Strategy for Implementation of IFAC
International Education Guideline No. 9:
“Prequalification Education, Tests of Professional Competence and Practical Experience of Professional Accountants”:
A Task Force Report of the International Association for Accounting Education and Research (IAAER)

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Abstract

This paper provides strategies for implementing the recommendations of the International Education Guideline No. 9 (hereafter referred to as Guideline), issued by the International Federation of Accountants. The three principal implementation issues addressed in this paper are as follows. (1) How to instill the characteristics of lifelong learning in future professional accountants through accounting education. (2) How to design and implement a program of accounting education that achieves the objectives of the Guideline. (3) How to develop awareness and encourage adoption of the recommendations of the Guideline by communicating and disseminating information through a series of projects within IFAC’s constraints and policies.

Introduction

In today’s global environment, the increasing number of nations that are moving to market-based economies has created an urgent need for the international accounting profession to improve accountability worldwide. In many developing nations, the knowledge and skills needed
to provide diverse accounting services in the new economies extend far beyond the technical knowledge and expertise currently available. The International Federation of Accountants (IFAC) has issued several Guidelines to explore new ways to encourage, support, and ensure that developing nations have the ability to respond quickly, flexibly, and comprehensively to reform opportunities in accounting education and practice.

However, the prevailing accounting education structure in many developing nations is not in a position to embrace reform and therefore cannot cope with the required and evolving changes. Without intervention, the gap between what accounting practitioners are expected to perform in the emerging environment and what accounting educators are providing will widen.

To foster the development of international accounting education, IFAC issued International Education Guideline No. 9 (Guideline). However, issuing the Guideline is just the starting point. To simply provide a benchmark will not close the gap. IFAC’s ability to translate the Guideline into actions and accomplishments depends, in large part, on its ability to foster change on many fronts. It needs to help accounting educators worldwide to better understand their roles in the new environment and, together with national, regional and international accountancy bodies, assist them in acquiring new skills and knowledge to fulfill those roles. Together with developed nations and international development agencies, IFAC must also continue to help provide resources for emerging economies to develop viable accounting education.

Purpose of Paper

This paper provides strategies for implementing the recommendations of the International Education Guideline No. 9 (hereafter referred to as Guideline). It is based on the following premises:

• The Guideline is intended to be “aspirational” of the goals of accounting education and is not intended to be “descriptive” of the current state of accounting education.
• The Guideline is not a “blueprint” that must be followed rigorously in every environment, but is a “benchmark” to measure achievement against and to look for ideas to improve current practice.
• While it is true that some environments are not currently in a position to implement the Guideline fully, it is clear that participation in the global
economy will require high standards of performance from accountants. Thus, the communication of a benchmark like the Guideline is a critical step in advancing the quality of professional accountants.

The Guideline emphasizes that accountants must have an attitude of learning to learn. This is necessary for the maintenance of professional competence in the face of the increasing changes they encounter. It follows that achieving the goal of providing a foundation for lifelong learning requires grounding in the knowledge, skills and professional values essential to professional competency. The Guideline addresses these knowledge, skills, and professional values and suggests a broad structure of elements of accounting education to accomplish them.

The principal implementation issues addressed in this paper are as follows:

1. How to instill the characteristics of lifelong learning in future professional accountants through accounting education.
2. How to design and implement a program of accounting education that achieves the objectives of the Guideline.
3. How to encourage adoption of the recommendations of the Guideline by communicating and disseminating information through a series of projects within IFAC’s constraints and policies.

A summary of the Guideline is provided in Appendix A and should be referred to at appropriate points in the following sections.

Issue No. 1: How to Instill the Characteristics of Lifelong Learning in Future Professional Accountants Through Accounting Education

The Guideline defines the goal of accounting education as producing “competent professional accountants capable of making a positive contribution over their lifetime to the profession and society in which they work.” The Guideline addresses the “need to maintain professional competence in the face of the changes that accountants increasingly encounter and requires that an attitude of learning be developed and maintained.”

The Guideline states that the predominant characteristic of the future in all cultures will be an environment of significant change, which will require a high standard of professional education and experience. This conclusion means that a program of accounting education and experience must go beyond the traditional approach to accounting education, which
has emphasized “transfer of knowledge,” with learning defined and measured strictly in terms of knowledge of principles, standards, concepts, facts, and procedures at a point in time. Emphasis must be placed on a set of knowledge, skills, and professional values broad enough to enable adaptation to change. Individuals who become qualified professional accountants should be characterized by a constant striving to learn and apply what is new. A high standard of professional education and experience is needed across all cultures in order to adapt to an environment of significant change.

This discussion implies that accounting education programs should provide a foundation for lifelong learning. Essential to that foundation is a broad system of knowledge, skills, and professional values that would facilitate self-directed learning and an unceasing endeavor to acquire and apply new knowledge. Indeed, the important message of the Guideline is that teaching students to learn on their own should be an essential element of accounting education programs. The standard for these programs “should place emphasis first on the desired output and then on the process necessary to achieve that output.” This section addresses the nature of the goal of lifelong learning.

Lifelong Learning

Objective. Lifelong learning is characterized by the notion of learning to learn or self-directed learning. Learning to learn or self-directed learning is defined as developing skills and strategies that help one learn more effectively and use of these effective learning strategies to continue to learn throughout his or her lifetime. Academic programs focused on teaching students how to learn must address three areas:

- **Content.** The content of the program must create a base upon which continued learning can be built. Developing both an understanding of underlying concepts and principles and the ability to apply and adapt those concepts and principles in a variety of contexts and circumstances are essential to lifelong learning. A focus on memorization of rules and regulations is contrary to the goal of learning to learn.
- **Process.** The process of learning should focus on developing the ability to identify problems and opportunities, search out the desired information, analyze and interpret the information and reach a well reasoned conclusion. Understanding the process of inquiry in an unstructured environment is an important part of learning to learn.
• *Attitudes.* An attitude of continual inquiry and life-long learning is essential for learning to learn. An attitude of accepting, even thriving on, uncertainty and unstructured situations should be fostered. An attitude of seeking continual improvement, both of self and the profession, will lead to life-long learning.

Instructional methods and materials need to change as the environment changes. Measurement and evaluation systems that encourage continuous updating and improvement of instructional methods and materials should be developed.

**Strategy.** The *Guideline* suggests that education at the prequalification stage should involve teaching methods that would encourage students toward self-directed learning following receipt of professional qualification. Teaching methods, therefore, should not be primarily oriented toward performance on professional examinations. Rather, the primary focus should be acquiring skills and strategies for more effective learning and toward the goal of lifelong self-directed learning.

Central to this approach is active participation by students in the teaching–learning experience. As initiator of the process, the instructor would facilitate learning activities, organization of tasks and content, and assessment criteria. In effect, the instructor becomes a manager of the learning process. Student participation opportunities are explored at these input levels and also output levels as students raise questions, reflect on answers, and apply new understanding to new situations.

