International Federation of Accountants
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Handbook of International Education Pronouncements 2010

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2010 Edition

International Federation of Accountants

International Accounting Education Standards Board
International Federation of Accountants
545 Fifth Avenue, 14th Floor
New York, New York 10017 USA
E-mail: educationpubs@ifac.org
Website: http://www.ifac.org

The mission of the International Federation of Accountants (IFAC) is to serve the public interest, strengthen the worldwide accountancy profession and contribute to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards, and speaking out on public interest issues where the profession's expertise is most relevant. In pursuing this mission, the IFAC Board has established the International Accounting Education Standards Board (IAESB) to function as an independent standard-setting body under the auspices of IFAC and subject to the oversight of the Public Interest Oversight Board (PIOB).

The IAESB develops and issues, in the public interest and under its own authority, standards, practice statements, information papers and other information documents on pre-qualification education and training of professional accountants and on continuing professional education and development for members of the accountancy profession. The IFAC Board has determined that designation of the IAESB as the responsible body, under its own authority and within its stated terms of reference, best serves the public interest in achieving this aspect of its mission.

The IAESB acts as a catalyst in bringing together the developed and developing nations, as well as nations in transition, and to assist in the advancement of accountancy education programs worldwide, particularly where this will assist economic development. The IAESB's role is focused on addressing the professional knowledge, skills and professional values, ethics and attitudes of the accountancy profession to serve the overall public interest.

This publication may be downloaded free-of-charge from the IFAC website: http://www.ifac.org. The approved text is published in the English language.

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HANDBOOK OF INTERNATIONAL EDUCATION PRONOUNCEMENTS

2010 EDITION

Scope of the Handbook

This handbook brings together for continuing reference background information on the International Federation of Accountants (IFAC) and the pronouncements on education and related services issued by IFAC as of January 1, 2010.

How the Handbook is Arranged

The contents of this handbook are arranged by section as follows:

CHANGES OF SUBSTANCE FROM THE 2009 EDITION OF THE HANDBOOK AND RECENT DEVELOPMENTS

This handbook contains the International Accounting Education Standards Board's (IAESB) suite of eight International Education Standards (IESs), including the *Framework for International Education Standards for Professional Accountants (*the Framework*)*, as well as three International Education Practice Statements.

This handbook replaces the 2009 edition of the *Handbook of International Education Pronouncements*. The handbook has been updated to include the new Framework document, a revised glossary that includes new terms from the Framework, and minor editorial corrections. The new Framework sets out the underlying educational concepts which the IAESB uses in its publications. This new document replaces the previously existing *Framework for International Education Pronouncements* and the *Introduction to the International Education Standards* documents which were published in October 2003.

Revision of International Education Standards

At its October 2009 meeting the IAESB approved a three project to revise and redraft all 8 of its IESs. The project aims to (1) improve clarity; (2) ensure consistency with concepts of the new Framework document; and (3) clarify issues resulting from changes in the environment of accounting education and the experience gained from implementation of the Standards by IFAC member bodies. The revision of the IESs will help promote consistency in practice and share good practices in the learning and development of a professional accountant.

Visit the IAESB's website at http://www.ifac.org/Education/Projects.php for more information on the revision project.

BACKGROUND INFORMATION ON THE INTERNATIONAL FEDERATION OF ACCOUNTANTS

The Organization

The International Federation of Accountants (IFAC) is the worldwide organization for the accountancy profession. Founded in 1977, its mission is to serve the public interest by continuing to strengthen the worldwide accountancy profession and contributing to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards, and speaking out on public interest issues where the profession's expertise is most relevant.

IFAC is comprised of 159 members and associates in 124 countries worldwide, representing approximately 2.5 million accountants in public practice, industry and commerce, the public sector, and education. No other accountancy body in the world and few other professional organizations have the broad-based international support that characterizes IFAC.

IFAC's governing bodies, staff and volunteers are committed to the values of integrity, transparency and expertise. IFAC also seeks to reinforce professional accountants' adherence to these values through the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code).

Visit the IFAC website at http://www.ifac.org for further information.

Standard-Setting Initiatives

IFAC has long recognized that a fundamental way to protect the public interest is to develop, promote, and enforce internationally recognized standards as a means of ensuring the credibility of information upon which investors and other stakeholders depend.

The International Auditing and Assurance Standards Board (IAASB), the International Accounting Education Standards Board (IAESB), the International Ethics Standards Board for Accountants (IESBA), and the International Public Sector Accounting Standards Board (IPSASB) follow a rigorous due process that supports the development of high-quality standards in the public interest in a transparent, efficient, and effective manner. These independent standard-setting boards all have Consultative Advisory Groups, which provide public interest perspectives, and include public members. These boards issue the following pronouncements:

- Code of Ethics for Professional Accountants
- International Standards on Auditing, Review, Other Assurance, and Related Services
- International Standard on Quality Control
- International Education Standards
- International Public Sector Accounting Standards

The IAASB, IAESB, IESBA and IPSASB are collectively referred to as the Public Interest Activity Committees. The IAASB, IAESB and IESBA are also subject to oversight by the Public Interest Oversight Board. See http://www.ipiob.org/ for more information.

