research generally continued to expand, and the need for specialized online database research skills continued to increase. Even dramatic changes in the CPA examination have occurred as new topics on technology are being incorporated into the exam and also the new path to licensure for CPAs is currently being considered by the AICPA—CPA Evolution Initiative.

In response to the changes, understanding how to perform accounting, auditing, tax, and financial-related research is more important than ever. Students and young professionals need practice applying knowledge of research techniques to problems or issues allowing them to develop effective research and analysis skills without fear of penalties that increasingly apply in the real world. Success in the profession depends on one’s ability to effectively and efficiently research, analyze, communicate, and master other key business skills.

*Accounting & Auditing Research: Tools & Strategies, Tenth Edition* is an invaluable, step-by-step guide to practical professional research, both in understanding the authorities that govern effective methodology for research and the professional research environment. This text focuses on today’s professional research using online databases, supplemented with other tools in conducting research and analysis. The text is more user-friendly and powerful than ever. The subtitle, *Tools & Strategies*, hints at the text’s awesome integration of teaching and learning capabilities. Thus, as described below, *Accounting & Auditing Research: Tools & Strategies* helps users develop skills to find authoritative solutions to accounting, auditing, fraud investigations, tax, and business problems.

*Accounting & Auditing Research: Tools & Strategies, Tenth Edition* helps develop various skills through reading and practice in applying the information presented. The text reemphasizes the knowledge needed for practical skill development. For example, the text enhances the reader’s critical thinking and effective writing skills through text examples and chapter exercises. Research and analysis skills are also developed by completing exercises presented at the end of each chapter. The skills developed in this text help prepare students to conduct research for their future careers and for the CPA Examination task-based simulations and document review questions.

## New, Revised, and Expanded Features of the Tenth Edition

This Tenth Edition of *Accounting & Auditing Research* has been carefully updated as to new developments in the authoritative literature including end-of-chapter case studies for financial and international research, and further adds data analytics perspectives throughout. The authors believe that data analytics will have a significant impact on the accounting profession including

research as discussed and illustrated throughout this new edition of the text. One can only imagine how artificial intelligence will impact research!

This edition also presents revised chapters, such as refining the research process. While the emphasis of *Accounting & Auditing Research: Tools & Strategies* remains on providing useful guidance and information in conducting practical professional research, enhancements and updates reflect significant changes in accounting research sources, technological advancements, and common professional practices.

Revised for greater effectiveness and readability, the text has enhanced the research tips, quick facts, and problems for assisting the learning process. Research Tips presented in sidebar boxes throughout the text help in doing common research tasks effectively and efficiently. Quick Facts sidebar boxes summarize and expand on chapter concepts to provide new and useful research information. Various exercises are presented at the end of each chapter to reinforce the material and further develop one's skills. The Tenth Edition provides powerful insights and learning tools for developing high-quality applied professional research.

### Major Research Databases Utilized in This Edition

**ACL™ (Educational Version)**—This audit software package is one of the most widely used audit software packages in the world. Both auditors and fraud examiners, as well as most accounting firms and internal audit departments, use it.

**Ai Auditor**—A new artificial intelligence tool database for auditors will be discussed in Chapter 10.

**AICPA Library**—This invaluable database, as presented in Chapter 8, includes a comprehensive collection of the AICPA literature consisting of Professional Standards, Accounting Trends and Techniques, Technical Practice Aids, Auditing and Accounting Guides, and Audit Alerts.

**Checkpoint®**—This professional tax database is covered extensively in Chapter 7. The database contains a comprehensive research library for primary sources and secondary sources in federal taxation, as well as various specialized libraries.

**Codification™**—FASB's codification enables comprehensive, but not complete, research on accounting issues for the private sector.

**e-CFR**—Electronic Code of Federal Regulations provides the rules published in the Federal Register by the departments and agencies of the Federal Government.

**EDGAR**—This database is updated and hosted by the SEC. It allows for extensive research of company filings.

**eIFRS**—This database is extensively covered in Chapter 5 and is used to examine international standards (IFRS).

**IDEA®**—This versatile research database is a powerful data analysis tool used for more effective audits.

**Internet**—The global network of billions of computers and various electronic devices provides extensive information from many sources.

**Nexis Uni®**—This research database is a subset of the massive legal and commercial LexisNexis® databases. The databases are presented in Chapter 6, because of its business library that provides extensive information on public companies.

**SAS Enterprise Miner**—A data-mining tool that aids in the creation of predictive and descriptive models for fraud detection is also covered in Chapter 10.

## Accounting Curriculum Development of Research and Analytical Skills

Adopted over the years by many universities, *Accounting & Auditing Research: Tools & Strategies* has also assisted many public accounting firms and corporations in their staff training programs. The text guides the reader, step-by-step, through the research process. Faculty recognizing the essential need to incorporate research and analytical skills in the accounting curriculum will want their students to use this text for a comprehensive and systematic approach for students to learn research skills and analysis needed in the profession.

This text has versatile usage in most areas of the accounting curriculum. Many faculty assign the text to supplement traditional accounting courses, such as intermediate accounting, advanced accounting, governmental accounting, auditing, theory, tax, or other courses. Alternatively, *Accounting & Auditing Research: Tools & Strategies, Tenth Edition* provides the information, insights, and research opportunities for a separate accounting and auditing research course.

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Mahalo is extended to all those entities granting copyright permission to use screen images to enhance the readers' ability to understand. These entities include the American Institute of Certified Public Accountants, Financial Accounting Foundation, MindBridge Auditor, IAAER, IDEA, LexisNexis, SAS, and Thomson Reuters.

Special thanks go to our supportive spouses and other family members, who provided encouragement during the writing of this edition. The authors thank members of the profession who have provided feedback on prior editions or a draft of a chapter in this edition. Finally, we appreciate the work of the professional staff at Wiley who have also enhanced this text.





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# Introduction to Applied Professional Research

## LEARNING OBJECTIVES

After completing this chapter, you should understand:

- The importance of research in the daily activities of the professional accountant.
- The definition and nature of professional accounting research.
- The navigation steps to narrow one’s research.
- The U.S. Securities and Exchange Commission’s view on the importance of research.
- The role of research within a public accounting firm or within an accounting department of a business or governmental entity.
- The basic steps of the research process.
- The importance of critical thinking and effective communication skills.
- The role of data analytics in accounting and auditing research.
- The importance of research on the U.S. Certified Public Accountant (CPA) exam.

Today’s accounting professionals, like other professionals, are witnessing a major transformation due to changes in the law, services, and technologies, and an ever-increasing number of professional standards. In the altered accounting and auditing landscape brought about by these dramatic changes, understanding how to perform accounting, auditing, tax, and business research is more important than ever. To develop effective skills in research and analysis, students and professionals need to apply their knowledge of research to everyday practical problems. In addition to accounting, auditing, and tax compliance, accountants are involved in such services as attestation reviews, forensic accounting, fraud examinations, and tax planning. Listening effectively and understanding opposing points of view are also critical skills for accountants, who often must present and defend their views through formal and informal communications. Professional research and communication skills are essential in this environment.

Varying views and interpretations exist as to the meaning of the term *research*. In the accounting profession, research points to what accounting practitioners do as a normal, everyday part of their job. In today’s environment, to become proficient in accounting, auditing, and tax research, they must possess the skills required to use various professional databases, which are increasingly available on the web. Using professional databases for research is even required in the CPA exam.

The professional accountant, whether in public accounting, industry, or government, frequently becomes involved with the investigation and analysis of an accounting, auditing, or tax issue. Resolving these issues requires formulating a clear definition of the problem, using

**QUICK FACTS**

Accounting research combines the use of accounting theory and existing authoritative accounting literature.

professional databases to search for the relevant authorities, reviewing the authoritative literature, evaluating alternatives, drawing conclusions, and communicating the results. This research process often requires an analysis of very complex and detailed issues, and researching such issues challenges the professional's critical thinking abilities. The professional must therefore possess the expertise to understand the relevant facts and render a professional judgment, even when no single definitive answer or solution exists. In such cases, the researcher applies professional judgment in the development of an answer to the issue or problem at hand.

## What Is Research?

Professional accountants conduct applied research primarily related to practice issues. The objective of conducting any type of research, including professional accounting, auditing, and tax research, is a systematic investigation of an issue or problem utilizing the researcher's professional judgment. Here are two cases of generalized research problems that serve as examples of the types of research questions confronting the accounting practitioner:

1. A client is engaged in land sales, primarily commercial and agricultural. The company recently acquired a retail land sales project under an agreement stating that, if the company did not desire to pursue the project, the property could be returned with no liability to the company. After the company invests a considerable amount of money into the project, the state of the economy concerning the market for retail land sales declines, and the company decides to return the land. As a result, the client turns to you, the CPA, and requests the proper accounting treatment of the returned project. At issue is whether the abandonment represents a disposal of a segment of the business, an unusual and nonrecurring extraordinary loss, or an ordinary loss. The client may also want to understand the tax consequences.
2. A controller for a construction contracting company faces a problem. The company pays for rights allowing it to extract a specified volume of landfill from a project for a specified period of time. How should the company classify the payments for such landfill rights in its financial statements?<sup>1</sup>

Research is often classified as either theoretical or applied. *Theoretical research* investigates questions that appear interesting to the researcher, generally an academician, but that may have little or no current practical application. Theoretical researchers attempt to create new knowledge in a subject area, sometimes using empirical data based on experimentation or observation. For example, a theoretical researcher may conduct a controlled experiment to investigate the hypothesis that the U.S. Securities and Exchange Commission's recommendation that firms provide disclosures on quantitative critical accounting estimates impact informed users.<sup>2</sup> Thus, theoretical research adds to the body of knowledge and may ultimately contribute directly or indirectly to practical problem solutions. Theoretical research using empirical research studies based on experimentation or observation is frequently reviewed and evaluated by standard-setting bodies in drafting authoritative accounting and auditing pronouncements.

*Applied research*, the focus of this text, investigates an issue of immediate practical importance. One type of applied research is known as *a priori (before-the-fact) research*, which is conducted before the client actually enters into a transaction. For example, assume that a public accounting firm needs to evaluate a client's proposed new accounting treatment for environmental costs. The client expects an answer within two days on the acceptability of the new method and its impact on

<sup>1</sup>AICPA, *Technical Practice Aids*.

<sup>2</sup>Glendening, Matthew, Elaine Mauldin, and Kenneth Shaw, "Determinants and Consequences of Quantitative Critical Accounting Estimates Disclosure", *The Accounting Review*, 94, no. 5 (September 2019).



the financial statements. In such a case, a member of the accounting firm’s professional staff would investigate to determine whether the authoritative literature addresses the issue. If no authoritative pronouncement exists, the accountant would develop a theoretical justification for or against the new method.

Applied research relating to a completed event is known as *a posteriori (after-the-fact) research*. For example, a client may request assistance preparing his or her tax return for a transaction that was already executed. Frequently, many advantages accrue to conducting a priori rather than a posteriori research. For example, if research reveals that a proposed transaction will have an unfavorable impact on financial statements, the client can abandon the transaction or possibly restructure it to avoid undesirable consequences. These options are not available, however, after a transaction is completed.

Society needs both theoretical and applied research. Both types of research require sound research design to effectively and efficiently resolve the issue under investigation. No matter how knowledgeable professionals become in any aspect of accounting, auditing, or tax, they will always face research challenges. However, using a systematic research approach will greatly help in resolving the problem.

**QUICK FACTS**

Professional accountants conduct primarily applied research related to practice issues.

**Research Questions**

Individual companies and CPA firms conduct research to resolve specific accounting, auditing, and tax issues, either for themselves or for clients. The results of this research may lead to new firm policies or procedures in the application of existing authorities. In the research process, the practitioner/researcher must answer the following basic questions:

1. Do I have complete knowledge to answer the question, or must I conduct research to consult authoritative references?
2. What is the tax law or authoritative literature?
3. Does the law or authoritative literature address the issue under review?
4. Where can I find the law or authoritative literature and effectively and efficiently develop a conclusion?
5. Where can I find international accounting and auditing standards?
6. If no law or authoritative literature directly addresses the topic, what approach do I follow in reaching a conclusion?
7. What professional databases or other sources on the Internet should I access for the research process?
8. If more than one alternative solution exists, what alternative do I select?
9. Can I utilize data analytic tools to assist my research?
10. How do I document my findings or conclusions?

The purpose of this text is to provide an understanding of the research process and the research skills needed to answer these questions. The whats, whys, and hows of practical professional accounting, auditing, and tax research are discussed with an emphasis on the following topics:

- How do I research effectively?
- How do I apply a practical research methodology in a timely manner?
- What are the generally accepted accounting principles (GAAP), auditing standards, and tax authorities?

**RESEARCH TIPS**

Successful research requires asking and answering various questions to find and apply relevant authorities.