The research of many experts suggests that a number of variables are important for the preparation of independent lifelong learners (Francis et al., 1995). These include student motivation, goal setting, self-management of strategies and effort, individual responsibility, and an understanding of learning as a continuous process. Essentially, the studies call upon students to practice what psychologists call “metacognition.” Metacognition means to think about thinking, to know about knowing, and to be aware of and control the learning process. These practices which embody learning to learn or self-directed learning are basic to the ability to learn to learn.

In implementing this approach it is important to determine the students’ current level of readiness for self-directed learning. Among the factors to consider are content knowledge, intellectual development, practical preparation, general interests, and aptitude for learning.
Attributes of Learning to Learn or Self-Directed Learning

Francis et al. (1995) suggest that five attributes comprise the core concept of self-directed learning (intentional learning). These attributes, which are part of the Task Force implementation guide, represent those intellectual characteristics or capacities deemed most significant in enabling students to be independent learners within any discipline. While not an exhaustive list, it identifies some basic factors prerequisite to independent thinking and lifelong learning within the accounting profession.

- **Questioning**: facts, theories, experience; wanting to learn, asking independent questions about what is to be known.
- **Organizing**: ideas, meaning, knowledge, developing understanding of what is learned.
- **Connecting**: new knowledge with old; integrating what is learned into a broader pattern of understanding.
- **Reflecting**: on what and how and why one is learning; understanding one’s learning needs and strategies.
- **Adapting**: to new situations and needs; using what is learned in a changing world or profession.

Teaching for Learning to Learn or Self-Directed Learning

Learning to learn or self-directed learning requires an understanding the process and making conscious choices among a variety of strategies. It enables students to question, organize, and reflect on their own learning. Faculty must develop their own system of teaching and learning, one that fits their own teaching styles and students’ needs. But there are actions faculty can take to instill self-directed learning in students. Among these are the following activities:

- Include learning goals as well as accounting content goals in the curriculum and in each course.
- Discuss the learning process and learning to learn strategies and attributes to make students conscious of these goals. Teach students to verbalize what they are doing and why they are doing it.
- Teach students the attributes of intentional learning, such as:
  a. Questions to ask about new accounting material and about their learning experience.
  b. Strategies for organizing new knowledge such as outlining, concept mapping, and diagramming.
c. Methods for making connections between new information and their own experience and previous knowledge.
d. Techniques for reflecting on what and how they are learning, such as journal writing, short papers, group discussions of learning exercises.
e. Strategies for adapting knowledge to different, real-world situations and for expanding their vision and understanding beyond course work.

- Use a variety of teaching strategies and roles to involve students actively in their learning; focus the course on student learning rather than on professor teaching.
- Assign problem-solving and critical thinking exercises which include:
  a. Defining the problem
  b. Assessing available information.
  c. Identifying assumptions.
  d. Examining potential solutions and their possible consequences.
  e. Adopting and evaluating a solution.
- Expect students to write often and well in all of their accounting courses and require them to write for a specific accounting-related audience.
- Create a classroom environment that provides an open and continuous opportunity to discuss both accounting subjects and the learning process. Reduce the fear of being wrong or the fear of dealing with the unfamiliar.
- Encourage positive student peer group attitudes toward learning and develop peer support systems.
- Give students plenty of practice in thinking about and doing both learning and accounting.
- Evaluate student learning processes as well as the accounting content learned.

**Issue No. 2: Developing a Program of Accounting Education to Achieve Goals of Knowledge, Skills and Values**

This section focuses on the process of developing accounting education by proposing a curriculum development methodology.

The curriculum development methodology adapts and expands on a framework set forth by Porter and Carr (1999). The adapted methodology consists of seven steps.

1. Information gathering.
3. Program identification.
5. Course content and teaching approaches.
6. Change implementation.
7. Ongoing review and improvement.

In the following paragraphs, the objective of each step is stated and a strategy for achieving the objective is suggested.

1. Information Gathering

*Objective.* Education programs must satisfy the needs of their constituents or stakeholders. The stakeholders of professional accountancy programs include students, community stakeholders, professional bodies, regulatory authorities, and the academic community. The objective of information gathering is to seek information from these stakeholders regarding the desired learning outcomes of an accountancy degree program, the external environment, and its strengths, weaknesses, opportunities, and constraints.

*Strategy.* Various methods could be used to ascertain the opinions of the stakeholder categories. The following are some examples of methods that could be used with various stakeholders:

- Interactive group discussion with student stakeholders.
- Telephone survey with local community stakeholders.
- Mail survey comprising open-ended questions with members of professional bodies.
- Another consisting of closed questions with the employers.
- The Delphi technique with regulatory authorities.
- Structured interviews with various groups.
- Literature study from academic community.

The information gained from these efforts will affect the balance and emphasis of knowledge, skills, and values that need to be achieved within the broad framework of the *Guideline.* However, it is important to always bear in mind that the overall objective of the *Guideline,* and therefore, accounting education generally, is:

To produce competent professional accountants capable of making a positive contribution over their lifetimes to the profession and society in which they work.

Skills that provide students with long-term benefits and develop an ability of lifelong learning are to be preferred over short-term knowledge.

2. Market Identification

**Objective.** Markets for accounting education can be approached from two vantage points. One is from the input side or the type of students. The second is from the output side or types of employers. The objective of market identification is to identify input and output markets.

**Strategy.** The first step in implementing the market identification strategy is to identify the factors in the local environment that will affect the input and output markets. It is important that these factors be a realistic assessment of the country in which the educational programs will be offered. Some examples of how such factors might be stated are as follows:

**Input factors**

- Government policies and society’s attitude to postsecondary education are likely to have a major impact on the number of students entering universities and other postsecondary institutions.
- Many candidates will be part-time students who are working while they are pursuing their education.
- The students who will begin a program of study in accounting education will be represented by a rather homogeneous group of students who have common educational backgrounds.
- The student population will be made up of students with diverse cultural backgrounds.
- Rather than going continuously through accounting programs from start to finish students typically follow a variety of paths due in part to changing economic conditions.

**Output factors**

- The job market is characterized by a market reduction in the demand for accountancy graduates.
- The offering of programs using distance education programs on the Internet is seen as a going market for students.
- Accountancy graduates in the future will be expected to be well-rounded business executives who possess a wide range of competencies: communicative and interpersonal skills; critical, analytical, creative
skills; and an ability to apply theoretical knowledge to practical situations.

- Accountancy graduates will continue to be expected to possess an in-depth knowledge of the “basics” of accountancy and business-related subjects.
- Accountancy laws are primarily administered by government accountants.
- Accountancy rules are primarily statutory in nature, requiring a strong knowledge of the companies’ laws by accounting graduates.

The above factors would, of course, not apply in every situation, but in practice the longer the lists and the more accurate they are in portraying the environment, the better picture curriculum planners will have of markets they are serving.

3. Program Identification

Objective. The objective of the program identification is to identify possible degree/diploma options to enable the desired learning outcomes to be achieved and the needs of the market(s) to be met, and from among these choices to select the best degree/diploma options for accountancy education.