The Compliance Advisory Panel (CAP) oversees IFAC's member body compliance program which requires IFAC members and associates to demonstrate how they have used best endeavors to implement the standards issued by IFAC and the International Accounting Standards Board. Member bodies' obligations are set out the IFAC's Statements of Membership Obligations. See http://www.ifac.org/complianceprogram for more information.

Other Initiatives

IFAC develops benchmark guidance and promotes the sharing of resources to serve professional accountants in business. It has also established groups to address issues pertaining to small and medium practices (SMPs) and entities (SMEs) and developing nations, all of which play a critical role in the global economy.

- Professional Accountants in Business Committee

  The committee develops good practice guidance and other resources, and facilitates the exchange of knowledge among its member bodies. These address a wide range of professional issues, encourage high-quality performance by professional accountants in business, and build public awareness and understanding of the roles these individuals play in their organizations. See http://www.ifac.org/paib for more information.

- Small and Medium Practices Committee

  The committee provides direct input from an SMP/SME perspective into the work of international standard setters to shape their work agenda and ensuring standards produced are applicable to SMPs and SMEs. The committee also issues practical support for SMPs such as implementation guides and web-based resources on topics such as efficient implementation of international standards and proficient practice management. The committee engages in outreach activities such as the annual SMP forum, to keep abreast of emerging issues and to facilitate timely respond to its constituents' needs. See http://www.ifac.org/smp for more information.

- Developing Nations Committee

  The committee supports the development of the accountancy profession internationally by representing and addressing the interests of developing nations and by providing guidance in relevant areas. The committee also seeks resources and development assistance from the donor community and IFAC members on behalf of developing nations. Further, the committee engages in outreach activities such as its annual forums. See http://www.ifac.org/developingnations or more information.

- Transnational Auditors Committee

  The committee is dedicated to representing and meeting the needs of the members of the Forum of Firms (FoF). The membership of the FoF is made up of international firms that perform audits of financial statements that are or may be used across national borders are represented in IFAC through the Forum of Firms. The firms' commitment to the membership obligations of the FoF contributes to raising the standards of the international practice of auditing, thus serving the public interest. See http://www.ifac.org/Forum_of_Firms/ for more information.

Other Resources

IFAC has a wide range of publications and resource materials. Other available handbooks are as follows:

- *Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements*
- *Handbook of International Education Pronouncements*
- *Handbook of the Code of Ethics for Professional Accountants*
- *Handbook of International Public Sector Accounting Pronouncements*

IFAC also publishes adoption and implementation support materials, exposure drafts, consultation papers, newsletters, and eNews. The majority of these publications are made available in electronic format on the IFAC website for download free-of-charge. Printed copies of the handbooks are also available for purchase. See http://web.ifac.org/publications for more information.

Copyright and Translation

IFAC's policy with regard to copyright of its publications is outlined in its Policy Statement, *Policy for Reproducing, or Translating and Reproducing, Publications Issued by the International Federation of Accountants*.

IFAC recognizes that it is important that preparers and users of financial statements, auditors, regulators, lawyers, academia, students, and other interested groups in non-English speaking countries have access to its standards in their native language. IFAC's policy with regard to translation and reproduction of its international standards (in final form) is outlined in its Policy Statement, *Policy for Translating and Reproducing Standards Issued by the International Federation of Accountants*. See http://www.ifac.org/translations for more information.

HANDBOOK OF INTERNATIONAL EDUCATION PRONOUNCEMENTS

TABLE OF CONTENTS

FRAMEWORK FOR INTERNATIONAL EDUCATION STANDARDS FOR PROFESSIONAL ACCOUNTANTS

CONTENTS

Introduction

1. This *Framework for International Education Standards for Professional Accountants* (the "Framework") establishes the concepts that the International Accounting Education Standards Board (IAESB) uses in its publications. It also provides an introduction to the IAESB publications and related IFAC member body obligations.

2. The accountancy profession serves the financial and, in some circumstances, the non-financial information needs of a broad range of decision makers, including (a) present and potential investors and creditors, (b) managers and employees within organizations, (c) suppliers, (d) customers, (e) governments and their agencies, and (f) the public. The accountancy profession's ability to satisfy users' information needs contributes to an efficient economy, creating value to society.