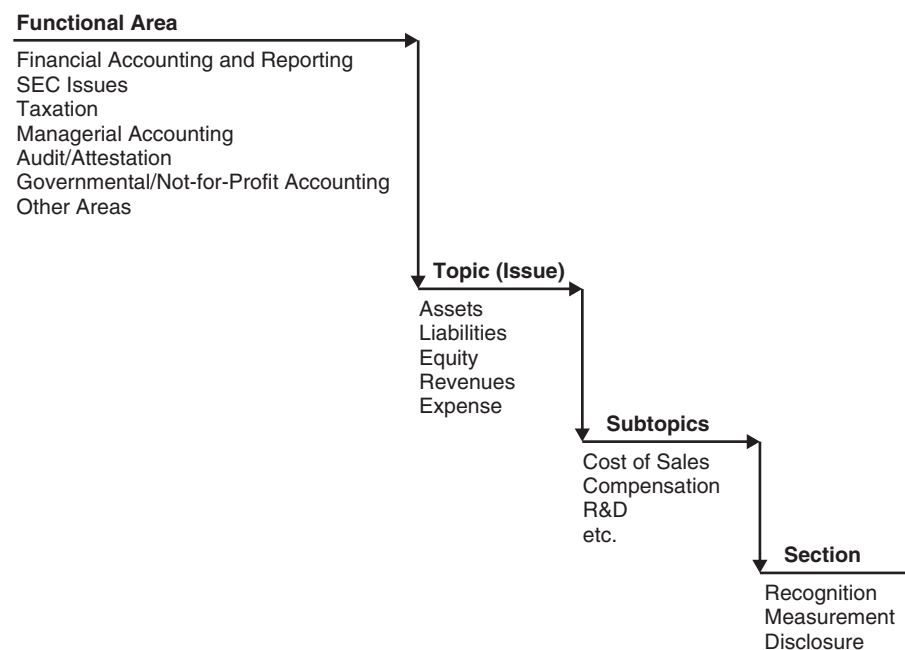


- What constitutes substantial authoritative support?
- What are the available sources of authority for accounting, auditing, and tax?
- What databases are available for finding relevant authorities or assisting in researching a problem?
- What role does the Internet (the information superhighway) have in the modern research process?

In conducting research for an issue or question at hand, one of the primary tools utilized in financial accounting research is the Financial Accounting Standards Board (FASB) Codification System™ (discussed in detail in Chapter 4). In addition to understanding the Codification's structure, navigating through the authoritative literature is necessary to analyze a variety of questions or issues. A useful instrument to help focus or narrow your research is a navigation guide such as the one depicted in Figure 1.1.

In navigating the literature or Codification, researchers should first focus on the functional area(s) that will guide them to the appropriate professional literature and/or database, as well as the authoritative body that issued the related literature. For instance, is the problem or issue under review a financial accounting question, managerial accounting issue, or technical Securities and Exchange Commission (SEC) problem? Once the functional area is determined, the next step in the navigation is to determine the broad categorization of the topic, such as an asset, a revenue, or an expense issue. Then, focusing on the subtopic allows for further segregation and navigation of the issue. For example, if the topical area is an expense issue, the subtopic might relate to cost of sales, compensation, or research and development.

The final phase in the navigation process is to focus on the section or nature of the content, which is often a recognition, measurement, or disclosure issue. For instance, if the functional area is financial accounting, the topic is assets, and the subtopic is financial instruments, the section or nature might address the proper measurement of the financial instrument either at cost or at fair value. The navigation guide is explained in detail later in the text.



**FIGURE 1.1** Research Navigation Guide.

**ACCOUNTING GUIDANCE**Standard Setter

Federal Accounting Standards Advisory Board (FASAB)

Financial Accounting Standards Board (FASB)

Governmental Accounting Standards Board (GASB)

International Accounting Standard Board (IASB)

U.S. Securities & Exchange Commission (SEC)

Responsibility

Responsible for accounting standards for federal government entities

Responsible for accounting standards for private and public companies

Responsible for accounting standards for state and local government entities

Responsible for the issuance of International Financial Reporting Standards

Responsible for accounting and disclosure standards for public companies in addition to standards of the FASB

**AUDIT GUIDANCE**

American Institute of CPAs (AICPA)

Responsible for auditing standards for private company audits

Governmental Accountability Office (GAO)

Responsible for audits of governmental entities

International Auditing & Assurance Standards Board (IAASB)

Responsible for the establishment of international auditing standards

Public Company Accounting Oversight Board (PCAOB)

Responsible for auditing standards for public company audits

**TAX GUIDANCE**Primary tax sources

Statutory sources

Items for research

the Internal Revenue Code, the U.S. Constitution, and tax treaties

Administrative sources

Treasury Regulations, Revenue Rulings, and Revenue Procedures

Judicial sources

Case decisions from the various courts

**FIGURE 1.2** Authoritative Guidance for Research.

Also presented in the text is a practical research approach, along with discussions of various research tools and demonstrations of the approach using a number of end-of-chapter questions and exercises. The text also addresses the importance of critical thinking and effective writing skills that the researcher should possess and utilize in executing the research process. Specific tips on developing these skills are presented in subsequent chapters.

As you read the following chapters, Figure 1.2 presents an overview of the accounting, auditing, and tax guidance that you will encounter in conducting your research.

## Nature of Professional Research

This text focuses on applied research, known as *professional accounting research*. Today's practitioner must conduct research effectively and efficiently to arrive at appropriate and timely conclusions regarding the issues at hand. Effectiveness is critical in order to confirm the following:

- The proper recording, classification, and disclosure of economic events.
- Compliance with authoritative pronouncements.
- The absence of preferable alternative procedures.



**QUICK FACTS**

The accounting researcher is an investigator with strong analytical and communication skills.

**RESEARCH TIPS**

Conducting research requires the use of electronic databases often available on the web.

Efficiency is needed to meet deadlines and manage research costs. Additional examples of issues frequently encountered by the practitioner include such questions as the following:

- What are the accounting, auditing, or tax implications of a new transaction?
- Does the accounting treatment of the transaction conform to GAAP?
- Does the tax treatment conform to the law?
- What are the disclosure requirements for the financial statements or tax returns?
- What is the auditor's responsibility when confronted with supplemental information presented in annual reports but not as part of the basic financial statements?
- What responsibilities and potential penalties do tax accountants face?
- How does an accountant proceed in a fraud investigation?

Responding to these often complicated questions has generally become more difficult and time-consuming as the financial accounting and reporting requirements, auditing standards, and tax authorities increase in number and complexity. The research process is often complicated further when the accountant or auditor researches a practical issue or question for which no applicable authoritative literature exists.

As a researcher, the accountant should possess certain desirable characteristics that aid in the research process: inquisitiveness, open-mindedness, thoroughness, patience, and perseverance.<sup>3</sup> *Inquisitiveness* is needed while gathering the relevant facts to obtain a clear picture of the research problem. Proper problem definition or issue identification is the most critical component in research. An improperly stated issue usually leads to the wrong conclusion, no matter how carefully the research process is executed. Likewise, the researcher needs to be *open-minded* and avoid drawing conclusions before the research process is completed. A preconceived solution can result in biased research in which the researcher merely seeks evidence to support the position rather than searching for the most appropriate solution. The researcher must carefully examine the facts, obtain and review authoritative literature, evaluate alternatives, and then draw conclusions based on the research evidence. The execution of an efficient research project requires *thoroughness* and *patience*. This requirement is emphasized both in the planning stage, where all relevant facts are identified, and in the research stage, where all extraneous information is controlled. Finally, the researcher must work *steadfastly* in order to finish the research on a timely basis.

Perhaps the most important characteristic of the research process is its ability to add value to the services provided. A professional auditor not only renders an opinion on clients' financial statements but also identifies available reporting alternatives that may benefit them. A professional tax accountant not only prepares the returns but also suggests tax planning for future transactions. The ability of a researcher to provide relevant information becomes more important as the competition among accounting firms for clients intensifies and the potential significance and enforcement of penalties become increasingly common. Researchers who identify reporting alternatives that provide benefits or avoid pitfalls will provide a strong competitive edge for their employers. Providing these tangible benefits to clients through careful and thorough research is essential in today's accounting environment.

## Critical Thinking and Effective Communication

Researchers need to know how to think; that is, they must identify the problem or issue, gather the relevant facts, analyze the issue(s), synthesize and evaluate alternatives, develop an appropriate

<sup>3</sup>Wanda Wallace, "A Profile of a Researcher," Auditor's Report, American Accounting Association (Fall 1984): 1-3.

solution, and effectively communicate the desired information. Such abilities are essential for the professional accountant in providing services in today’s complex, dynamic, and changing profession. In this environment, the professional accountant must possess the ability not only to think critically, which includes being able to grasp a variety of contexts and circumstances, but also apply and adapt various accounting, auditing, tax, and business concepts and principles to the circumstances in order to develop the best solutions. The development and nurturing of critical thinking skills will also contribute to the lifelong learning that today’s professionals need to nurture.

Research efforts may culminate in memos or work papers, letters to clients, journal articles, or firm reports. Whatever its form, the dissemination of your research will require effective communication skills for both oral presentations and written documents. Your research output must demonstrate coherence, conciseness, appropriate use of Standard English, and achievement of the intended purpose. Critical thinking and effective writing skills are the focus of Chapter 2.

RESEARCH TIPS

Successful research requires critical thinking and effective communication.

Economic Consequences of Standards Setting

It is often desirable, if not necessary, to investigate the economic consequences of accounting standard setting. Without this exploration, the establishment of a particular accounting standard may produce unintentional or unforeseen economic consequences. And accounting standards can have far-reaching economic consequences, as was demonstrated by the FASB in addressing such issues as restructuring costs, financial instruments and fair value accounting, stock options, and postemployment benefits. Difficulties sometimes arise in the proper accounting for the economic substance of a transaction within the current accounting framework.

Because financial statements must conform to GAAP, the standard-setting bodies, such as the FASB or Governmental Accounting Standards Board (GASB), conduct research on the economic impact of any proposed standard. For example, the handling of off-balance sheet transactions has sometimes encouraged the selection of one business decision over another, producing results that may be less oriented to the users of financial statements.

In today’s complex business and legal environment, the accounting and auditing researcher should understand the economic and social impact that accepted accounting alternatives may have on society in general and on individual entities in particular. Such economic and social concerns are becoming a greater factor in the evaluation and issuance of new accounting standards, as discussed more thoroughly in Chapter 4.

Role of Research in the Accounting Firm

Although accountants often conduct research in education, industry, and government, the particularly important areas for a public accounting firm are accounting, auditing, and tax. Reflecting today’s society, significant changes have occurred in the accounting environment. The practitioner today requires increased knowledge because of the heightened complexity of many business transactions, the proliferation of new authoritative pronouncements, and advances in technology. As a result, practitioners should possess the ability to conduct efficient research. An accountant’s responsibility to conduct accounting/auditing research is analogous to an attorney’s responsibility to conduct legal research. For example:

- A lawyer should provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness, and preparation reasonably necessary for the representation.<sup>4</sup>

<sup>4</sup>Model Rules of Professional Conduct of the American Bar Association, Rule One.

**QUICK FACTS**

The accounting practitioner may be held liable for inappropriate or incomplete accounting or tax research.

- A California court interpreted the research requirement to mean that each lawyer must have the ability to research the law completely, know the applicable legal principles, and find “the rules” which, although not commonly known, are discovered through standard research techniques.<sup>5</sup> Thus, in the California case, the plaintiff recovered a judgment of \$100,000 in a malpractice suit that was based on the malpractice of the defendant in researching the applicable law.
- The U.S. SEC has also stressed the importance of effective accounting research through an enforcement action brought against an accountant. In Accounting and Auditing Enforcement Release No. 420, the SEC instituted a public administrative proceeding against a CPA. The SEC charged that the CPA failed to exercise due care in the conduct of an audit. The enforcement release specifically stated the following:

In determining whether the [company] valued the lease properly, the [CPA] failed to consult pertinent provisions of GAAP or any other accounting authorities. This failure to conduct any research on the appropriate method of valuation constitutes a failure to act with due professional care.

Thus, the professional accountant must possess the ability to use relevant sources to locate applicable authoritative pronouncements or law and to ascertain their current status. Due to the expanding complex environment and proliferation of pronouncements, many accounting firms have created a research specialization within the firm. Common approaches used in practice include the following:

**RESEARCH TIPS**

At times, conducting research will require consulting with research specialists.

1. The staff at the local office conducts day-to-day research, whereas industry-specific questions are referred to industry specialists within the firm.
2. Selected individuals in the local or regional office are designated as research specialists, and all research questions within the office or region are brought to their attention for research.
3. The accounting firm establishes at the firm’s executive office a centralized research function that handles technical questions for the firm as a whole.
4. The firm maintains computerized files of previous research to provide consolidated expertise on how the firm has handled issues in the past.

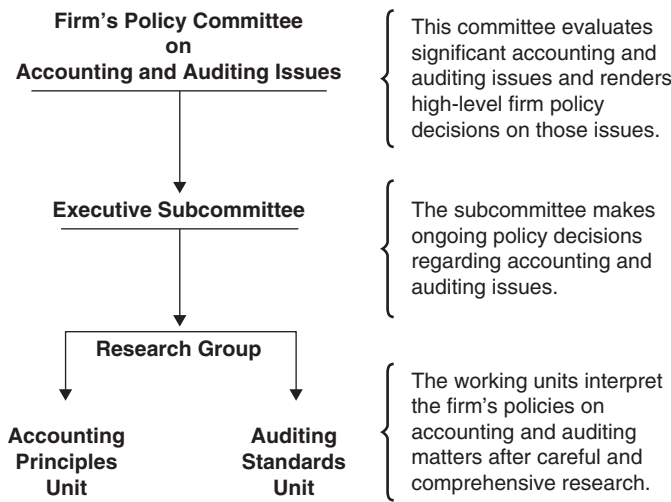
The task of accurate and comprehensive research is often complex and challenging. However, one can meet the challenge by becoming familiar with the suggested research process to solve the accounting, auditing, or tax issues.

Figure 1.3 depicts a more in-depth look at a typical organizational structure for policy decision-making and research on accounting and auditing matters in a multioffice firm that maintains a research department. The responsibilities of a firm-wide accounting and auditing policy decision function include:

- Maintaining a high level of professional competence in accounting and auditing matters.
- Developing and rendering high-level policies and procedures on accounting and auditing issues for the firm.
- Disseminating the firm’s policies and procedures to appropriate personnel within the firm on a timely basis.
- Supervising the quality control of the firm’s practice.