Strategy. In some countries and for some professional organizations, the types of degree/diploma options are well established by tradition and legal structure. However, in some emerging economies program designers have options because they are not bound by a long history. Also, in some established countries, new structures are emerging. In the United States, education for accountants is expanding from four to five years, giving rise to restructured undergraduate programs and new “five-year” programs. In New Zealand, Porter and Carr say a future norm may be a four-year degree encompassing the three-degree and the diploma year followed by a Masters year.

For countries that have the need to develop new structures for accounting education, Needles (1990) has identified three common structures of programs among world accounting programs (see Figure 1):

- **Model A:** An integrated system of professional accounting education in which education is integrated with practical experience.

- **Model B:** A linear system of accounting education in which general education and professional education precede practical experience.

- **Model C:** A parallel system that gives alternate tracks from the above options.
Another consideration that will affect the structure is the emergence of distance education whereby courses are offered over the Internet. Under this structure students take courses on their own time from remote locations. Although the students may be working while taking the courses, the work experience may or may not be a part of the program structure.

Whatever the structure of the program, the Guideline emphasizes that accounting education is not just a series of accounting courses, but is a comprehensive structure that must consist of five elements, which when completed by a candidate, achieves the overall goal of accounting education.

The above points are illustrated by the matrix in Figure 2. Along the left are the competencies as specified by the Guideline. Across the top are the five elements of a complete program of accounting education: entry

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Figure 1. Models of Accounting Education
requirements, general education, professional education, assessment, and experience. Over the course of this complete program a candidate gains the knowledge, skills, and values necessary to be qualified as a professional accountant. Entry requirements play a role in insuring that the candidate has the proper prerequisites for success in the program, including a background in general education and basic intellectual skills. Each cell either does not deal with a competency or covers it at a heavy, medium, or low level. Some skills, such as interpersonal skills, are touched on in course work but are most heavily emphasized in experience.

Figure 2. Relationship of Competencies to Elements of Accounting Education

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Entry requirements</th>
<th>General education courses</th>
<th>Business courses</th>
<th>Professional Education InforTech courses</th>
<th>Accounting courses</th>
<th>Assessment</th>
<th>Experience</th>
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<td>Knowledge competencies</td>
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<td>Quantitative methods and statistics</td>
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<td>Operations research</td>
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<td>Marketing</td>
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<td>International business</td>
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<td>Information technology knowledge</td>
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<td>Manager role</td>
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<td>Designer role</td>
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<td>Evaluator role</td>
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<td>Accounting and accounting related knowledge</td>
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<td>Financial accounting and reporting</td>
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<td>Management accounting</td>
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<td>Business and commercial law</td>
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<td>Communication</td>
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<td>Professional values competencies</td>
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Key to coverage:  H = Heavy;  M = Medium;  L = Low.
Source: Adapted from DePaul University (1998).
Some skills, such as accounting knowledge, are more heavily covered in
the assessment element. The placement of H, M, and L are not meant to
be prescriptive in this example, but only suggestive of the approach that
can be taken to insure that all competencies are adequately covered by the
program.

4. Course Identification

Objective. Once a structure has been developed and the matrix shown in
Figure 2 has been completed, the next step is course identification. The
objective of course identification is to identify the courses that will make
up the curriculum.

Strategy. This step may involve working with existing courses in an
established curriculum, developing new courses, and a combination of
both. The number of courses in each category will depend on the
allocation of topics in the matrix and the structure. For example, a four-
year curriculum might consist of one-third general education courses,
one-fourth business courses, one-eighth informational technology courses,
and one-fourth accountancy courses. It is not intended that a course has to
fill every cell with an H, M, and L in the matrix, but each of these cells
should be covered in one or more courses.

5. Course Content and Teaching Approaches

Objective. The objective of the course content step is to specify not only
the topics that will be in each course but also to determine what skills
and professional values competencies are appropriate in each. This step
will also require specification of teaching techniques and assessments
methods.

Strategy. IEG No. 9 makes it clear that teaching methods need to expand
in accounting programs to include a broad range of learner-centered
teaching methods that include:

• Use of case studies.
• Working in groups.
• Adapting methods to the ever-changing environment in which the
  professional accountant works.
• Pursuing a curriculum that encourages students to learn on their own.
- Using technology creatively.
- Encouragement of students to be active participants in the learning process.
- Using measurement and evaluation methods that reflect the changing knowledge, skills, and values of professional accountants.
- Integration of knowledge and skills across topics and disciplines to address multifaceted and complex situations typical of professional demands.
- Emphasis on problem solving which encourages identifying relevant information, making logical assessments, and communicating clear conclusions.

The following paragraphs from Porter and Carr (1999) illustrate how these concepts have been implemented in a specific instance in New Zealand.

First, they identify six innovations that can be used at other schools to integrate expanded competency (skills and abilities) instruction with knowledge instruction:

- Organizing and integrating technical content by business cycles.
- Using new teaching approaches, including extensive use of student groups (cooperative learning) and teaching in longer time blocks.
- Grading on the basis of both technical and skill-based competencies.
- Using a business-events systems approach to teaching accounting, and using textbooks and other materials as resources rather than as drivers of the curriculum.

Second, they identified the following ten skill-based (expanded) competencies that needed to be added to the teaching of accounting and business content:

- Written communication: the ability to present views in writing.
- Oral communication: the ability to present and explain views through discussion and debate.
- Ability to listen effectively.
- People skills: ability to understand group dynamics and work effectively with people.
- Ability to resolve conflict.
- Ability to organize and delegate tasks.
- Critical thinking: ability to solve diverse and unstructured problems.
- Ability to read, critique, and judge the value of written work.
- Working under pressure: ability to deal effectively with imposed pressure and deadlines.

- Technology: ability to communicate, create, analyze, and manipulate data using technology; and familiarity with software programs and databases used by accounting professionals.

6. Change Implementation

Objective. The objective of the change implementation step is to successfully put into operation the new program within the timetable established in the plan.

Strategy. Change is often difficult to accomplish. The barriers to change are associated with individuals and with their organizations (Krogh et al., 2000). At the individual level, accomplishing change must address individual faculty members’ ability to deal with new situations, information and content, and pedagogical methods. These individuals, first, must be able to assimilate or integrate the new curriculum and pedagogical methods into their existing experiences. For example, instructors who are used to teaching by lecture only will likely have difficulty with more interactive classroom strategies such as class discussion and use of teams because they have no experience with the give and take of such an environment. These new teaching methodologies can also pose a treat to the self-image of the faculty member because they feel inadequate using methods with which they are not comfortable.