3. The IAESB's mission is to "serve the public interest by strengthening the worldwide accountancy profession through the development and enhancement of education." Enhancing education serves the public interest by contributing to the ability of the accountancy profession to meet the needs of decision makers. Enhancing education through developing and implementing International Education Standards (IESs) should increase the competence of the global accountancy profession, contributing to strengthened public trust.

4. Developing and implementing IESs can also contribute to other desirable outcomes, including:

   - Reduction in international differences in the requirements to qualify and work as a professional accountant;
   - Facilitation of the global mobility of professional accountants; and
   - Provision of international benchmarks against which IFAC member bodies can measure themselves.

Purpose of the Framework

5. The Framework is intended to assist IFAC member bodies, as they have direct or indirect responsibility for the education and development of their members and students. It should also enhance the understanding of the work of the IAESB by a wide range of stakeholders including:

   - Universities, employers, and other stakeholders who play a part in the design, delivery, or assessment of education programs for accountants;
   - Regulators who are responsible for oversight of the work of the accountancy profession;

- Government authorities with responsibility for legal and regulatory requirements related to accounting education;
- Accountants and prospective accountants who undertake their own learning and development; and
- Any other parties interested in the work of the IAESB and its approach to developing publications on accounting education.

6. The intended benefits of the Framework include:
   - The development of IESs that are consistent, because they are based on a common set of concepts relevant to education;
   - A more efficient and effective standard-setting process, because the IAESB debates issues from the same conceptual base; and
   - Increased transparency and accountability of the IAESB for its decisions, because the concepts underlying the Board's decisions are known.

Authority and Scope of the Framework

7. The IAESB uses the International Federation of Accountants' (IFAC) definition of professional accountant: an individual who is a member of an IFAC member body.[1] The IAESB achieves its mission primarily by developing and publishing IESs and promoting the use of those standards through IFAC member bodies.

8. Members of IFAC member bodies work in every sector of the economy and in many different areas of accountancy, including auditing, financial accounting, management accounting, and tax accounting. The IAESB establishes the learning and development principles for the education of professional accountants. The IAESB may also establish requirements for roles that are widely practiced or are of specific public interest internationally.[2] The Audit Professional[3] is an example of one such role.

9. The IAESB will apply the concepts set out in the Framework when developing IESs. In the absence of a specific IES, IFAC member bodies and other interested parties should also apply these concepts when designing, delivering, and assessing education for professional accountants.

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1 Terminology in accounting education is not universal; different countries use the same term in different ways. Readers of IAESB publications should consult the IAESB Glossary of Terms to determine how the IAESB uses a particular term.

2 A role is a function that has a specific set of expectations attached – see the IAESB Glossary of Terms.

3 A professional accountant who has responsibility, or has been delegated responsibility, for significant judgment in an audit of historical financial information—see the IAESB Glossary of Terms.

Structure of the Framework

10. The remaining sections of this Framework are in two parts. Part One deals with the educational concepts of (a) competence, (b) initial professional development, (c) continuing professional development, and (d) assessment used by the IAESB when developing IESs. Part Two describes the nature of IESs and related publications, as well as related IFAC member body obligations.

PART ONE: EDUCATIONAL CONCEPTS

Competence

11. The overall objective of accounting education is to develop competent professional accountants.

12. Competence is defined as the ability to perform a work role to a defined standard with reference to working environments. To demonstrate competence in a role, a professional accountant must possess the necessary (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes.

13. For example, a desired competence for a professional accountant working in a financial accounting role may be the ability to produce a set of company accounts in full accordance with International Financial Reporting Standards (IFRSs) and national legal and regulatory requirements. Knowledge of IFRSs, as well as skills and judgment to assess their relevance to the situation, are needed to complete this task.

14. The definition of competence (a) emphasizes the ability of individuals to perform to standards expected of professional accountants, and (b) requires an appropriate level of knowledge, skills, values, ethics, and attitudes to achieve that competence. The appropriate level of competence will vary, depending on such factors as the complexity of the environment, the complexity of tasks, the variety of tasks, required specialist knowledge, influence on the work of others, reliance on the work of others, level of autonomy, and required level of judgment.

15. For example, an audit manager planning an engagement will require different competences than a more junior member of the engagement's audit team. A tax accountant responsible for the tax transactions of multinational groups will require different competences than a tax accountant dealing with companies that operate in only one jurisdiction.

Learning and development

16. An individual becomes competent through learning and development. The term "learning and development" is used by the IAESB to incorporate all the different processes, activities, and outcomes contributing to the achievement of competence.

17. Competence can be achieved through a number of different forms of learning and development. The primary types of learning and development are defined by the IAESB as follows:

Education[4]

Education is a systematic process aimed at acquiring and developing knowledge, skills, and other capabilities within individuals, a process that is typically but not exclusively conducted in academic environments.

Practical experience

Practical experience refers to workplace activities that are relevant to developing competence.