Research plays an important role in this decision-making process. A CPA firm’s policy committee and executive subcommittee, as shown in Figure 1.3, generally consist of highly competent partners with many years of practical experience. The policy committee’s primary function is to

<sup>5</sup>Smith and Lewis, 13 Cal. 3d 349, 530 P.2d 589, 118 Cal Rptr. 621 (1975).



**FIGURE 1.3** Organizational Framework for Policy Decision-Making and Research Within a Typical Multioffice Accounting Firm.

evaluate significant accounting and auditing issues and to establish firm-wide policies on these issues. The executive subcommittee's function is to handle the daily ongoing policy (lower-level) decisions for the firm as a whole. The responsibility of the accounting and auditing research personnel is to interpret firm policies in the context of specific client situations. Frequently, technical accounting and auditing issues that arise during the course of a client engagement are resolved through research conducted by personnel assigned to the engagement. When a local office cannot resolve a research matter satisfactorily, assistance is requested from the firm's specialized research units. These units conduct careful and comprehensive research in arriving at the firm's response to technical inquiries. This response is then disseminated to the various geographic offices of the firm for future reference in handling similar technical issues.

Practical accounting and auditing research is not confined to public accounting firms. All accountants should possess the ability to conduct effective research and develop logical and well-supported conclusions on a timely basis. The basic research process is similar whether the researcher is engaged in public accounting, management accounting, governmental accounting, auditing, or even taxation.

## Skills Needed for the CPA Exam and Practice

In the licensing of a new CPA, state laws or regulations typically require a combination of education, examination, and experience. State legislatures, state boards of accountancy, the Public Company Accounting Oversight Board (PCAOB), and the American Institute of Certified Public Accountants (AICPA) have strived to assure the professional competencies of CPAs. The role that a CPA plays in society is so significant that several years ago the AICPA Board of Examiners identified certain skills that the beginning CPA must possess in order to protect the public interest, including understanding, research, analysis, synthesis (deductive reasoning), judgment, and communication.

Recall that the U.S. CPA exam consists of four equal sections: (1) Business Environment (BEC), (2) Financial Accounting and Reporting (FAR), (3) Auditing, and (4) Regulation. Seven to eight task-based simulation problems provide half of each section of the exam, except BEC, which has more multiple-choice questions. Two specialized types of task-based simulations are research problems and "document review simulations." Because CPAs spend a lot of time preparing and

reviewing documents from e-mails, invoices, letters, memos, and reports, document review problems attempt to provide realistic scenarios, which the CPA candidate must review and determine either what information is relevant or edit information that is needed in a document.

Skills in practice identified for the CPA in the 2018 CPA Exam Blueprints fall into three basic skill categories: (1) remembering and understanding, (2) application, and (3) analysis and evaluation. In both BEC and FAR parts of the CPA exam, application skills are at least half, analysis either a quarter or a third, and remembering and understanding the smaller remaining amount. In both the auditing and the regulation parts of the CPA exam, they test roughly one-third for each of these three skill categories, with application (and evaluation for auditing) skills typically slightly higher. Task-based simulation problems test on application, analysis, or evaluation skills because the profession is demanding stronger critical thinking skills from new hires in identifying issues and forming reasoned conclusions.

*Remembering* is acquired through education, experience, and familiarity with information. *Understanding* is the process of using concepts to address the facts or situation. The CPA exam has reduced the importance of *remembering and understanding* information because someone who can easily memorize information doesn't always do well when they go to work.

*Application* is the use or demonstration of knowledge, concepts, or techniques. Application skills include research and technological skills. Research skills include recognizing keywords, searching through large volumes of electronic data, and organizing data from multiple sources. Technological skills are needed in using spreadsheets, databases, and computer software. Application represents about one-half of the skills tested in the CPA exam.

*Analysis* involves determining compliance with standards, noticing trends and variances, and performing appropriate calculations. It examines the interrelationship of areas to find causes or to find relevant evidence. *Evaluation* is the assessment of problems and use of judgment to draw conclusions. Judgment includes devising a plan of action for any problem, identifying potential problems, and applying professional skepticism. Evaluation questions are very limited, just appearing in the auditing part of the CPA exam. Evaluation may include solving unstructured problems, examining alternative solutions, developing logical conclusions, and integrating information to make decisions.

Various communication skills important for practice previously identified by the AICPA include oral, written, graphical, and supervisory skills. Oral skills include attentively listening, presenting information, asking questions, and exchanging technical ideas within the firm. Written skills include organization, clarity, conciseness, proper English, and documentation skills. Graphical skills involve organizing and processing symbols, graphs, and pictures. Supervisory skills include providing clear directions, mentoring staff, persuading others, negotiating solutions, and working well with others.

In the CPA exam, task-based simulations might require students to:

- Interpret and apply the relevant professional literature to specific fact patterns in various cases.
- Identify relevant information and draw appropriate conclusions from searching the professional literature.
- Recognize business-related issues as they evaluate an entity's financial condition.
- Identify, evaluate, analyze, and process an entity's accounting and reporting information.

Also in the CPA exam, candidates must demonstrate their research abilities by accessing various professional databases and searching through the legal or professional literature in order to identify the relevant authorities and to draw conclusions related to the issues at hand. A candidate's research skills are tested by completing task-based simulations. (The appendix to this chapter provides an overview of the basic format of the CPA exam's simulations, which are presented throughout subsequent chapters.) This text will help you not only to develop the necessary

#### QUICK FACTS

The CPA exam simulations (case studies) require conducting research by using professional literature in computerized databases.

skills to utilize the databases needed for the CPA exam but also to acquire and refine the necessary skill sets and competencies necessary for your professional career. The following chapters further focus on these skills, with particular emphasis on those related to research.

## Overview of the Research Process

The research process in general is often defined as a scientific method of inquiry, a systematic study of a field of knowledge in order to discover scientific facts or principles. An operational definition of research encompasses the following process<sup>6</sup>:

- Investigate and analyze a clearly defined issue or problem.
- Use an appropriate scientific approach.
- Gather and document adequate and representative evidence.
- Employ logical reasoning in drawing conclusions.
- Support the validity or reasonableness of the conclusions.

### RESEARCH TIPS

Conduct each step in the research process carefully.

With this general understanding of the research process, practical accounting, auditing, and tax research is defined as follows:

Accounting, auditing, or tax research: A systematic and logical approach employing critical thinking skills to obtain and document evidence (authorities) underlying a conclusion relating to an accounting, auditing, or tax issue or problem.

The basic steps in the research process are illustrated in Figure 1.4, and an overview is presented in the following sections. As indicated in the figure, carefully document each step of the research process. When executing each step, the researcher may also find it necessary to refine the work done in previous steps. The refinement of the research process is discussed in more detail in Chapter 9.

### QUICK FACTS

The research process is appropriate for any type of accounting or tax issue confronted.

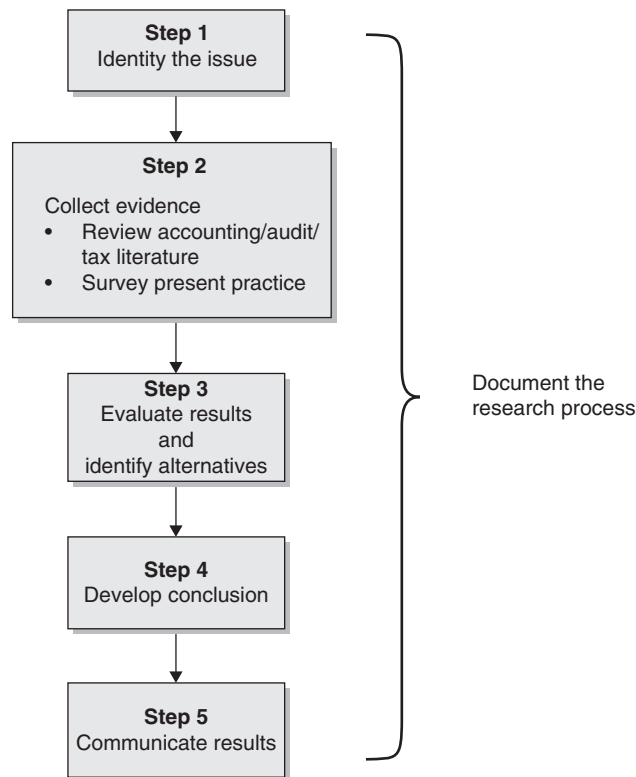
## Step One: Identify the Relevant Facts and Issues

The researcher's first task is to gather the facts surrounding the problem. However, problem-solving research cannot begin until the researcher clearly and concisely defines the problem. Researchers need to analyze and understand the why and what about the issue to begin the research process. Without knowing why the issue was brought to their attention, they might have difficulty knowing what to research. Novice researchers may find it difficult to distinguish between relevant and irrelevant information, and in those cases, it is advisable to err on the side of gathering too many facts rather than too few. As researchers become more knowledgeable, they become more skilled at quickly isolating the relevant facts. Data analytics, as discussed in greater detail in subsequent chapters, may assist in understanding the issue/problem under review.

In most cases, the basic issue is identified before the research process begins, such as when a client requests advice about the proper handling of a transaction. However, further refinement of the exact issue is often required. The refining of the issue is referred to as *problem distillation*, whereby a general issue is restated in sufficiently specific terms. If the statement of the issue is too broad or general, the researcher is apt to waste valuable time consulting irrelevant sources.

<sup>6</sup>David J. Luck, Hugh C. Wales, and Donald A. Taylor, *Marketing Research* (Englewood Cliffs, NJ: Prentice Hall, 1961), p. 5.



**FIGURE 1.4** The Research Process.**RESEARCH TIPS**

Use electronic databases and the Internet to help collect the evidence.

Factors to consider in the identification and statement of the issue include the exact source of the issue, its justification, and the determination of its scope. To successfully design and execute an investigation, state the critical issue clearly and precisely. As explained in Chapters 4 and 6, many research tools, especially computerized databases, are indexed by a set of descriptive words. Because keywords aid in reference identification, failure to use the appropriate keywords or understand the facts in sufficient detail can cause a researcher to overlook important authorities. Undoubtedly, writing a clear, concise statement of the problem is the most important task in research. Failure to frame all the facts can, and often will, lead to an erroneous conclusion.

**Step Two: Collect the Evidence****QUICK FACTS**

The Internet opens a vast world of information for the professional accountant/researcher.

As stated, problem-solving research cannot begin until the researcher accurately defines the problem. Once the issues are adequately defined, the researcher is ready to proceed with step two, the collection of evidence. This step usually encompasses a detailed review of relevant authoritative accounting or auditing literature and a survey of present practice. In collecting evidence, the researcher should be familiar with the sources available, identify which to use, and know the order in which to examine them and other applicable authorities.

The early identification of the relevant sources aids in the efficient conduct of the research. A number of research tools, including electronic databases and the Internet, that aid in the collection of evidence are identified and discussed in detail in Chapters 4–8. With the Internet growing at an exponential rate as new websites are added every day, this tool provides an increasingly significant impact on the way people, including accountants, auditors, and tax professionals, conduct business. The Internet permits accounting professionals to use discussion groups or webinars whereby professionals discuss topics on accounting, auditing, or tax issues. Accountants use the

Mark Jensen, CPA, states that the Internet has become the “greatest equalizer” because it provides his small practice with many of the research tools formerly utilized only by the big international accounting firms. “It lets me offer resources and services to my clients and future clients that the big firms have to offer,” says Jensen.

Mark was asked by a would-be entrepreneur to help write a business plan to open a computer software store in southern New York State. Both Jensen and the client were computer literate, but neither of them knew much about the software business. So Mark accessed the Internet and, within an hour, was deluged with information about software stores.

A word search for “software” yielded more than one hundred articles about computer stores, including one from the *Washington Post* about a software store start-up. Jensen also gleaned information about software stores from the small business forums on the Internet. Mark and his client used the information to prepare a business plan that helped secure financing for the business.

Access to the Internet allows Jensen to search through news sources throughout the world. Publications and news services such as *The New York Times*, Associated Press, United Press International, Reuters, *Financial Times of London*, and Dow Jones News Service are just a few of the sources available on the Internet.

Mark also retrieves news items for clients as an effective way to maintain relationships and attract new clients. One of his clients is in the machine tools industry, and Mark frequently notifies the client when a major industry event takes place.

Besides tracking news, Jensen uses the Internet to exchange e-mails with clients and associates. He can also access the SEC’s website and obtain recent SEC filings of major public companies, such as their 10-K, 10-Q, or other filings.

**FIGURE 1.5** An Example of a Small CPA Firm’s Utilization of the Internet.

Internet to search for federal and state legislation that may have an impact on clients and to retrieve financial statements from SEC filings. Figure 1.5 provides an example of how a small CPA firm might utilize the Internet. Many accountants also use the Internet to interact quickly and effectively with the client to assist in collecting the appropriate evidence, such as requesting additional facts that may influence the evidence needed or results from the relevant authorities.

When authoritative literature does not exist on an issue, practitioners should develop a theoretical resolution of the issue based on a logical analysis of the factors or analogous authorities. In addition, they need to evaluate the economic consequences of the alternatives in the development of a conclusion. Note that, in practice, a solution is sometimes not readily apparent. Professional judgment and theoretical analysis are key elements in the research process.

#### RESEARCH TIPS

Different search engines on the Internet can give you different hits. So use more than one search engine when conducting research.

### Step Three: Analyze the Results and Identify the Alternatives

Once practitioners have completed a thorough investigation of the facts and the collection of evidence, the next step is to evaluate the results and identify alternatives for one or more tentative conclusions. They must fully support each alternative by authoritative literature or a theoretical justification with complete and concise documentation. One cannot expect to draw sound conclusions from faulty information. Soundly documented conclusions are possible only when the information has been properly collected, organized, and interpreted.