Second, individual instructors must also be able to accommodate the changes in curriculum and pedagogy. For example, just as bookkeepers must accommodate themselves to using computers or lose their jobs, instructors must embrace the need to incorporate information technology into their curriculum. The barriers to change in organizations are also formidable (Krogh et al., 2000). To overcome these barriers and at the same time implement dramatic change in curriculum and programs successfully requires acceptance and support by the people involved. This methodology has emphasized input from stakeholders from the first step. It also requires good communication as the programs are being developed and as to how they going to be implemented. This objective, however, cannot be accomplished without a concentrated effort. One approach to accomplishing change is the following eight step process (Kotter, 1996):

- Establish a sense of urgency. Communicate the fact that the market and competitive realities facing professional accountants today are such that dramatic change in curriculum and approach are required.
• Create a guiding coalition. Put together a group of leaders, broadly represented, with the power to work as a team and to lead the movement for change in accounting education.

• Develop a vision and strategy. Create a vision for the new curriculum that includes a new language and that leads to well thought out strategies for change.

• Communicate the change vision. Use every vehicle possible to constantly communicate the new vision and the strategies that result from it.

• Empower board-based action. Identify the barriers at the individual and organizational level and attack them. Train faculty to assimilate and accommodate. Change systems or structures that undermine the vision. Challenge the stories that impede change. Encourage risk-taking and nontraditional ideas and actions.

• Generate short-term wins. Plan for visible implementations of part of the plan where barriers are least restrictive. Keep tallies of “wins.” Recognize, reward, and communicate those “wins.”

• Consolidate gains and produce more change. Use increased credibility to make more changes. Hire, promote, and develop people who can implement the change vision. Reinvigorate the process with new content, courses, and pedagogies.

• Anchor new approaches in the culture. Develop assessment measures to show progress. Report at regular intervals on the progress in achieving the change vision.

7. Ongoing Review and Improvement

Objective. The objective of ongoing review and improvement is to establish procedures for monitoring internal and external environmental changes, implementation of curriculum changes, modes of delivery, and educational outcomes.

Strategy. As part of the change process, procedures need to be established to ensure that the outcomes of the (revised) curriculum are achieved as planned, and that the outcomes, curriculum, and delivery modes remain appropriate as changes occur in the department’s external or internal environments. Outcomes assessment research is needed to discover reliable assessment mechanisms for connections between a program’s mission, teaching effectiveness, and outcomes.

Continuous improvement implies continuous change—concepts which lie at the heart of total quality management (TQM). In an academic
setting, TQM may be defined as the never-ending quest by suppliers of academic services (faculty, departments, schools, etc.) to improve quality by responding to their stakeholders’ (students, students’ parents and other sponsors, and students’ future employers) need for better performance and low cost. TQM rests on the assumption that all systems can be improved through continuous measurement of outcomes, evaluation, and change. In this scenario, change is but one element in an ongoing, never-ending process of improvement; it is effected seamlessly, without major dislocation. Accounting programs should be kept under constant review and adapted as necessary so they continue to best meet the needs of the prevailing circumstances.

**Issue No. 3: Developing an Action Plan to Encourage Awareness and Adoption of the Recommendations of the Guideline by Communicating and Disseminating Information**

This section proposes an action plan to communicate and disseminate the Guideline through a series of projects within IFAC’s constraints and policies. The plan recognizes that each nation needs to determine the pace and the scope of implementation in a way that best suits its goals, abilities, and resources. It suggests the development of partnerships with other international organizations such as IAAER and the World Bank. The options presented in this section are ideas from which the most promising can be chosen.

**Major Challenges**

A major challenge facing IFAC in implementing the Guideline is to make accounting faculty worldwide aware of the Guideline. IFAC needs to cultivate the interest and involvement of accounting educators in updating the accounting curriculum.

- *Awareness of and interest in trends in accounting education.* Accounting educators in many developing nations lack sufficient awareness of and interest in trends in accounting education. This is largely a product of a reward structure that does not encourage or explicitly acknowledge the need for applied instructional and pedagogical research and thus the need for change in academic content.
- *Traditional mindset as to the role of accounting.* In many developing countries accounting educators typically have a mindset associated with the conventional role of accounting in non-market based economies.
They do not fully understand the mechanism of the market system and the role of accounting in such an environment. They lack an awareness of current developments in accounting education and the expertise and financial resources necessary to plan accounting reform.

**Variability in cultures.** In addition, the different cultural and economic environments of developing nations make it impossible to rely on just one model of curriculum reform. Therefore, rather than imposing a single version of the *Guideline*, it is, therefore, important to adapt the *Guideline* to meet the needs of different environments.

### Critical Elements for Success

For the *Guideline* to be implemented, accounting education needs an environment that is conducive for it to reassess its mission and objectives, redirect its approach, and, in some cases, redesign its content. The following are critical elements for this environment.

- **National/regional accounting capacity.** Developing nations need help in creating national or regional capacity in curriculum design and in developing catalysts who can determine the scope and pace of reform and adapt the *Guideline* to their needs.
- **Accounting faculty participation.** Accounting educators in developing nations, in general, need to take the initiative and be actively involved in and supportive of curriculum change. They must acknowledge their responsibility to parties outside the university setting for accounting education reform and encourage all stakeholders to discuss the need, implications, and benefits of change in accounting curriculum.
- **Policymaker support.** Policymakers in developing nations need to be educated about the role of accounting in a market-based economy. Policymakers include top level university administrators, accounting professionals, and appropriate government officials.
- **A systemic approach.** There needs to be a systemic approach in adapting the *Guideline* to ensure the integrity of the education process, establish educational priorities, and resolve conflicts.
- **Collaborative efforts.** There needs to be collaborative efforts between accounting practitioners and academicians to ensure full participation in setting priorities, preparing action plans, and providing feedback in adapting the *Guideline*.
- **Centers of excellence.** There needs to be local or regional “centers of excellence” as change agents. Concentrating reform effort on carefully
selected quality institutions helps develop a critical mass of change agents.

- **Financial support.** There needs to be financial support for select academic programs. Interested institutions could compete for funds to implement changes.

- **Technical Assistance.** There needs to be intensive involvement by experts to enable academic institutions which have the desire and capacity to change to build reform teams and to manage change. Specifically, the experts would provide assistance to academic institutions to:
  - Identify the agents of change at the national and institutional levels who can provide leadership and vision for the entire process.
  - Assist in defining expectations as to how accounting educators should carry out their responsibilities to serve the accounting profession.
  - Assess the current state of affairs by examining the current profiles of accountants and determining how close the curriculum is to the Guideline.
  - Based on the assessment, perform a need analysis of accounting education at the local scene by identifying the desired profile of the new accountant.
  - Adapt the *Body of Knowledge* in the *Guideline* that is relevant to the specific environment.
  - Specify the suggested curricula, with full designation of topics and course descriptions.
  - Create a common vision of an academic program as it should be in the specific environment.
  - Identify steps for moving toward the vision by preparing an action plan, taking into consideration the prevailing conditions and constraints.
  - Establish criteria to determine priorities. The specification of priorities is a prerogative of the recipient countries.
  - Specify minimum standards for content of the curriculum, resources needed, and qualifications of accounting educators, identify a sequence of curriculum reform, and select pilot projects.
  - Develop accounting faculty by equipping them with the necessary skills and knowledge. This includes arranging training programs, internships, and on-the-job experience in academic institutions.
  - Establish assessment criteria and create a review process to continually assess the program.
  - Design pilot project(s) to test.
**IFAC’s Role in Effecting Change**

Within IFAC’s existing policy, IFAC can selectively adopt the following roles as desired by the recipient nations:

- **Facilitator.** IFAC can assume the role of a facilitator to support the proposed changes, to provide a framework to clear the impediments to the changes and to mitigate faculty dissension.
- **Conduit for technical assistance.** Implementing the Guideline will demand substantial financial and technical assistance. IFAC is in a position to facilitate this type of assistance.
- **Advisor.** IFAC is in the best position to render objective and rational advice on proposed changes, their implications, and their impact on those involved.
- **Objective evaluator and assessor.** If foreign assistance is provided to adapt the Guideline, it is important that the results of changes are evaluated and actual outcomes are measured against the benchmark established by the Guideline. IFAC is in a position to judge accountability and assess outcomes.

**Awareness Campaign and Action Options**

To make accounting faculty around the world aware of the Guideline and its value, the IFAC needs to adopt a persuasive awareness campaign. In the list below are an array of ideas from which the most promising can be chosen.

1. **Reach agreements with international, regional, and local academic and professional accounting organizations to participate in the campaign.** Organizations, such as the IAAER, can play a vital role in publicizing the Guideline through their websites, newsletters, and conferences. In addition, these centers may offer scholarships to accounting faculty from developing nations to attend seminars focusing on accounting curriculum issues. Such activities would create synergy and supplement IFAC’s resources.

2. **Collaborate with international development organizations such as the World Bank, OECD, USAID, and the United Nations to publicize the Guideline as a benchmark for accounting curricula in developing nations.** Development agencies spend massive resources training accounting professionals, but often overlook the fact that a nation without relevant
accounting education will continue to produce obsolete graduates, thus making remedial training a perpetual activity. Using the Guideline as a benchmark would help development agencies in their technical assistance efforts.

3. Create an Online Forum for educators and administrators of accounting programs. The Forum would be a leading knowledge, education and information resource where accounting academicians in developing nations would look for collaboration and guidance. It would bring together a team of leading academics, television producers, instructional designers, and web designers to produce engaging online content, creating a powerful, interactive educational experience. The Forum would allow the production of videos and audio cassette tapes to serve as tools for stimulating group discussion on selected topics. Activities of the Forum would include:

- Putting into focus current forces impacting accounting curriculum, featuring interviews with prominent opinion makers and leaders in accounting academia today.
- Discussing “hot” issues led by provocative and engaging experts. Examples of such hot issues would be challenges confronting accounting programs, how convergence and technology are impacting the rapidly changing accounting educational landscape, program strategies and options, reward structure, and related institutional processes necessary for successful implementation of the Guideline.
- Arranging for internationally recognized accounting experts to share their experiences and expertise about the processes and tactical planning that have guided their successful efforts in changing their curricula. They would identify principles that built success for their programs through an in-depth discussion of strategies, practical guidance, ideas, and models.
- Presenting creative responses to tough issues and promoting the opportunity for accounting programs to play a leading role in causing changes throughout the profession and the economy.

4. Produce a variety of publications, handbooks and videos that focus on the accounting curriculum and on various aspects of implementation processes. These suggested actions would include:

- Creating an IEG No. 9 Handbook: “Interpretation and Implementation” (video and guide). The manual (hard copy and video) to describe all of the issues involved in implementing the Guideline. A companion video
discussion guide would include discussion questions designed to stimulate discussions on how the Guideline applies to a department’s mission, objectives, educational programs and processes.

• Producing a Value of the New Curriculum Brochure: “Change for the Best: Accounting Education.” This brochure and short video would communicate the benefits of the new curriculum. The brochure would describe the values of the new curriculum to assist aspiring accounting programs that are interested in implementing the new curriculum to better understand how the Guideline focuses the department’s energy to achieve quality and continuous improvement in accounting education. The brochure would include testimonials from academic institutions that have implemented the new curriculum, articulating and sharing its value and benefits to students, business, and the economy.

5. Utilize IFAC’s current channels of communication.

• Translation. Expand official translations of the Guideline into as many languages as needed.
• Member Body Information Sharing Project. Use the contact person at the participating member bodies to provide information on the Guideline. IFAC can also post information on the Guideline on IFAC’s web page as menu items in “Display by Participating Body” and “Display by Desired Services.”
• Education Network. Use the biannual newsletter of the “Education Network” to provide a forum for exchanging information on new developments in implementing the Guideline.
• Education Committee Outreach Program. Use the Internet-based program of the “Education Committee Outreach Program” to encourage member bodies to volunteer to communicate their experiences in implementing the Guideline to other member bodies via IFAC’s web page.
• Other channels of communication. Maximize the use of IFAC’s current channels of communication such as IFAC News & Views, IFAC Press Releases, and the IFAC Quarterly to promote the Guideline and inform readers of new developments.
• Frequently Asked Questions. Create a question and answer forum on the IFAC web page, IFAC News & Views, IFAC Press Releases, and the IFAC Quarterly to answer questions related to the Guideline.

6. Use the Internet. IFAC has already begun to take advantage of the Internet as a communication medium. IAAER, as another example, has
become exclusively an Internet publisher of its newsletter. The Internet and other online networks can play a major role in the adoption of the *Guideline*. Accounting educators in developing nations can collaborate in online teaching and learning environments. Faculty in leading academic institutions can extend their expertise and guidance beyond the boundaries of their universities to colleagues around the world. As an example, IFAC could establish and moderate an e-mail discussion group for questions and answers on policy and management issues related to implementation and priority setting. The discussion group could be established on IFAC’s web page.

7. *Establish an international clearinghouse.* IFAC could establish and operate a multi-national, multi-university clearinghouse for curriculum innovation. The principle role of the clearinghouse would be to be an influential facilitator between developing and developed accounting programs. Under this arrangement, IFAC would build a database of accounting programs of institutions that are interested in participating in the project. Any participating institution could access the database via IFAC’s web page for information.

8. *Collaborate through an agency of education reform.* IFAC could establish an Agency for Education Reform (AER) as part of its newly established *International Forum on Accountancy Development* (Forum). Major international financial institutions, development agencies, international and regional professional accounting organizations (such as the World Bank, United Nations agencies, the World Trade Organization, the British, Canadian, Dutch, German, and Swiss governments, the International Standards of Accounting and Reporting, the Inter-American Accounting Association, the Confederation of Asian and Pacific Accountants, the Southern African Development Community, the Eastern Central and South African Federation of Accountants) have all been actively involved in responding to accounting reform. As in the case of the *Forum*, *AER* could mobilize these entities to focus on implementing the *Guideline* and enhancing the quality of accounting education worldwide. This cooperative approach would help leverage limited funding and maximize program impact.