Further analysis and research are sometimes needed about the appropriateness of the alternatives identified. This reevaluation may require further discussions with the client or consultations with colleagues. In discussing an issue with a client, researchers should use professional skepticism and recognize that management is not always objective in evaluating alternatives. For example, the issue may involve the acceptability of an accounting method that the client currently uses. In such cases, the research is directed toward the support or rejection of an alternative already decided on by management. Given the possibility of bias, researchers should retain a degree of professional skepticism in discussions with the client regarding their conclusion.

## Step Four: Develop a Conclusion

After a detailed analysis of the alternatives, including economic consequences, the researcher develops a conclusion and thoroughly documents the final conclusion selected from the alternatives identified. The conclusions should be well supported by the evidence gathered. The conclusion and details of the proposed solution are then presented to the client.

## Step Five: Communicate the Results

The most important point in the communication is the conclusion reached. The communication often takes the form of a research memorandum, requiring an objective and unbiased analysis and report. The memorandum should contain a statement of facts, a clear and precise statement of the issue, a brief and straightforward conclusion, and a discussion of the authoritative literature and explanation about how it applies to the set of facts. The written communication should communicate clearly and follow the conventional rules of grammar, spelling, and punctuation. Particularly, because a client often cannot evaluate the quality of research, nothing diminishes a professional's credibility with the client faster than misspellings, incorrect grammar, or the misuse of words. Sloppy communications may suggest sloppy research and analysis.

In drafting the appropriate written communication, avoid making common errors, such as:

1. Excessive discussion of the issue and facts in a memo, which indicates that the memo was not drafted with sufficient precision.
2. Excessive citations to authoritative sources (cite only the relevant authorities for the conclusion reached).
3. Appearing to avoid a conclusion by pleading the need for additional facts.
4. Including irrelevant information, which novice researchers do and which distracts from the fact that the proposed solution to the problem is appropriate.

A serious weakness in any part of the research and communication process undermines the entire effort. Therefore, address each step in the process with equal seriousness because each has its impact on the entire research project.

### RESEARCH TIPS

After analyzing the results, develop a conclusion and communicate the results.

## Data Analytics/Emerging Technologies in Accounting and Auditing Research

Data analytics/big data and new emerging technologies such as artificial intelligence (AI) and robotic process automation (RPA) are having a major impact in the business environment including accounting, whether public or corporate accounting. "Big data" is often referred to as an entity's information asset. Big data coupled with data analytics impacts all areas in business decision-making and related business strategies. Data analytics, as defined in Wikipedia, is "a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision-making." For instance, data analytics can enhance an entity's marketing analysis of customer buying power, improve supply chain efficiencies, enhance the planning and analysis of financial decisions, improve risk management, impact accounting, and transform the audit process. It can assist the accounting or auditing researcher in the beginning steps of the research process of identifying the problem to research, or in obtaining a deeper understanding of the issue, which aids in the search for the appropriate authoritative literature as to the proper accounting or auditing solution.

No matter what your job is, CEO, CFO, or independent auditor, big data/data analytics will transform your work. Data analytics software, as discussed in greater detail in subsequent

chapters, has the ability to analyze structured and unstructured data. Major stores, like Walmart, sell millions of products to millions of customers around the world. In such a competitive world, to compete, one must have the right price, meet customer demands, with the right products in the right place, and present solutions to major decisions by management such as logistical issues. Oil companies, like Shell Oil, had traditionally searched for new reserves by inserting sensors into the earth to analyze seismic waves, which provided a hit or miss evaluation. Now with data analytics, Shell is analyzing not a few thousand seismic waves, but millions that are compared to various other sites around the world to provide matches of profitable reserve sites to drill. This reduces costs and improves profits. Also, with sensors on the production equipment, Shell is able to monitor the equipment for performance and condition; the sensors indicate time for preventative maintenance.

As described earlier, data analytics is simply a process of ascertaining theoretical or actable business intelligence from business facts/data. Two perspectives exist as to the direction of research: (1) Authoritative accounting or auditing literature can provide guidance as to analyzing the data by identifying what the literature requests, and then determining if the data supports the literature. (2) The alternative perspective is that data can provide business facts that are used to search the authoritative accounting or auditing literature to provide a potential solution for proper recording or disclosure.

Data analytics analysis can be either qualitative or quantitative. A qualitative analysis is effective for a priori (before-the-fact) judgment that suggests disclosure information that might be warranted. The qualitative analysis could also be effective for a posteriori (after-the-fact) assessment of aggregate effect such as a post-implementation review verdict as to whether a potential fraud exists or whether the accumulated balance of all potential risk transactions exceed a materiality threshold.

A quantitative analysis is effective for a priori (before-the-fact) estimation of aggregate data such as a feasibility study cost estimation of implementation as to what amounts need be booked in an adjusting entry. Quantitative analysis can also be effective for a posteriori (after-the-fact) assessment of an aggregate effect, such as post-implementation review of cost and operational effectiveness, or volume and net impact of likely fraud, or the accumulated balance of all potential at risk transactions. Data analytics in general creates a fact-based research medium from existing data that moves beyond authoritative literature into business intelligence.

The rise of the importance of data analytics has been the proliferation of technological improvements and “big data” (large volume). Furthermore, the expanding social conscientious around “data” with its various impact on decision-making and ethical concerns has also increased the use of data analytics. A major focus of CFOs at Fortune 500 companies is on data analytics and data analytics departments.

As one becomes involved in data analytics, new concepts and tools become important. Rather than just structured data to analyze (i.e., Excel spreadsheets) unstructured data or semi-structured data are also being incorporated in the analysis (i.e., pictures or videos, paper contracts, or Twitter feeds, and data being steamed on the Internet).

New tools such as IBM Watson Analytics, Microsoft BI, Tableau, and other enhanced tools such as ACL Analytics, MindBridge AI, and CaseWare IDEA plus advanced analytics are used for predictive modeling (i.e., statistical analysis with R or SAS software) and will become an important part of effective data analytics. The new and expanded core competencies and techniques for data analytics can be applied to all areas of accounting, audit, tax, and consulting engagements. Various chapters of this text present greater detail as to how data analytics/data visualization can be utilized in research. Having a better focus on the business transactions provided by data analytics can impact your research by focusing on the detailed issues/problem, which will then assist in researching the accounting or auditing standards that apply.

Furthermore, the AICPA has underway a Practice Analysis related to new technologies and their impact on the CPA exam. As the exam incorporates this technology, new candidates will

be tested on the technology, which will also impact when conducting accounting and auditing research.

### SUMMARY

The research work of a practicing professional accountant is very important. Few practitioners ever experience a workweek that does not include the investigation and analysis of an accounting, auditing, or tax issue. Thus, every professional accountant should possess the ability to conduct practical, systematic research. The goal of this text is to aid current and future practitioners in developing a basic framework or methodology to assist in the research process.

The emphasis of the following chapters is on practical applied research that deals with solutions to immediate issues rather than theoretical research that has little or no present-day application:

- Chapter 2 presents an overview of the importance of critical thinking and effective writing skills that every researcher (accountant/auditor/tax professional) must possess to be effective.
- Chapters 3 and 8 provide an overview of the environment of accounting and auditing/attestation research, with an emphasis on the standard-setting process.
- The FASB's Codification Research System™ is presented in Chapter 4.
- The sources of authoritative literature in dealing with international accounting issues are discussed in Chapter 5.
- Chapter 6 presents other available research tools that may aid in the effective and efficient conduct of practical research, with an emphasis on computerized research via existing databases.
- Chapter 7 provides the basic steps of tax research and valuable databases and websites. The chapter highlights the Checkpoint tax database, part of which is also utilized in the CPA exam.
- Chapter 8 discusses the various types of assurance and consulting services and the applicable standards in conducting research.
- Chapter 9 concludes with a refinement of the research process by presenting specific annotated procedures for conducting and documenting the research process via a comprehensive problem.
- Chapter 10 provides an overview of fraud and insights into the basic techniques of fraud investigation, an area that is particularly pertinent as more practitioners are entering the specialized field of forensic accounting. The basic steps of a fraud investigation are similar to accounting research.

### DISCUSSION QUESTIONS

1. Define the term *research*.
2. Explain what accounting, auditing, and tax research are.
3. Why is accounting, auditing, and tax research necessary?
4. What is the objective of accounting, auditing, and tax research?
5. What role does professional research play in an accounting firm or department? Who primarily conducts the research?
6. What are the functions or responsibilities of the policy committee and executive subcommittee in a multioffice firm?
7. Identify and explain some basic questions the researcher must address in performing accounting, auditing, or tax research.

8. Differentiate between theoretical and applied research.
9. Identify the characteristics that an accounting practitioner should possess.
10. Provide an example of utilizing the research navigation guide.
11. Distinguish between a priori and a posteriori research. Which research is used more for planning work?
12. Explain the analogy of the California court decision dealing with legal research as it relates to the accounting practitioner.
13. Explain how the research process adds value to the services offered by an accounting firm.
14. What consequences are considered in the standard-setting process?
15. Explain the importance of identifying keywords when identifying relevant facts and issues.
16. Explain the five basic steps in research.
17. Discuss how research can support or refute a biased alternative.
18. Explain what is meant by problem distillation and its importance in the research process.
19. What skills are important and tested in the CPA exam?
20. Your conclusion to the research is often presented to your boss or client in the form of a research memorandum. Identify the basic points to include in this memo. Also, identify at least two common errors to avoid in the drafting of the memo.
21. Explain the necessity of critical thinking in the research process.
22. Why did the SEC bring an enforcement action against a CPA concerning research?
23. If authoritative literature does not exist, what steps might the researcher take?
24. If one is researching for accounting standards related to a federal government agency, which standard setter would you focus your research on?
25. As an accountant for Microsoft, you are conducting accounting research related to pension accounting, would you utilize the standards of the AICPA, GAO, FASB, or the PCAOB? Why?
26. Briefly explain the distinction between qualitative and quantitative analysis in conducting data analytics.
27. Define data analytics.
28. Provide an example of structured and unstructured data.

## EXERCISES

1. In auditing a public company, you decided to access the PCAOB website ([www.pcaobus.org](http://www.pcaobus.org)), click on standards followed by clicking on quality controls standards and identify by title two quality control standards.
2. Your firm has received a request from an international company client as to a certain accounting issue. Access the IASB website ([www.iasplus.com](http://www.iasplus.com)), and briefly explain the role of the IASB and the standards issued by the Board.
3. In auditing an international company, or a subsidiary of an international company, you would more than likely need to follow the auditing standards of the International Auditing & Assurance Standards Board. Access the IAASB's website ([www.iaasb.org](http://www.iaasb.org)) and click on the Standards and Pronouncements link and briefly explain two publications of the IAASB.
4. Access the AICPA website ([aicpa.org](http://aicpa.org)) and click on the Store link followed by clicking on Publications, and name two major publications of the AICPA.



## Appendix: Research Focus on the CPA Exam

Three categories of practical skills are identified for the CPA: (1) knowledge and understanding; (2) application skills, which include research and analysis; and (3) communication skills. *Knowledge* is acquired through education or experience and familiarity with information. Understanding is the process of using concepts to address the facts or situation. Although knowledge and understanding skills are tested in the CPA exam, the exam is focusing more on advanced critical thinking skills as explained in Chapter 2.

The *application skills* of judgment, research, analysis, and synthesis are required to transform knowledge. *Judgment* includes devising a plan of action for any problem, identifying potential problems, and applying professional skepticism. *Research* skills include recognizing keywords, searching through large volumes of electronic data, and organizing data from multiple sources. *Analysis* consists of verifying compliance with standards, noticing trends and variances, and performing appropriate calculations. *Synthesis* involves solving unstructured problems, examining alternative solutions, developing logical conclusions, and integrating information to make decisions. Application skills require technological competencies in using spreadsheets, databases, and computer software programs. *Communication skills* are oral, written, graphical, and supervisory. *Oral skills* include attentively listening, presenting information, asking questions, and exchanging technical ideas within the firm. *Written skills* encompass organization, clarity, conciseness, proper English, and documentation skills. *Graphical skills* involve organizing and processing symbols, graphs, and pictures. *Supervisory skills* include providing clear directions, mentoring staff, persuading others, negotiating solutions, and working well with others. Chapter 2 also highlights written communication skills.

Using the five-step research process demonstrated in this chapter substantially helps in developing the necessary skills for the CPA exam. For any research problem, learn the facts, and understand the problem or issues. Acquire knowledge about the client's needs and desires in order to understand the alternative and best solutions to the problem. Knowledge and understanding of accounting should also include the various standard setters and their authoritative sources, as well as the nonauthoritative sources, available in databases, websites, hardbound books, newsletters, and other secondary sources.

Use application skills, such as identifying keywords for research. Develop the skills of locating and reviewing the relevant authorities. Analyze how the authorities apply to the particular facts in the research problem. Synthesize information with the help of insightful, nonauthoritative sources. Use professional judgment as you refine the issues for greater specificity and develop well-reasoned conclusions. Develop strong communication skills not only for the CPA exam and research memos but also for handling the day-to-day tasks and interactions that typify the work of accountants and business professionals. Communicate the results of the research, as appropriate.

Many of these skills are tested in the CPA exam in what are called simulations. The AICPA defines a simulation as "an assessment of knowledge and skills in context approximating that found on the job through the use of realistic scenarios and tasks and access to normally available and familiar resources." In other words, simulations are condensed case studies that utilize real-life, work-related examples. These case studies require the use of tools (computerized databases) and skills that accountants use in the real world. The primary computerized databases are similar in functionality to the AICPA Professional Standards (Auditing and Attestation literature), the FASB Codification Research System, and Thomson Reuters/RIA Checkpoint® tax database.

To successfully complete a simulation, CPA candidates are expected to possess basic computer skills that include the use of spreadsheets and word processing functions. For the research component of the simulation, candidates are required to search authoritative literature databases in order to answer accounting, auditing, and tax questions to support their judgments and prepare formal communications.

### RESEARCH TOOLS

ACL  
Ai Auditor  
AICPA Library  
Checkpoint  
Codification  
e-CFR  
EDGAR  
E-IFRS  
IDEA  
Internet  
Nexis Uni

Figures A1.1–A1.2 present the opening screenshots of the Auditing and Attestation simulation. Figure A1.3 provides the opening screenshot for the BEC simulation. Finally, FAR and REG Simulation examples are presented in subsequent chapters.

**AUDITING AND ATTESTATION** ✓ TESTLET 1 ✓ TESTLET 2 TESTLET 3 TESTLET 4 TESTLET 5

3:53 EXAM TIME REMAINING

CALC. EXCEL AUTH. LIT.

1 2

EXHIBITS

Show Correct Answer

A nonissuer's current CEO and CFO were not present during all periods covered by the auditor's report. Which citation in the professional standards outlines the auditor's responsibility regarding obtaining a written representation letter from management under these circumstances?

Enter your response in the answer fields below. Guidance on correctly structuring your response appears above and below the answer fields.

Choose a title from the list.

Select... Select...

- ET
- BL
- CS
- QC
- PR
- PFP
- CPE
- PCAOB
- TS
- VS
- AU-C
- AR-C
- ATC

**FIGURE A1.1** Opening Screenshot of the Auditing and Attestation Simulation.  
Source: © 2019, AICPA. All rights reserved. Used with permission.


**AUDITING AND ATTESTATION** ✓ TESTLET 1 ✓ TESTLET 2 TESTLET 3 TESTLET 4 TESTLET 5


3:52 EXAM TIME REMAINING

CALC. EXCEL AUTH. LIT.

1 2

◀ 2 ▶

**EXHIBITS** 

 [Show Correct Answer](#)


A nonissuer's current CEO and CFO were not present during all periods covered by the auditor's report. Which citation in the professional standards outlines the auditor's responsibility regarding obtaining a written representation letter from management under these circumstances?

Enter your response in the answer fields below. Guidance on correctly structuring your response appears above and below the answer fields.

Type the paragraph here.

Correctly formatted AU-C paragraphs are 1, 2, or 3 digits, preceded in some cases by an upper case letter.

AU-C § 580 ✓ A26 ✓

 Some examples of correctly formatted AU-C responses are AU-C§123.45, AU-C§123.456, AU-C§123.A45, AU-C§123.A456, AU-C§1234.56, AU-C§1234.567

◀ ▶

**FIGURE A1.2** Opening Screenshot of the Auditing and Attestation Simulation.

Source: © 2019, AICPA. All rights reserved. Used with permission.

**BUSINESS ENVIRONMENT AND CONCEPTS** ✓ TESTLET 1 ✓ TESTLET 2 TESTLET 3 TESTLET 4 TESTLET 5

3:58 EXAM TIME REMAINING

CALC. EXCEL AUTH. LIT.

1 2

◀ 2 ▶

**EXHIBITS**

Standard Versus Actual Costs Other Information Show Correct Answer

close all exhibits

**Scroll down to complete all parts of this task.**

A manufacturing company is reviewing its results for the quarter ended June 30, year 4. The company uses standard costs, based on past performance and expectations for each quarter, to monitor performance and analyze variances. At the end of each quarter, variances are identified and investigated further.

For each of the variances in column A, complete the following using the information provided in the exhibits above:

- In column B, calculate the amount of the variance for the quarter ended June 30, year 4. Enter all amounts as positive numbers.
- In column C, select the type of variance.

1			
2	Selling-price variance		unfavorable
3	Sales-volume variance		
4	Direct labor rate variance		
5	Direct labor efficiency variance	123	
6	Materials price variance	123	
7	Materials usage variance	123	
8	Variable overhead spending variance	123	

◀ ▶

**FIGURE A1.3** Opening Screenshot of the BEC Simulation.  
 Source: © 2019, AICPA. All rights reserved. Used with permission.

# 2

## Critical Thinking and Effective Writing Skills for the Professional Accountant

### LEARNING OBJECTIVES

After completing this chapter, you should understand:

- Critical thinking skills.
- Levels of thinking.
- How critical thinking skills can help professional accountants add value to their services.
- How competent writing forms a key element of critical thinking skills.
- How to strengthen and improve writing skills.
- The proper use of punctuation.
- The U.S. Securities and Exchange Commission's Plain English Initiative.
- How to write effective client letters and e-mails.
- How to write memos to a file.

Change is accelerating in today's environment, and the pressure to respond is intensifying. As new technology, accounting standards, laws, business methods, and global economic realities work their way through the accounting profession, these changes and realities are becoming increasingly complex. Critical thinking is necessary for effectively addressing these dynamic changes and is considered an important component of accounting education. In addition, all professionals must know how to write effectively.

Clients now expect professional accountants to add value to what they observe, read, and write. Accountants must evaluate complex systems and information, in addition to detecting, predicting, advising, and recommending appropriate courses of action. Critical thinking is needed throughout the process. Effective writing communicates the results to others.

### Critical Thinking Skills

Today's professional accountants must respond to the progressive diversity and complexity of accounting, auditing, and tax practice and develop lifelong learning skills that enable them to think critically. Critical thinking skills are essential to understanding, applying, and adapting

concepts and principles in a variety of contexts and circumstances. The accountant's professional skepticism—that of questioning management's responses—involves critical thinking that entails an attitude of examining and recognizing emotion-laden and explicit or hidden assumptions behind each question. Accountants must master critical thinking skills particularly because business organizations continue to evolve in response to new information technology and heightened worldwide competition.

Critical thinking can be summarized as follows:

1. Critical thinking is difficult because it is often complex.
2. Critical thinking applies multiple criteria.
3. Critical thinking requires an ability to tolerate ambiguity and uncertainty.
4. Critical thinking involves self-regulation of the thinking process.
5. Critical thinking may impose meaning and find structure in apparent disorder.
6. Critical thinking requires effort. It entails intense elaboration and careful judgment.
7. Critical thinking often yields multiple solutions and requires cost and benefit analysis.
8. Critical thinking involves making interpretations.<sup>1</sup>

Nothing is more important and practical for the accounting practitioner than developing critical thinking skills. Poor thinking will inevitably cause new problems, waste time, and ensure frustration. As you become more proficient in critical thinking, you also become more proficient in assessing issues and objectives, problems and solutions, information and data, assumptions and interpretations, different points of view, and frames of reference.

Critical thinking has many definitions. The *American Heritage Dictionary* defines *critical* as “characterized by careful and exact evaluation and judgment.” Critical thinking indicates a positive ability in those who possess it. Critical thinking focuses on problem definition and problem solving; it is a rational response to questions that may lack definite answers or that may be missing relevant information. Its purpose is to explore situations to arrive at justifiable conclusions and optimal solutions. Critical thinking rests on a willingness to take nothing for granted and to approach each experience as if it were unique. Although the purpose of critical thinking is to understand, its practice usually leads to evaluation and therefore to judgment. Simply stated, critical thinking is the art of using your best thinking, given your knowledge and skills.

Critical thinking is purposeful, goal-oriented, and creative. It is an active process involving rethinking the problem and refusing to consider merely the most obvious or easiest solutions. The qualities that lie behind rethinking are:

- A willingness to say, “I don’t know.”
- An openness to alternatives in ways of seeing and doing—alternatives that are based on understanding how things work.
- An interest in the ideas of others that is shown by paying attention, even when the ideas conflict with your own.
- Thoughtfulness that is shown by genuine, not just idle, curiosity.
- A desire to discover what other people have done and thought.

#### RESEARCH TOOLS

Use critical thinking to assess issues, problems, data, and other issues.

<sup>1</sup>Lauren B. Resnick, *Education and Learning to Think* (Washington, DC: National Academy Press, 1987).

- An insistence on getting the best evidence before choosing among alternatives.
- An openness to your own intuition.<sup>2</sup>

Critical thinking is a process of understanding how thinking and learning work, of using higher-order skills for comprehending issues and for analyzing, synthesizing, and assessing ideas logically. Higher-order reasoning skills include:

**QUICK FACTS**

Critical thinking skills include analysis, synthesis, and critical assessment.

1. Analysis of a problem, or breaking ideas into their component parts to consider each separately.
2. Synthesis, or connecting different components or ideas in order to derive relationships that tie the parts of an answer together.
3. Critical assessment of the conclusions reached, examining them for sound logical reasoning. Accountants must master critical thinking skills in order to engage effectively in the process of research and problem solving.

The ability to reason critically is an essential, fundamental skill that enables one to acquire knowledge easily. Critical thinking includes:

1. Recognizing any explanatory relationship among statements.
2. Recognizing the structure of arguments (the premises, implicit assumptions, and conclusions).
3. Assessing consistency or inconsistency, equivalence among statements, and logical implications.
4. Formulating and identifying deductively and inductively justified conclusions based on the available evidence.

## Levels of Thinking

The difficulty in discussing critical thinking concisely arises from two characteristics of critical thinking itself. First, clear thinking results less from practicing skills than from adopting such attitudes as persistence, open-mindedness, thoroughness, and flexibility. Second, thinking is not a single process that can be divided into a series of steps. Instead, it is a family of processes that enlighten and support one another.<sup>3</sup>

The noted nineteenth-century writer Oliver Wendell Holmes characterized people according to their thinking skills. The lowest-level thinkers were fact collectors with no aims beyond the facts; thinkers on the next level were able to compare, reason, and generalize using the results of the fact collectors' work; and the highest-level thinkers demonstrated the ability to idealize, imagine, and predict.

One current classification of thought, generated by the Illinois Renewal Institute, distinguishes recall, process, and application. The lowest level of thought is recall, in which one defines, describes, lists, recites, and selects. The second level of thought is process, in which one compares, contrasts, classifies, sorts, distinguishes, explains, infers, sequences, analyzes, synthesizes, and analogizes. The highest level of thought is application, in which one evaluates, generalizes, imagines, judges, predicts, speculates, hypothesizes, and forecasts.

<sup>2</sup>Robert Boostrom, *Developing Creative and Critical Thinking: An Integrated Approach* (Chicago: National Textbook Co., 1992), pp. 24–25.

<sup>3</sup>*Ibid.*, Teacher's Manual, 1.



Level No.	Major Categories in Bloom's Taxonomy	Illustrative General Instructional Objectives	Illustrative Behavioral Terms for Stating Specific Learned Outcomes
1.	<b>Knowledge</b> represents recalling previously learned materials.	Knows common terms, specific facts, basic concepts, and principles.	Defines, describes, labels, lists, reproduces, selects, and states.
2.	<b>Comprehension</b> involves grasping the material, including translating words into numbers, summarizing or interpreting the materials, and estimating future trends.	Understands facts and principles; translates verbal materials into mathematical formulas; estimates future consequences implied in the data; and justifies methods and procedures.	Converts, defends, distinguishes, estimates, extends, explains, predicts, rewrites, and summarizes.
3.	<b>Application</b> of the use of previously learned materials into new situations.	Correctly applies laws and theories into new and practical situations.	Changes, computes, demonstrates, discovers, manipulates, modifies, shows, solves, and uses.
4.	<b>Analysis</b> breaks down the material into its component parts to better understand its organizational structure.	Recognizes unstated assumptions and logical gaps in reasoning; distinguishes between facts and inferences; and evaluates the relevancy of data.	Breaks down, diagrams, differentiates, discriminates, distinguishes, infers, outlines, relates, selects, separates, and subdivides.
5.	<b>Synthesis</b> puts parts together to form a new whole, usually involving creative behaviors and new patterns or structures (e.g., developing a new schema for classifying information).	Writes a well-organized research paper; gives a well-organized speech; integrates learning from different areas into a new plan to solve a problem; and formulates a new schema to classify objects or events.	Assigns, categorizes, combines, compiles, composes, creates, devises, explains, generates, plans, recognizes, reorganizes, revises, rewrites, tells, or writes.
6.	<b>Evaluation</b> judges the value of the statement (based upon definite criteria) for a given purpose. The criteria can be internal (organization) or external (relevant to the given purpose).	Judges the logical consistency of the presented material, how well the data support the conclusions, and how well the end product adheres to the internal and external criteria.	Appraises, compares, concludes, contrasts, criticizes, explains, interprets, justifies, relates, summarizes, and supports.