9. *Use the AAA’s online course exchange.* The American Accounting Association’s web page offers a unique resource for educators all over the world: the Accounting Coursepage Exchange (ACE) Project. This is a
searchable database designed to make it possible for faculty to share educational materials and find useful ideas to support the development of accounting curriculum in developing nations. In cooperation with the AAA, IFAC could arrange for accounting educators in developing nations to access the ACE database by clicking on a link page on IFAC’s web page. They could then search for accounting courses separately by name, institution, text, course category, or other characteristics. They could also add their own course page to the database and solicit feedback.

10. Adapt/use the American Accounting Association Benchmarking. The American Accounting Association (AAA) Benchmark Program allows academic institutions, through a survey, to compare their accounting programs to peer programs in many areas including curriculum. In addition to providing the opportunity for international recognition of a program’s strengths, benchmarking also offers the opportunity to find out where and how to improve. It identifies the best practices among accounting programs and helps academic institutions adapt these practices for their own environment. IFAC could either utilize the AAA’s existing Benchmark Program or develop its own.

11. Adapt the AICPA’s online Core Competency Framework. In 1999, the American Institute of Certified Public Accountants (AICPA) Board of Directors endorsed the development of an online competency framework for academic use, the AICPA Core Competency Framework for Entry into the Accounting Profession (the Framework). The Framework lays the foundation for progressive curriculum change and provides resources for educators to implement the new CPA vision in academia. IFAC can either develop its own Framework modeled after the AICPA’s Framework or adapt the AICPA Framework to ensure suitability and flexibility to varying institutional environments, resources and missions.

12. Establish a partnership program. IFAC could establish stable, constructive, ongoing, and helpful partnerships between recipient academic institutions aspiring to implement the Guideline and host academic institutions which already have a curriculum that meets the standards established by the Guideline. An institution that wants to participate in the program would be a “Partner.” It would be committed to participate in a systematic program of quality enhancement and continuous improvement. Recipient institutions would benefit from the Partnership by receiving ongoing assistance that fosters continuous improvement and minimizes
non-productive or misdirected efforts. Host institutions on the other hand would benefit from the Partnership by exposing their faculty to a rich international experience. IFAC could disseminate the collective experience partnership to other institutions that did not participate in the Partnership.

13. **Set-up a curriculum incubator.** IFAC could create a “curriculum incubator” (CI) to provide for developmental assistance (as compared to traditional assistance) in curriculum development around the world. The main features of the CI would include:

- Working with institutions, nations, or regions desirous of change with a strategic plan for curriculum reform.
- Designing customized reform programs that emphasize participation.
- Responding quickly to windows of opportunity for positive change.
- Focusing on the core issues of curriculum to meet the hierarchy of needs identified by recipient countries as priority areas.
- Building on best practices and developing creative, innovative approaches to curriculum reform, testing new approaches, and adapting future engagements to lessons learned.
- Leveraging funding and programs by inspiring others to do more.
- Saying “no” when a place, an idea, or the timing is not right.
- Re-evaluating strategies and maintaining flexibility in response to curriculum restructuring.
- Contributing to a common strategy/framework for accounting development.

14. **Create Fellowships and awards for innovation in accounting education.**

- IFAC could establish an award for innovation in accounting education for developing nations implementing the Guideline. There could be one international award or several regional awards. The award could also be for implementing a specific area in the Guideline or it could be for innovative classroom activities, use of specific tools in the classroom for instructional development, or curriculum innovations.
- IFAC could also establish a collaborative effort award to acknowledge significant collaboration among academic institutions and nations and to encourage bilateral recognition. A Fellowship program could be used to reward and direct attention to needed areas.

15. **Sponsor awareness activities and training programs.** IFAC could collaborate with other organizations to develop and offer national and
regional training programs, conferences, and seminars to educators on market mechanism, the role of accounting in a market-based economy, and on the features and necessity of a new curriculum. IFAC could also cosponsor or assist in designing and making available domestic and/or international study tours to enhance professional development and collaboration in particular areas of curriculum reform.

Summary and Conclusion

This paper provides strategies for implementing the recommendations of the International Education Guideline No. 9. This guidance is organized under three major issues that are critical to the successful implementation of the Guideline. Under Issue No. 1, we provide guidance as to how to instill the characteristics of lifelong learning in future professional accountants through accounting education. Under Issue No. 2, we provide and illustrate a methodology for designing and implementing a program of accounting education that achieves the objectives of the Guideline. Under Issue No. 3, we recommend actions involving a series of projects within IFAC’s constraints and policies directed at developing awareness and encouraging adoption of the recommendations of the Guideline.

The next step is action on the part of IFAC. A task force should be formed to examine the recommendations in this paper with a view to select the most promising options. This step may be accomplished by examining the options in more detail and prioritizing them as to their potential impact and practicality. An implementation plan can be formulated with specific goals over a three to five year period.

References

American Institute of Certified Public Accountants, The AICPA Core Competency Framework for Entry into the Accounting Profession (AICPA, 1999).
DePaul University, Curriculum Revision Committee Report, (School of Accountancy, DePaul University, May 21, 1998).

**Appendix A—Summary of IFAC International Education Guideline No. 9: Prequalification Education, Tests of Professional Competence and Practical Experience of Professional Accountants**

All quotations in the sections that follow are from revised IEG No. 9 and all references to IEG No. 9 refer to the revised guideline unless otherwise noted.

**The Goal of Accounting Education**

IEG No. 9 sets forth the goal of a program of accounting education and experience for professional accountants “to produce competent professional accountants capable of making a positive contribution over their lifetimes to the profession and society in which they work.” This goal addresses the need to maintain professional competence in the face of the changes that accountants increasingly encounter and requires that an attitude of learning be developed and maintained. It implies that a broad body of knowledge, skills, and professional values will provide strategies by which accountants can continue to learn and adapt to change throughout their professional life.

The Committee believes that the predominant characteristic of the future in all cultures will be an environment of significant change, which will require a high standard of professional education and experience. This conclusion means that:

A program of accounting education and experience must go beyond the traditional approach to accounting education, which has emphasized “transfer of knowledge,” with learning defined and measured strictly in terms of knowledge of principles, standards, concepts, facts, and procedures at a point in time. Emphasis must be placed on a set of knowledge, skills, and professional values broad enough to enable adaptation to change. Individuals who become qualified professional accountants should be characterized by a constant striving to learn and apply what is new.
Because professional accountants work in diverse cultural, political, and economic environments, the goal is to promote flexibility in the development of accounting education and experience. It holds that the focus of accounting education and experience should be on the knowledge, skills, and professional values needed for working in the professional environments, such as public, managerial, or government accounting. Standards for accounting education and experience should place emphasis, first, on the desired output and then on the process necessary to achieve that output. This process, which will be carried out in an unstructured environment, is an important part of the concept of learning to learn. Moreover, the guideline says that a key objective of accounting programs should be to teach students to learn on their own. To achieve this objective, educators may need to be trained and must be encouraged to use a broad range of teaching methods, including:

- Use of case studies and other means to simulate actual work situations.
- Working in groups.
- Adapting instructional methods and materials to the ever-changing environment in which the professional accountant works.
- Pursuing a curriculum that encourages students to learn on their own.
- Using technology creatively.
- Encouraging students to be active participants in the learning process.
- Using measurement and evaluation methods that reflect the changing knowledge, skills, and values required of professional accountants.