**FIGURE 2.1** Examples of Applying and Understanding Bloom's Taxonomy.

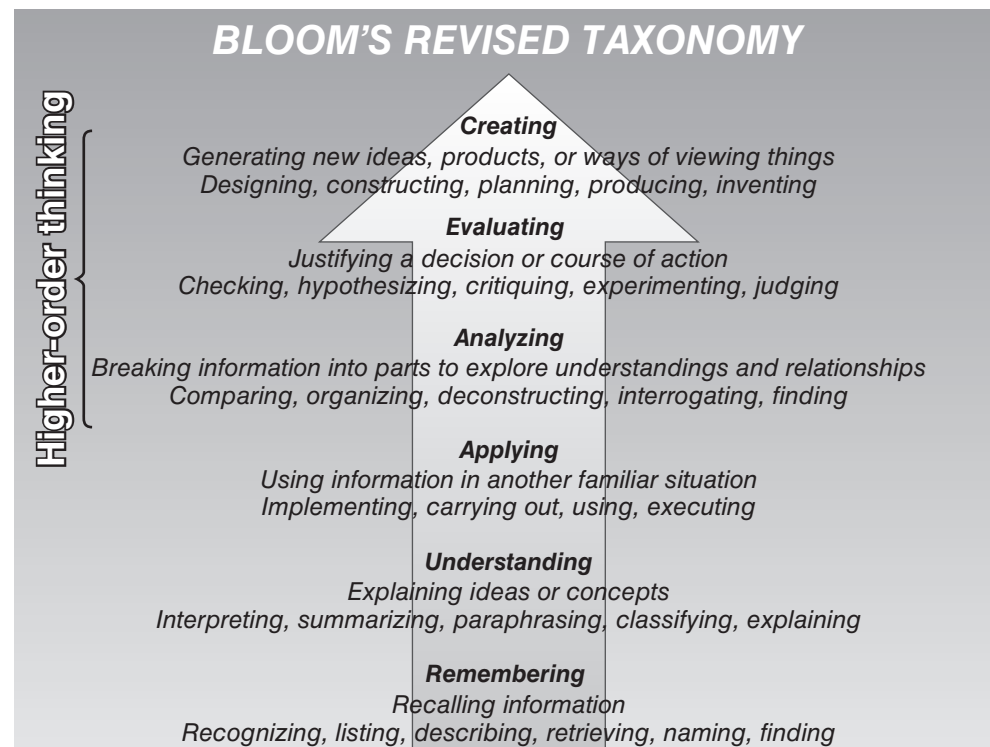
Bloom's taxonomy is probably the most famous classification of thought. Bloom's six-level taxonomy proceeds from knowledge, comprehension, application, analysis, and synthesis to evaluation, as presented in Figure 2.1. Bloom hypothesized that higher-order knowledge occurs with the use of higher-level skills (i.e., critical thinking skills).

Practitioners can use higher-level application skills to complement lower-level recall skills both by focusing on what successful accountants do to add value to their organizations and by always questioning assumptions.

Bloom's taxonomy implies that the levels of thinking are incremental: The ability to perform at level 4, for example, is necessary before moving up to level 5. (The ideal readers, writers, accountants, or auditors move up the levels until they can perform at the top level.) To exercise the highest-level (level 6) skills, they must already possess the skills at the other levels. To infer properly, for example, they must first define and describe accurately the objects or situations from which they will infer. The skills increase in complexity as the level rises. Analyzing a situation, for example, is a far more complicated process than simply recalling it, and evaluating a situation (using definite criteria for a given purpose) is more complicated than either of the other processes. The basic differences between the levels are largely a matter of attitude, not procedure. That is, the ability to progress upward through the levels partly depends on one's ability to internalize the qualities of the previous levels.

#### QUICK FACTS

Bloom's taxonomy proceeds from remembering, understanding, applying, analyzing, and evaluating to creating.



**FIGURE 2.2** Bloom's Revised Taxonomy.

Source: Kurwongbah State School, Queensland, Australia, 2012. Licensed under CC BY 4.0.

A revised version of Bloom's Taxonomy is presented in Figure 2.2. This revision includes the use of 25 verbs that provides a collegial understanding of student behavior and learning outcomes. This revised version parallels the original taxonomy but provides a more descriptive meaning to the six levels. Take a minute to compare the two versions, as critical thinking is very important to the accounting professional.

Bloom's framework of thought (original and revised) has had a practical impact on accountants. It has influenced many professional accounting examinations to modify their questions and format in order to test the higher-level critical thinking skills of candidates (levels 4, 5, and 6). For example, the Uniform CPA Examination, now completely computerized, emphasizes heavily the critical thinking and research skills that accountants need in the workplace.

Critical thinking also depends on the ability to make specific decisions, such as deciding:

1. On the meaning (and intent) of a statement.
2. Whether a definition is adequate.
3. Whether an observation statement is reliable.
4. Whether a statement is an assumption.
5. Whether a statement made by an alleged authority is acceptable.
6. Whether a conclusion follows necessarily from the underlying data.
7. Whether an inductive conclusion is warranted.

**Purpose:** To prepare a report based on your research to answer the following client request.  
**Issue/Question:** A major client, who maintains homes in both New York and Florida and uses both frequently throughout the year, asks you, from an economic standpoint, which state would be the best for her to establish residency in.  
Answering this question quickly, intelligently, and accurately requires critical thinking to identify all the relevant factors regarding this decision and to develop proper conclusions, including focusing on such issues as (a) income tax rates of both states, (b) state sales tax rules and rates (e.g., buying and using such discretionary assets as a new car), (c) property taxes (e.g., buying or selling a home), unemployment/welfare taxes, municipal taxes, inheritance taxes (e.g., considering the client’s age), and (d) costs of other essentials (e.g., food, clothing, and shelter).  
After identifying the relevant factors, you should focus this analysis by asking specific questions to narrow the scope of this decision to such relevant issues as:

- 1. Does the client anticipate selling one of the homes? If so, which one?
- 2. Where will the client purchase and use her assets (e.g., the new car)?

The answers to these and other, similar questions will affect how you proceed with this analysis while fully considering all of the relevant factors. Considering relevant issues and eliminating irrelevant ones forms the crux of critical thinking.  
This example can also help you better understand such critical thinking skills. For example, the researcher must analyze, synthesize, and critically assess the relevant factors. This process requires using the available evidence effectively. Specifically, the accountant should ascertain that the evidence is:

- 1. **Sufficient.** Does the accountant have adequate evidence to reach a proper conclusion or should he or she ask further questions (e.g., are state inheritance tax rates under review by the respective state legislatures)?
- 2. **Representative.** Is the evidence provided objective (e.g., will the client actually spend the requisite days in Florida to be considered a legal resident of that state)?
- 3. **Relevant.** Does the evidence relate directly to the provided assertion (e.g., will the client’s plans to spend much time visiting her grandchildren in California impact her legal residence status)?
- 4. **Accurate.** Does the evidence come from reliable primary or secondary sources (e.g., can CPA firm employees observe the times spent in Florida or New York)?

Thus, the ability to reason critically is essential to the acquisition of knowledge in any discipline and may, therefore, be appropriately regarded as a fundamental skill, one that new accountants should acquire as soon as possible. Critical thinking includes:

- 1. Formulating and identifying deductively and inductively warranted conclusions from available evidence.
- 2. Recognizing the structure of arguments (premises, conclusions, and implicit assumptions).
- 3. Assessing the consistency, inconsistency, logical implications, and equivalence among statements.
- 4. Recognizing explanatory relations among statements.

**FIGURE 2.3** Critical Thinking Accounting Example.

In critical thinking “you decide first what the words mean, then whether they make sense, and finally whether you believe them.”<sup>4</sup> A simplified example that helps to reinforce the critical thinking process is presented in Figure 2.3.

## Universal Elements of Reasoning

It is helpful for the professional accountant/researcher to concentrate on the eight universal elements of reasoning when using critical thinking to arrive at a solution to a problem: purpose, issue, information, concepts, assumptions, interpretation, implications, and conclusions.<sup>5</sup> Whenever we think, we should use these eight elements of analysis, as described in Figure 2.4.

<sup>4</sup>Boostrom, *op. cit.*, p. 198.  
<sup>5</sup>Richard Paul, *Critical Thinking: Basic Theory & Instructional Structures* (Dillon Beach, CA: Foundation for Critical Thinking, 1998).

1. **Purpose.** You reason things out in order to meet some specific end, goal, or objective. If the purpose or goal is unclear or unrealistic, various problems can occur as you proceed. As an accountant/researcher, your primary goal or purpose is to complete accounting/auditing research in order to develop an answer to a particular practical issue/problem. You should select clear and realistic purposes and evaluate your reasoning periodically to make sure you still are on target with your stated purpose.
2. **Issue.** The second element is to reason out a question or issue. This requires the formulation of the issue in a clear and relevant way. Because accounting/auditing authoritative literature is organized around keywords or concepts, clearly identifying the issue will greatly aid you in researching it.
3. **Information.** Data or information exists concerning the issue about which you are reasoning. Any defect in the data or information is a possible source of problems in conducting research. As an accounting practitioner, you will use client-provided data and both authoritative and nonauthoritative sources in reasoning out a solution. Therefore, you need to be mindful that the data or information may contain defects or contradictions, especially in the client data or nonauthoritative sources.
4. **Concepts.** Reasoning uses concepts that include theories, principles, or rules. A basic understanding of the concepts is important as you reason out an accounting/auditing issue.
5. **Assumptions.** All reasoning begins somewhere. Incorrect assumptions in your reasoning can be a source of problems and can bias your research. You must determine that your assumptions are justifiable and how they will shape your point of view in conducting research.
6. **Interpretation.** The sixth element of reasoning requires that what you infer from your research is based on the evidence gathered. All reasoning requires some type of interpretation of the data in order to draw conclusions from the research process.
7. **Implications.** As you conclude the research process and begin to develop conclusions, you need to consider the various implications or consequences that arise from your reasoning. Consider both negative and positive implications as you develop your conclusions.
8. **Conclusion.** The final element of reasoning is the conclusion to the research question or issue. As you develop the conclusion, be careful to have the proper point of view—one that is not too narrow or broad, or based on misleading information or contradictions.

**FIGURE 2.4** Eight Elements of Reasoning.

## An Example of Using Critical Thinking Skills

The use of critical thinking skills in a business organization is illustrated in Goldratt and Cox's<sup>6</sup> best-selling business book, *The Goal*. This book describes a company that has floundered because it conducted its business under certain time-honored assumptions, such as:

1. Keep all the employees busy all the time.
2. Order materials in the largest quantities possible to receive the lowest price.
3. Keep the manufacturing robots working all the time (minimize downtime).
4. Measure the cost of an idle machine as its depreciation expense.
5. Allow management to change the priority of jobs in process to meet customer needs.

Goldratt and Cox demonstrate that the company could operate much more profitably by challenging these assumptions (i.e., by using higher-order critical thinking skills) and thereby achieving dramatically improved results. They showed that adhering to these old policies made the company less efficient. Some new results included the following policies:

1. Because busy employees produce unneeded inventory, wasting large amounts of resources, have certain production employees perform quality control and preventive maintenance, rather than producing nonessential parts.

### RESEARCH TIPS

As you analyze a problem, you need to proceed through the eight elements of reasoning.

### RESEARCH TIPS

Use careful analytical reasoning (critical thinking skills) for effective research.

<sup>6</sup>E. M. Goldratt and J. Cox, *The Goal* (New Haven, CT: North River Press, 1992).

Skill	Description
Value-added services	Advise, predict, detect, recommend, and evaluate.
Wariness	Take nothing for granted. Approach each experience as if it were a unique event.
Rethinking	Do not perform tasks in an obvious and routine manner. Use innovative, alternative ways to perform the necessary jobs. Insist on obtaining the “best” available evidence, considering the related costs.
Evaluation and judgment	Use definitive criteria to obtain the goal of the assignment, and then apply reasonable judgment after this evaluation.
Incremental levels of thinking	Apply lower levels of thinking before progressing to higher ones.

**FIGURE 2.5** Basic Critical Thinking Skills.

2. Because ordering large amounts of materials increases unnecessary inventory, order smaller quantities of parts inventory.
3. Because robots, like employees, only increase unneeded inventory, consider the cost of the inventory they produce in deciding whether to allow the robots to work.
4. Because bottlenecks often prevent a factory from working to its full potential, focus on reducing operating bottleneck constraints.
5. Because rush orders generally impair the optimal timing of the production process, rarely alter the normal workflow for special jobs.

Similarly, professional accountants should develop and use critical thinking skills to add value to their services—an important goal for all professionals, including newly hired employees. Figure 2.5 summarizes some necessary basic critical thinking skills.

## Effective Writing Skills

The ability to communicate effectively, in both oral and written form, is essential for today’s practitioner. In the workplace, an accountant may write to a supervisor, a shareholder, a company’s management, government agency, or others. Strong communication skills are emphasized in the following personal statements shared by two leading business professionals:

In accounting and all other professions, we must have the appropriate technical skills, but if we cannot communicate what we know, the value of technical skills is lessened. For example, knowing how to compute corporate income taxes is a valuable skill. Being able to tell others how to do it magnifies the value of that technical skill. Others can capitalize on your knowledge only if you can communicate it.

—Dennis R. Beresford, *former chair, Financial Accounting Standards Board*

Learning to communicate well should be a top priority for anyone aspiring to lead or advance in a career. Strong technical skills are needed, but technical ability alone will not result in career advancement. Those who develop only technical skills always will work for people who have both technical and leadership abilities, and communication is the key ingredient in leadership.<sup>7</sup>

—Hugh B. Jacks, *former president, BellSouth Services*

<sup>7</sup>William C. Himstreet, Wayne M. Baty, and Carol M. Lehman, *Business Communications: Principles and Methods*, 10th edition. © 1993.

**QUICK FACTS**

Written communication skills are considered one of the researcher's most important skills.

Accounting practitioners have ranked written communication as the most important of 22 skills to develop in students, according to research conducted by Albrecht and Sack.<sup>8</sup> Similarly, writing skills are among the most important attributes considered in the hiring process, according to a survey of Fortune 500 senior tax executives.<sup>9</sup> Thinking and writing are somewhat related: Thinking determines what one wants to say, and writing records these ideas for future communication. However, effective writing is more than making a draft, jotting down isolated ideas, writing reminders to oneself, making outlines, or charting different sides of an issue. Writing is a process that enables us to be more precise and effective, rather than merely relying on reading or discussion.

Because thinking and writing are related, it follows that critical thinking and effective writing are also connected. Effective writing is a matter not just of form but also of quality content arising from critical thought. One must think critically in order to write effectively.

## Writing as a Process

Writing is a way to make meaning of our experiences and knowledge. Writers perform many functions simultaneously, such as:

- Remembering past experiences or readings while determining what they intend to write.
- Trying to convey major concepts while supplying supporting evidence and details.
- Considering personal knowledge while considering what the audience needs to know for its unique purposes.
- Continually editing and revising as needed while trying to retain the central idea and purpose.

Envisioning the intended final product helps to bring logical order to the writing. The AICPA defines effectively written essay answers for the CPA examination as having the following six characteristics:

**RESEARCH TIPS**

Review writing requirements any time you write a professional report or when you study for the CPA exam.

**RESEARCH TIPS**

Write concisely and clearly, using Standard English and coherent organization.

- 1. Coherent organization:** Organize responses so that the ideas are arranged logically and the flow of thought is easy to follow. Generally, knowledge is best expressed by using short paragraphs composed of short sentences. Moreover, short paragraphs, each limited to the development of one principal idea, can better emphasize the main points in the answer. Place each principal idea in the first sentence of the paragraph, followed by supporting concepts and examples.
- 2. Conciseness:** Conciseness requires that candidates present complete thoughts in as few words as possible, while ensuring that important points are covered adequately. Short sentences and simple wording also contribute to concise writing.
- 3. Clarity:** A clearly written response prevents uncertainty concerning the candidate's meaning or reasoning. Clarity involves using words with specific and precise meanings, including proper technical terms. Well-constructed sentences also contribute to clarity.
- 4. Use of Standard English:** Standard English is characterized by exacting standards of punctuation and capitalization, by accurate spelling, by exact diction, by an expressive vocabulary, and by knowledgeable usage choices.

<sup>8</sup>W. S. Albrecht and R. J. Sack, *Accounting Education: Charting the Course through a Perilous Future*. Accounting Education Series, vol. 16 (Sarasota, FL: American Accounting Association, 2000).

<sup>9</sup>G. Paice and M. Lyons, "Addressing the People Puzzle," *Financial Executive* (September 2001). Available online: [http://www.fei.org/magazine/articles/9-2001\\_corptaxes.cfm](http://www.fei.org/magazine/articles/9-2001_corptaxes.cfm).

- 5. Responsiveness to the requirements of the question:** Answers should directly address the requirements of the question and demonstrate the candidate's awareness of the purpose of the writing task. Avoid making broad expositions on the general subject matter.
- 6. Appropriateness for the reader:** Writing that is appropriate for the reader takes into account the reader's background, knowledge of the subject, interests, and concerns. The requirements of some essay questions may ask candidates to prepare a written document for a certain reader, such as an engagement memorandum for a CPA's client. When the intended reader is not specified, the candidate should assume the intended reader is a knowledgeable CPA.<sup>10</sup>

Professional accountants should apply to their writing these same six criteria of coherent organization, conciseness, clarity, use of Standard English, responsiveness to the requirements of the question, and appropriateness for the reader. Let us further examine these criteria by classifying them as either composing or editing skills.

*Composing skills* are used primarily for a focused first draft. Three of the criteria are essential composing skills:

- **Organization:** Is the writing organized in a logical manner? Apply this concept not only to the document as a whole, but also within each section and paragraph.
- **Responsiveness:** Does the writing respond to what is asked for and needed?
- **Appropriateness:** Is the writing appropriate for the readers, considering their capacity and level of experience?

*Editing skills* are used primarily in revising a draft. Editing is what one does to the draft; it is largely a matter of rewriting to produce a more concise presentation, yet one with greater clarity of expression. Thus, editing skills are:

- **Conciseness:** The writing contains no extraneous matter and does not repeat itself.
- **Clarity:** The right word choices and the most effective sentence patterns are used.
- **Use of Standard English:** The writing reflects Standard English both in usage and mechanical exactness.

The first draft should focus on conveying the substantive ideas in an organized fashion that is appropriate and responsive to the reader's needs. Writers should not worry about conciseness, clarity, and Standard English until revising the draft. Often, several revisions are necessary, and some composing skills are also used. Figure 2.6 presents some basic suggestions for revising word selection and sentence structure for effective writing.

Success in critical thinking and effective writing comes from the lifelong learning of skills developed from education, practice, and experience. If effective writing is not developed, the accountant may lose business or the potential for career advancement. Clients who are unable to judge the quality of work may form impressions based solely on the quality of the accountant's writing: Bad writing may indicate poor thinking.

## Punctuation Primer

Successful writing requires proper grammar and punctuation. Figure 2.7 provides a basic primer on the main punctuation issues, along with examples. Remember that proper punctuation is very

### QUICK FACTS

Effective writing is a process that includes proper grammar as well as proper punctuation.

<sup>10</sup>Examination Division, AICPA, *Report of the Testing of Writing Skills Subtask Force of the CPA Examination Change Implementation Task Force*, September 18, 1990.



1. Visualize your readers, and select words familiar to them.
2. Use the active voice in your writing.
3. Choose short words.
4. Use technical words and acronyms with caution.
5. Select your words for precise meanings.
6. Limit your sentence content. Use short sentences.
7. Use proper punctuation in sentence development.
8. Arrange your sentences for clarity and unity.

**FIGURE 2.6** Word Selection and Sentence Structure Guidelines.**PERIODS**

**Rule 1.** Use a period after a declarative sentence (one that states a fact) or an imperative sentence (one that states a command).

**Examples:** Our accountant resigned yesterday. Get me the reconciliation report immediately.

**Rule 2.** Use a period with abbreviations and initials. If the last word in the sentence ends in a period, do not follow it with another period.

**Examples:** Robert received his M.B.A. from Harvard. The meeting will begin at 2:00 p.m.

**COMMAS**

**Rule 1.** Use commas when a sentence contains words in a series.

**Examples:** Her previous employers were the SEC, AICPA, and FBI.

The auditor requested support for the accounts payable balance, the accounts receivable balance, and the vacation accrual balance.

**Rule 2.** Use a comma when two or more adjectives describe the same noun.

**Examples:** That was a long, tiring meeting. Susan is a loyal, dedicated employee.

**Note:** If the word *and* can be inserted between the two adjectives, a comma is needed.

**Rule 3.** Use a comma to separate two independent clauses that are joined by a conjunction. An independent clause is a group of words that can stand alone as a sentence.

**Examples:** The audit has been concluded, but an opinion has not been issued. We are pleased to have you join our firm, and we hope this will be a rewarding experience for you.

**SEMICOLONS**

**Rule 1.** Use a semicolon to separate two independent clauses when no conjunction is used.

**Examples:** The president declined the raise; he was already making \$2 million a year. Fifty people attended the conference; most of them were accountants.

**Rule 2.** Use a semicolon to avoid confusion where commas are already present.

**Examples:** The auditors traveled to Los Angeles, California; Chicago, Illinois; and Little Rock, Arkansas, to conduct the fraud investigation.

Will, partner of the firm, interviewed three potential staff members; but not one of them was hired.

**COLONS**

**Rule 1.** Use a colon after a complete sentence to show that something is to follow.

**Examples:** Please get me the following items: payroll register, list of vendors, and list of accounts payable. Please get the payroll register, a list of vendors, and a list of accounts payable. (No colon is needed after *get* because *Please get* is not a complete sentence.)

**Rule 2.** Use a colon after the salutation of a business letter.

**Example:** Dear Mr. Williams:

**FIGURE 2.7** (Continued)

QUESTION MARKS

**Rule 1.** Use a question mark after a direct question.

**Examples:** Are you sure the tax forms were filed before the deadline?  
I asked John if he was sure the tax forms were filed before the deadline.  
(No question mark is needed because it is not a direct question.)

**Rule 2.** When quotation marks are used, place the question mark inside the final quotation mark only if the quoted part of the sentence is a question.

**Examples:** The partner asked, "Will you be at the audit committee meeting tomorrow?" Did Thomas say, "We can push the deadline back until Friday"? (The question mark is placed outside the quotation mark because the entire sentence is a question.)

EXCLAMATION POINTS

**Rule 1.** Use an exclamation point to show emphasis or surprise.

**Example:** Help me!

**Rule 2.** Do not use an exclamation point in formal business letters.

QUOTATION MARKS

**Rule 1.** Periods and commas always go inside quotation marks.

**Examples:** Jill said, "I will not have time to reconcile the bank statement tomorrow." The professor said, "Remember the accounting equation for tomorrow's test."

**Rule 2.** Use single quotation marks for quotes within quotes. Remember that the period goes inside all quote marks.

**Examples:** He said, "The boss said, 'Make sure to disclose the inventory method used in our notes to financial statements.'" Bob said, "The professor said, 'The quiz tomorrow only covers the journal entries regarding cash and accounts receivable.'"

APOSTROPHES

**Rule 1.** Use an apostrophe to show singular possession by placing the apostrophe before the s.

**Examples:** Today's assignment will involve performing some tax research on the Internet. Bill's presentation was excellent.

**Rule 2.** Do not use an apostrophe with possessive pronouns—his, her, our, their, etc.

**Examples:** His accounting professor was one of the best. Our company should have caught the error—not theirs.

**Rule 3.** Use an apostrophe to indicate omitted letters in a contraction.

**Examples:** Sue doesn't care if you use UFO or FIFO. Don't assume that the financial statements are free of error.

HYPHENS

**Rule 1.** Use a hyphen in a compound expression when a noun follows the expression.

**Examples:** The vendor has a past-due account.

The vendor's account is past due. (No hyphen is needed because a noun does not follow *past due*.)

**Rule 2.** Use a hyphen in compound numbers and fractions.

**Examples:** Sixty-three employees signed the code of ethics. Please sell me the 10-year-old bonds.

CAPITALIZATION

**Rule 1.** Capitalize the first word in a sentence.

**Examples:** The balance sheet presents information for a certain date.  
The income statement presents information over a period of time.

**Rule 2.** Capitalize the first word of a direct quote.

**Examples:** The manager said, "Please have the statement of cash flows ready by tomorrow." Peter asked, "Should we expense this item or capitalize it?"

**Rule 3.** Capitalize proper nouns.

**Examples:** During our business trip we saw the Golden Gate Bridge. The SEC office is close to the Washington Monument.

FIGURE 2.7 Punctuation Primer.

important not only for business writing but also on the CPA exam. Proper punctuation on the CPA exam essays improves one's grade.

## Improved Writing Skills Required

Improved writing skills are required by many key accounting organizations, including the AICPA, and by the managing partners of the country's largest public accounting firms. Improved writing skills enhance an organization's productivity and lowers training costs. Thus, the Uniform CPA Examination now requires CPA candidates to possess more effective research and writing skills.

The Securities and Exchange Commission (SEC) has criticized dense writing styles, technical jargon, and repetitive disclosures in prospectuses, which is a document provided to the public when a company is issuing new stock. The prospectus outlines the business and principal purposes for the company's proposed use of the capital funds raised from the stock offering. The SEC Release 33-7380, "Plain English Disclosure," requires public company registrants to use "plain English" in a prospectus's cover page, summary, and risk factor sections. The SEC also issued *A Plain English Handbook: How to Create Clear SEC Disclosure Documents*, which specifies six principles for clear writing: active voice, short sentences, everyday language, tabular presentation of complex material, limited legal jargon, and no multiple negatives.

The SEC plain writing concepts apply to any writing. However, let us first discuss the concepts in the context that most concerns the SEC.

### RESEARCH TIPS

Use plain English with short sentences, everyday language, active voice, tabular presentation of complex material, limited legal jargon, and no multiple negatives.

## Active Voice

The *active voice* uses strong, direct verbs and thus increases readers' confidence in the writing. The active voice follows the way we think and process information. Technically, the subject of the sentence performs the action described by the verb. The active voice is often easier to understand than the passive voice.

The *passive voice* is easy to spot because it uses the word "be" or "been" as part of the verb. In the passive voice, the action is done to somebody or something by an agent that might not be identified in the sentence. Did you notice that the previous sentence included an example of the passive voice, "be identified"? The passive voice is less effective because it often forces the reader to reread information, particularly if it is part of a long, complex sentence. Therefore, when revising work, modify sentences to change the voice from passive to active.

The SEC provides the following example of how to change from the passive to the active voice. The "before" material is from an actual corporate filing with the SEC.

**Before:** No person has been authorized to give any information or make any representation other than those contained or incorporated by reference in this joint proxy statement/prospectus, and, if given or made, such information or representation must not be relied upon as having been authorized.

The SEC's proposed revision not only changes the voice but also reinforces its clarity, conciseness, and use of Standard English:

**After:** You should rely only on the information contained in this document or incorporated by reference. We have not authorized anyone to provide you with information that is different.

## Short Sentences

Short sentences help to prevent such problems as run-on sentences and sentence fragments. *Sentence fragments* are constructions that represent just part of a sentence. Typically, in a sentence

### QUICK FACTS

The active voice helps to keep the reader's attention.

fragment, either the subject or verb is left out. *Run-on sentences* have two independent clauses joined without any punctuation. Having more than one idea in a sentence often makes the sentence difficult to read. The SEC suggests that a registrant strive to use short sentences, of 25–30 words, as in the following before-and-after example:

**Before:** Machine Industries and Great Tools, Inc., are each subject to the information requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and in accordance therewith file reports, proxy statements, and other information with the Securities and Exchange Commission (the “Commission”).

**After:** We must comply with the Securities Exchange Act of 1934. Accordingly, we file annual, quarterly and current reports, proxy statements, and other information with the Securities and Exchange Commission.

RESEARCH TIPS

Divide long sentences into short sentences to convey your research results.