**Knowledge, Skills, and Professional Values**

In IEG No. 9, the Committee supports programs of accounting education and experience centered on outputs that are appropriate to the country or the professional organization to which they apply. This approach should make possible the development of measurable competency standards, which should form the basis for the monitoring and assessment that can lead to improvement in the quality of accounting education and experience.

The Committee contends that methods should be adopted to assess the potential of students for providing a positive lifelong contribution to the profession and society. These assessment methods should focus on developing competency standards to evaluate the knowledge, skills, and professional values required of professional accountants.

The Committee also asserts that to achieve the goal of providing a foundation for lifelong learning, a program of accounting education and
experience must offer a grounding in an essential body of knowledge, skills, and professional values which would form the basis for competency standards. The professional bodies in each country must identify the knowledge, skills, and professional values relevant to their environments and develop the related competency standards. The Committee has identified the following sets as a basis for establishing these standards.

Knowledge. Prior to qualification, an individual should acquire information about the world in which the professional accountant works, covering knowledge in general, organizational and business areas, information technology, and accounting and accounting related. The content of these areas is as follows:

- **General knowledge.** Broad-based individuals, who think and communicate effectively and who have the basis for conducting inquiry, carrying out abstract logical thinking, and undertaking critical analysis must have a good foundation of general education. This foundation enables them to place decisions in the larger context of society, to exercise good judgment and professional competence, to interact with diverse groups of people, and to begin the process of professional growth.
- **Organizational and business knowledge.** Organizational and business knowledge provides the context in which professional accountants work. A broad knowledge of business, government, and non-profit organizations, how they are organized, financed, and managed, and the global environment in which they operate is essential to the functioning professional accountant.
- **Information technology knowledge.** Information technology has transformed the role of the professional accountant. The professional accountant not only must use and evaluate information systems but also must play an important role in the design and management of such systems.
- **Accounting and accounting-related knowledge.** Accounting and knowledge provides the strong technical background essential to a successful career as a professional accountant.

Skills. Whereas the knowledge set may be most directly identified with the information content of the curriculum, the skill set identified by the Committee is more oriented toward attributes that will result in the successful use of the knowledge set. They are not usually acquired from specific courses devoted to them but from the total effect of the educational program and professional experience. This set consists of three kinds...
of skills—intellectual, interpersonal, and communication, as enumerated below.

- **Intellectual skills**—enable the professional accountant to solve problems, make decisions, and exercise good judgment in complex organizational situations. Capabilities that collectively compromise an individual’s intellectual skills are:
  - the capacity for inquiry, research, abstract logical thinking, inductive and deductive reasoning and critical analysis;
  - the ability to identify and solve unstructured problems in unfamiliar settings and to apply problem-solving skills in a consultative process;
  - the ability to select and assign priorities within restricted resources and to organize work to meet tight deadlines;
  - the ability to adapt to change.

- **Interpersonal skills**—enable professional accountants to work with others for the common good of the organization. The components of interpersonal skills are:
  - the ability to work with others in a consultative process, particularly in groups, to organize and delegate tasks, to motivate and develop people, to withstand and resolve conflict, and at appropriate times to lead them;
  - the ability to interact with culturally and intellectually diverse people;
  - the ability to negotiate acceptable solutions and agreements in professional situations.

- **Communication skills**—enable the professional accountant to receive and transmit information, form-reasoned judgments, and make decisions effectively. The components of communication skills are:
  - the ability to present, discuss, and defend views effectively through formal and informal, written and spoken language;
  - the ability to listen effectively, including a sensitivity to cultural and language differences;
  - the ability to locate, obtain, organize, report, and use information from human, print, and electronic sources.

**Professional Values.** Professional values comprise the attitudes that identify professional accountants as a members of a profession. They are essential to making a continuing contribution to the development of the profession and the society in which it operates. The attributes which collectively comprise the values and attitudes of professional countants are:

- A commitment to act with integrity and objectivity and to be independent under applicable professional standards.
• a knowledge of the standards of professional ethics of the member body to which an individual aspires.
• a concern for the public interest and sensitivity to social responsibilities.
• a commitment to lifelong learning.

_Flexibility of the knowledge, skills, and values._ By focusing on the outcomes of knowledge, skills, and values, the guideline recognizes that professional accountancy bodies, regulatory agencies, and educational systems across the world have adopted a variety of practices to ensure that candidates possess the educational background and intellectual qualities which, together with appropriate experience, are necessary for admission to membership. Differences in these practices result from differences in several other areas, including long-established preparation for the profession; educational systems; views on the role of prequalification education and the merits of practical experience; the organization and role of the profession; the influence of government; cultural outlooks; and economic conditions.

.Elements of Accounting Education

Whereas a program’s output will be specified by the foregoing goals and knowledge sets, the processes leading to that output will be determined by the elements of accounting education and experience. These elements include entry requirements, general education, professional education, assessment, and experience requirement.

Entry requirements. Because of considerable variation in the entry requirements for entering a program of study for professional accountants, IEG No. 9 sets a minimum standard of the education that an individual must bring to the program of education and experience. This minimum standard states that “for an individual seeking to begin a program of study leading to membership as a professional accountant in an accountancy body should be at least equivalent to that which would entitle one to admission into a recognized university degree program or its equivalent.” While in some countries, this standard may not seem minimal, it represents an improvement on the original IEG No. 9 in that it is a firm requirement not allowing for exceptions. It recognizes that the quality of a profession cannot be maintained and improved if the capability of the individuals that enter it do not meet high standards.

General education. Because the Committee believes that a broad-based general education is critical, it proposes that general education “must focus on the development of general knowledge, intellectual skills, interpersonal skills, and communication skills through a broad range of subjects that provide students with a grounding in arts, sciences, and humanities.” Although general education requirements vary greatly from program to program and from country to country, a broad-based general education is critical to lifelong learning and provides the foundation on which to build professional and accounting studies and should provide students with:

- An understanding of the flow of ideas and events in history, the different cultures in today’s world, and an international perspective.
- Basic knowledge of human behavior.
- A sense of the breadth of ideas, issues and contrasting economic, political, and social forces in the world.
- Experience in inquiry and evaluation of quantitative data.
- The ability to conduct inquiry, carry out abstract logical thinking, and understand critical thinking.
- An appreciation of art, literature, and science.
- An awareness of personal and social values and of the process of inquiry and judgment.
- Experience in making value judgments.

Professional education. IEG No. 9 states that “the professional education component must consist of two or three years of full-time study (or the equivalent) and must build on and develop further the intellectual, interpersonal, and communication skills provided in general education. Professional education consists of the:

- organizational and business knowledge core;
- information technology knowledge core;
- accounting and accounting-related knowledge core.