Definite, Concrete, Everyday Language

Clearer communication results when writers and readers use definite and concrete words. Similarly, providing examples using one investor helps make complex information more understandable. The SEC provided the following before-and-after example to help registrants communicate in clearer, less vague language. The SEC uses greater specificity in the after example.

**Before:** *History of Net Losses.* The Company has recorded a net loss under generally accepted accounting principles for each fiscal year since its inception, as well as for the interim nine months of this year. However, these results include the effect of certain significant, noncash accounting transactions.

**After:** *History of Net Losses.* We have recorded a net loss under general accounting principles for each year since we started business, and for the interim nine months of this year. Our losses were caused, in part, by the annual write-off of a portion of the goodwill resulting from the 10 acquisitions we made during this period.

Tabular Presentation

Tabular presentations often help to organize complex information. SEC registrants using if-then tables, for example, can make the presentation of such information more accessible. For example, the following tabular headings define two columns to enhance the identification of information that might not stand out in a paragraph:

The Event of Default [if]	Remedy [then]
---------------------------	---------------

Limited Jargon and Technical Terms

Use legal and other jargon sparingly in registration statements. Jargon often forces readers to learn a new vocabulary that inhibits their understanding of the information. In certain circumstances, jargon is unavoidable; technical terms are sometimes needed to communicate technical information as efficiently as possible. However, the writer should define or explain any such terms used. The SEC suggests the use of clear and common terms for better understanding, as demonstrated in the following example:

**Before:** The following description encompasses all the material terms and provisions of the Notes offered hereby and supplements, and to the extent inconsistent therewith replaces, the description of the general terms and provisions of the Debt Securities (as defined in the accompanying Prospectus)

set forth under the heading “Description of Debt Securities” in the Prospectus, to which description reference is hereby made.

**After:** We disclose information about our notes in two separate documents that progressively provide more detail on the notes’ specific terms: the prospectus, and this pricing supplement. Since the specific terms of notes are made at the time of pricing, rely on information in the pricing supplement over different information in the prospectus.

## No Multiple Negatives

The SEC suggests that registrants’ filings avoid multiple negatives. Comprehending documents is more difficult when readers must decipher the meaning of the combination of negatives. Avoiding negatives clarifies the writing, as demonstrated in the following example:

**Before:** Except when an applicant has submitted a request for withdrawal without the appropriate tax identification number, the request will be honored within one business day.

**After:** We will send your money within one business day if you include your tax identification number in your withdrawal request.

## Elements of Plain English

### QUICK FACTS

The SEC requires plain English for clear, straightforward language.

The SEC has also stated that using plain English is part of writing well. Plain English uses common but not overly simplified English. Plain English is the opposite of obscure language because it seeks to make the message understood on the first reading. Successful plain English depends on whether the writing is in suitably clear, straightforward language for that audience.

The SEC has identified the following four basic requirements for plain English:

- 1. Know your audience:** Successful communicators first identify the investor groups for whom they write. Effective writing includes analyzing the readers’ needs and expectations. Writers should tailor their tone and style to their intended audience, select words that contribute to an effective writing style, and choose language based on current and future investors’ educational and financial knowledge.

Other pertinent factors in audience targeting include investor demographics (e.g., job experience, age, and income) and how the investors will read and use the document. Authors should remember that the least sophisticated investors often have the greatest need for an “understandable” disclosure document.

- 2. Know what material information needs to be disclosed:** After identifying the readers’ needs and expectations, the author should gather the necessary information to communicate. The SEC has stated that too many disclosure documents combine material and immaterial information into long, dense sentences; they do not prioritize the information or organize it logically for the reader. The SEC notes that prospectus cover pages typically include very dense printing with sentences running 60–100 words in length and include superfluous information. In this respect, they do not “invite” the investor to read the remainder of the prospectus for key information concerning the offering.

In coherent writing, main points stand out. Registrants should emphasize main points by placing them where they will attract the reader’s attention. Therefore, the cover page should provide a clear, concise, and coherent “snapshot” of the offering. Subsequent sections of the prospectus then present the details in a logical fashion.

- 3. Use techniques of clear writing:** Two overriding themes in clear and effective writing are conciseness and clarity. In writing documents, one should eliminate digressions and irrelevant detail. Precise diction is another important element of clear writing.

Content	Add relevant, value-added content, a process enhanced with the use of critical thinking skills.
Chain of processes	Convey large concepts while supplying evidence supporting these ideas, to add meaning from your experiences.
Coherent organization	Organize ideas logically, making the flow of thought easy to follow.
Conciseness	Use as few words as are necessary to convey complete thoughts.
Clarity	Select effective words to make the ideas easy to see and understand.
Use of Standard English	Use appropriate punctuation and grammar, perhaps with the help of a computer-based spelling/grammar checker.
Responsiveness	Ensure that the answers directly address the research question.
Appropriateness for the reader	Consider the intended readers' background and experience.

**FIGURE 2.8** Key Points of Effective Writing

**4. Design and structure the document for ease of readability:** Readers demand properly designed documents, and the dense printing typical of most prospectuses discourages reading. Good use of white space and margins increases the readability of documents. Headings, bullet points, and graphic illustrations make a long document more pleasing to the eye.

Plain English in writing does not omit complex information. Instead, it presents information in an orderly and clear fashion so that the reader can better understand and absorb the ideas.

Figure 2.8 presents a summary table of some elements of effective writing.

## Writing Effective Texts, e-mails, and Letters

Written communication is used when the information is complex and warrants repeating or when a copy will help for later reference. Oral communication, such as telephone calls or in-person meetings, is used when an immediate response is needed, when one needs to hear a voice to read between the lines, or when a concern about privacy applies.

Written communication by today's accountants includes texts, e-mails, and letters. The increased use of e-mail has reinforced the need to develop strong writing skills, as well as technological skills, to ensure the security of the transmissions and the sophistication of the presentation. Apply the writing and thinking concepts previously discussed in the context of typical written communications with clients. Also, strive to maintain a cordial and respectful tone, which connects with the client. Although one might use a conversational style in a client letter, that tone should be limited for most letters. Write directly and clearly.

Four basic types of business letters that are often sent via e-mail are transmittal letters, status update letters, action-requested letters, and opinion letters.

A *transmittal letter* merely transmits information; it does not seek an action. An effective transmittal letter must quickly summarize information that the accountant will be delivering in more detail. The letter often closes with an offer to provide additional assistance. A firm newsletter is an example of a common transmittal letter. Because the accountant's real goal is to impress clients and potential clients with the firm's knowledge and potential services, a newsletter and its transmission must meet the firm's quality standards. If the transmittal occurs via e-mail, it is particularly important that the subject line state the contents accurately, so as not to cause surprises.

A *status update letter* typically reminds the client about a situation by providing an update. When writing such a letter, assume that not everyone reading the letter will remember everything about the past events. Thus, reference previous correspondence on a subject or summarize major

### QUICK FACTS

Business letters include transmittal, status update, action-requested, and opinion letters.

### RESEARCH TIPS

Use an update letter to remind the client about a matter.

actions already taken. Then summarize new developments or activities. You might close the status update letter by suggesting that the reader call if there are any questions.

A *letter requesting action* needs to make the request clearly and up front. List precisely what is needed in order to minimize the burden on the client. To motivate the recipient to make the desired response, briefly mention why the information is needed. Close the letter by politely mentioning an approaching deadline or likely follow-up.

An *opinion letter* summarizes the situation very briefly but should restate the critical facts that are the basis for the advice provided. Although the client is interested primarily in the conclusions and planning implications, provide some level of detail depending on the client's sophistication. Include language to limit potential misunderstanding, such as "based on the facts provided" or "based on a due diligence review."

## Writing Memos to the File

### RESEARCH TIPS

Write a memo to the file to document the reason for your conclusion.

Writing a memo to the file is often an important and required part of documentation in accounting, auditing, and taxation. Memos should provide important information up front. For example, the top of the memo will list the date, to whom the memo is written, who wrote the memo, and the subject matter. Similarly, the content of the memo states important conclusions early. A memo rarely waits until the end to provide a conclusion. Busy businesspeople do not always read the entire memo.

In tax practice, the typical memo has the following headings: Facts, Issues, Conclusion, and Reasoning (sometimes the reasoning is divided by issue). The reasoning must discuss the law or authorities, applying them to the client's set of facts. Writing the memo so that each sentence integrates some aspect of the specific facts with some aspect of the law is a difficult but necessary skill to develop. Some firms will wish to separate discussion of the law and authority from the analysis. In such cases, every law and authority explained in the discussion should be referenced in the memo. Do not just provide conclusions; state how each element of the legal test or authority applies in that particular case.

A memo should not amount to an academic lecture about a topic. Instead, you should carefully write the memo to present only the potentially relevant facts, laws, and authorities. However, it is generally better to provide too many facts than too few. Potentially relevant authority is sometimes referred to as colorable authority. Colorable authority is usually discussed but distinguished from authority having real relevance to the problem.

Discuss the facts, law, and authorities logically. The facts are often best provided in chronological order. A tax memo may need to discuss both the client's position and the government's position. Generally, the strongest authority is discussed first, before citations of other authority that may interpret the strongest authority. Most firms want the writer to discuss all relevant authorities objectively. Do not omit the discussion of law or authorities on the grounds that it may prevent the client from achieving the desired results.

A strong memo provides great insight by identifying the issues. Thus, the issue statement is refined to include the most critical facts, along with pinpointing where in the law the real issue arises. For example, even if an accountant is told that the issue is whether the client gets a home office deduction, the accountant must make that issue more precise using the facts and law. In this case, detailed knowledge of the law on home offices will help determine which facts are critical. Then pinpointing precisely the part of the law, or the phrase in it, that is at issue enables the reader to assess the situation much more quickly and accurately.

A memo is a formal document. Use the third person in the memo (the person's name, *he*, *she*, *it*, and *they*) to keep the constant focus on the subject. Avoid using the first person (*I*, *we*, and *our*) and the second person (*you* and *yours*), which comes across as less objective. The length of



- **Opening**—The opening of your communication should present the background and context to the reader that indicates why you are writing and why the message is relevant to the reader.
- **Agenda**—The agenda is your road map of the body of your message.
- **Body**—The body contains the details of your communication, which follows the agenda. (However, remember to follow the tips included in this chapter.)
- **Closing**—The closing generally summarizes the written document's key points, draws conclusions, and provides possible recommendations.

**FIGURE 2.9** Effective Writing Outline (OABC).

the memo may vary, but edit it for conciseness. A chitchatty writing style does not go over well in a memo.

In composing business communication, such as memos, Figure 2.9 provides an overview of an appropriate writing pattern.<sup>11</sup>

## SUMMARY

Accounting professionals—whether in auditing, management accounting, not-for-profit accounting, taxation, or business—provide value-added services to others in a dynamic, complex, expanding, and constantly changing profession. Therefore, accountants must learn to rethink, to develop lifelong learning skills to think critically—to grasp the meaning of complex concepts and principles—and to judge and apply these concepts and principles to specific issues.

Additionally, quality writing requires continual practice. Just as SEC registrants must recognize the importance of developing strong writing skills, accountants must do the same to meet their goals.

Critical thinking and effective writing are essential tools for accounting, auditing, and tax research. The concepts outlined in this chapter are used throughout the remainder of this text.

## DISCUSSION QUESTIONS

1. Define critical thinking.
2. Discuss the highest level of thinking according to Bloom's taxonomy.
3. Discuss what grasping the meaning of a statement or comprehension implies.
4. Discuss how critical thinking relates to the term *professional skepticism*.
5. What are the qualities that lie behind rethinking?
6. Discuss the three levels of thought as defined by the Illinois Renewal Institute.
7. Discuss the AICPA list of effective writing characteristics. Which are editing skills, and which are composing skills?
8. What six principles of clear writing does SEC Release 33-7380 identify?
9. Explain why plain English writing does not mean deleting complex information.
10. What are the elements of plain English?
11. What is the difference between the active voice and the passive voice? Give an example.

<sup>11</sup>Baker, William H. and Matthew J. Baker, *Writing & Speaking for Business*, 4th Ed. 2015, BYU Academic Publishing.

12. What are special concerns with e-mails?
13. What are the types of client letters?
14. How does writing a client letter differ from writing a memo to the file?
15. How is a tax memo usually organized?
16. Explain the difference in the revised Bloom's Taxonomy between Understanding and Evaluating.

### EXERCISES

1. There are five houses in a row, each of a different color, that are inhabited by five people of different nationalities, with different pets, favorite drinks, and favorite sports. Use the following clues to determine who owns the monkey and who drinks water. Utilize the chart to develop your answer.
  - a. The Englishman lives in the red house.
  - b. The Spaniard owns the dog.
  - c. Coffee is drunk in the green house.
  - d. The Russian drinks tea.
  - e. The green house is immediately to the right of the white house.
  - f. The hockey player owns hamsters.
  - g. The football player lives in the yellow house.
  - h. Milk is drunk in the middle house.
  - i. The American lives in the first house on the left.
  - j. The table tennis player lives in the house next to the man with the fox.
  - k. The football player lives next to the house where the horse is kept.
  - l. The basketball player drinks orange juice.
  - m. The Japanese resident likes baseball.
  - n. The American lives next to the blue house.

		HOUSE 1	HOUSE 2	HOUSE 3	HOUSE 4	HOUSE 5
Color						
Country						
Sport						
Drink						
Pet						

2. Allison, Mary, and Jennifer are in a gymnastics competition. Here are the results at the end of competition:
  - a. The youngest person received the least points.
  - b. Mary got half of the points of the eldest.
  - c. Jennifer received as many points as both others combined. Who is the eldest of the three gymnasts?