The aim of the professional education component is to identify the subject areas which should be covered, but it does not necessarily suggest actual courses that would be taken, because the subjects identified are covered under different descriptions in different parts of the world. It is also recognized that some bodies require a greater range of subjects; others place greater emphasis on some subjects in order to meet the purposes for which their students are being trained. The level of understanding required may also vary in different professional bodies and over different time periods. An important determinant of the curriculum should be the knowledge,
skills, and professional values relevant to a particular country or professional body.

• **Organizational and business core.** The organizational and business knowledge core must include coverage of the following subjects:
  - economics;
  - quantitative methods and statistics for business;
  - organizational behavior;
  - operations management;
  - marketing;
  - international business.

These core subjects are intended to provide the prospect professional accountant with:

• a knowledge of the activities of business, government, and non-profit organizations, and of the environments in which they operate, including the major economic, legal, political, social, international, and cultural forces and their influences and values;
• a knowledge of macro- and micro-economics;
• the application of quantitative methods and statistics to business problems;
• an understanding of interpersonal and group dynamics in organizations, including the methods for creating and managing change in organizations;
• an understanding of personnel issues, operations management, organizational strategy, and governance and marketing;
• a basic knowledge of international trade and finance and the ways in which international business is conducted;
• an ability to integrate the above components in accomplishing strategic objectives.

• **Information technology core.** The information technology core requirements for professional accountants are addressed in IEG No. 11 on “Information Technology in the Accounting Curriculum.” It may be obtained in a variety of ways, including in separate courses and by integrating the subject into the organizational and business core and into the professional accounting core, but should provide students with the knowledge and skills they need to use and evaluate information technology and systems and to provide input into the design and management of those systems. It also provides the prospective accountant with a knowledge of the process of identifying, gathering, measuring,
summarizing, and analyzing financial data in the contemporary environment, including:

- the basic concepts of information systems and technology;
- skills in the use of current software such as spreadsheets, word processors, graphics packages, database systems, electronic mail, accounting packages, and similar programs;
- the concepts and principles of information system design;
- the concepts and principles of information system evaluation;
- use of information technology for competitive advantage, organization, staffing, planning, budgeting, and control.

**Accounting and accounting-related core.** The accounting and accounting-related core identifies the subject areas to which all accountants should be exposed and provides students with the technical accounting knowledge and professional ethics and values sufficient to pursue careers as professional accountants. It must include coverage of at least the following subjects:

- financial accounting and reporting;
- management accounting;
- taxation;
- business and commercial law;
- auditing;
- finance and financial management;
- professional ethics.

These core subjects should provide the prospective professional accountant with a knowledge of:

- history of the accounting profession and accounting thought;
- content, concepts, structure, and meaning of reporting for organizational operations, both for internal and external use, including the information needs of financial decision makers and a critical assessment of the role of accounting information in satisfying those needs;
- national and international accounting and auditing standards;
- financial management including managing resources, planning and budgeting, cost management, quality control and benchmarking;
- environmental factors, including the regulation of accounting;
- ethical and professional responsibilities of an accountant;
- the concepts, methods and processes of control that provide for the accuracy and integrity of financial data and safeguarding of business assets;
- taxation and its impact on financial and managerial decisions;
• the nature of auditing and other attest services and the conceptual and procedural bases for performing them in manual and electronic environments;
• a knowledge of finance, including financial statement analysis, financial instruments, and capital markets, both domestic and international.

Specialized studies should be pursued only after a student has received a foundation in the organizational and business core and the professional accounting core. The IFAC Discussion Paper *Specialization in the Accounting Curriculum* is devoted to this subject.

**Assessment of professional competencies.** Assessment of competence is an important element in any educational process. Public confidence in the profession depends, to some degree, on the adequacy of professional examinations. IEG No. 9 strengthens considerably the examination element by stating that:

A final examination, administered by, or with substantive input from, the professional body or regulatory authority. The examination must be comprehensive, require a significant portion of responses to be in writing, and be administered near the end of the educational and, where appropriate, experience requirement.

The original IEG No. 9 addressed the need for tests of professional competence but did not require them. The Committee has determined that assessment of competence in the form of an examination of professional competence is a required element for several reasons. First, professional organizations, particularly those that are self-regulatory, have a responsibility to ensure that their members have the competence expected from them by society. Second, individuals who assume responsibility for certain aspects of the well being of others need to demonstrate their ability to discharge them in a competent manner. Third, the well being of society and the credibility of the profession is enhanced by preventing those who do not meet its competency standards from holding themselves out as professionals.

The Committee also believes that an examination of professional competence should measure more than just theoretical knowledge. For example, candidates should be able to demonstrate that they:

• have a sound technical knowledge of the specific subjects of the curriculum;
• have an ability to apply technical knowledge in an analytical and practical manner;
• are able to extract from various subjects the knowledge required to solve integrated problems;
• can identify information relevant to a particular problem by distinguishing the relevant from the irrelevant in a given body of data;
• are able, in multi-problem situations, to identify the problems and rank them in the order in which they need to be addressed;
• appreciate that there can be alternative solutions and understand the role of judgment in dealing with these;
• have an ability to integrate diverse areas of knowledge and skills;
• can communicate effectively to the user by formulating realistic recommendations in a concise and logical fashion;
• have knowledge of the ethical requirements of the profession.

The overall thrust of this requirement is to place more emphasis on the assessment of competencies as opposed to knowledge. This is an approach that is already being tried in some countries. For example, countries in Southern Africa are working on the possibility of a joint examination and the work on competency standards in Australia, New Zealand, and other southeast Asian countries has already been cited.

Experience requirement. To ensure that professional accountants have attained the necessary level of professional competence in their application of knowledge, skills, and values, an appropriate period of relevant experience in accounting practice is recognized as a component of most pre-qualification programs. The period of experience may vary due to differences among the environments in which professional accountants offer their services. Differences also exist among countries, as well as professional bodies, as to the length and nature of such experience.

IEG No. 9 addresses the issue of these differences by stating that “this period should be long enough to permit prospective accountants to demonstrate they have gained the knowledge, skills, and professional values sufficient for performing with professional competence and for continuing to grow throughout their careers.” Although the guideline falls short of specifying a minimum period of experience, it does state that “This objective cannot normally be met in a period of less than three years.” This period is greater than the experience requirement in some countries, such as the United States, where the trend has been toward a shorter experience requirement.

Another issue that the Committee found difficult to resolve is the nature of relevant experience. The term “relevant experience,” as used in
the guideline, refers to participation in work activities in an environment appropriate to the application of knowledge, skills, and professional values. IEG No. 9 states that prospective professional accountants should receive their relevant experience in accounting positions deemed “appropriate by the professional body to which they are applying.” For those who intend to work in public practice, the most relevant experience would be gained in public practice. For professional accountants who will work in another field, such as industry, commerce or government service, or in a specialty, such as auditing and insolvency, experience in the relevant area may be required by a regulatory or professional body.