Training

Training is used to describe learning and development activities that complement education and practical experience. It has a practical bias, and is usually conducted in the workplace or a simulated work environment.

18. In addition to education, practical experience, and training, the term learning and development includes activities such as (a) coaching, (b) networking, (c) observation, (d) reflection, and (e) self-directed and unstructured gaining of knowledge.

19. Learning and development is an ongoing process of acquiring, maintaining, and renewing competence at an appropriate level throughout a professional accountant's career. The extent to which each of the different forms of learning and development are used may vary.

20. For example, in the early stages of development as a professional accountant, education may be emphasized more than in later stages of development. Over time, the balance may shift more to learning and development through practical experience and training.

21. In a constantly changing work environment, both learning to learn and a commitment to lifelong learning are integral aspects of being a professional accountant. Thus, the IESs address both Initial Professional Development (IPD) and Continuing Professional Development (CPD).

Initial Professional Development

22. IPD is learning and development through which individuals first develop competence leading to performing a role in the accountancy profession.

23. IPD includes general education, professional accounting education, practical experience (as defined in paragraph 17), and assessment, as follows:

[4] The IAESB uses the term "education" in its own title and publications; however, its terms of reference include the entire learning and development process.

General education

Broad-based education to develop the skills necessary as a foundation for coping with the demands of professional accounting education and practical experience.

Professional accounting education

Education and training that builds on general education, and imparts (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes.

Assessment

Measurement of professional competence developed throughout learning and development.

24. There are significant legal and regulatory differences in the point of qualification (or licensing) internationally; qualification may occur from very early to very late in a career. Each IFAC member body may define the appropriate link between the end of IPD and the point of qualification (or licensing) for its members.

25. IPD continues until individuals can demonstrate the competence required for their chosen roles in the accountancy profession.[5] One result of demonstrating this competence may be the admission to membership in an IFAC member body. IPD goes beyond knowledge of principles, standards, concepts, facts, and procedures at a given point in time. It includes the ability to integrate (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes. Such competences enable individuals to identify issues, know what knowledge is relevant, and know how to apply that knowledge and professional judgment to resolve issues ethically.

Continuing Professional Development

26. Change is a significant characteristic of the environment in which professional accountants work. Pressures for change come from many sources, including (a) globalization, (b) advances in technology, (c) business complexity, (d) societal changes, and (e) the expansion of stakeholder groups, including regulators and oversight bodies. Change requires professional accountants to maintain and develop new and/or more specialized knowledge and skills throughout their careers.

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[5] There are significant legal and regulatory differences in the point of qualification (or licensing) internationally; qualification may occur from very early to very late in a career. Each IFAC member body may define the appropriate link between the end of IPD and the point of qualification (or licensing) for its members.

27. Throughout their careers, professional accountants (a) change and expand the scope of their competence, (b) develop their expertise, and (c) generally improve their competence. The competence gained during IPD is continually renewed, modified, and/or expanded through CPD.

28. CPD is learning and development that maintains and develops capabilities to enable professional accountants to perform their roles competently. CPD provides continual development of the (a) professional knowledge, (b) professional skills, (c) professional values, ethics and attitudes, and (d) the competence achieved during IPD.

29. In addition, professional accountants may take on new roles during their careers that require new competences. For example, a professional accountant in business wants to become an accounting educator; or an accounting technician wants to become an audit professional. In such cases, CPD that includes many of the same elements as IPD may be necessary for roles that require additional breadth and/or depth of knowledge, skills, and values.

Assessment: Measurement of the Effectiveness of Learning and Development

30. Different measurement approaches can be employed to assess the effectiveness of learning and development. They include:

    Input measures: An input-based measure focuses on the investment made in learning and development, for example, the number of hours an individual is expected to attend a course or the subject areas covered. Input-based measures have traditionally served as proxies for measuring the development of competence, primarily because they are easy to measure and verify. They do not, however, measure the competence developed.

    Process measures: A process-based approach focuses on the design and delivery of learning and development, for example, a course curriculum that is regularly reviewed and updated. As with the input-based measures, process measures are proxies for the competence developed.

    Output measures: An output-based approach focuses on whether the professional accountant has developed the specified competence. Competence can be assessed by a variety of means, including workplace performance, workplace simulations, written examinations, and self-assessment. Competence-based assessment begins with the creation of competence statements[6] as benchmarks.

31. In choosing a measurement approach, the following characteristics should be considered:

    (a) Validity—whether it measures what needs to be measured;

[6] Also known as competency frameworks, competency profiles, competency models, competency maps, or functional maps.

(b) Reliability—whether it consistently produces the same result, given the same set of circumstances; and

(c) Cost effectiveness—whether the benefits outweigh the costs of measurement.

32. Output measures, being directly focused on competence, are rated as highly valid. They can be challenging to implement without substantial investment in measurement systems, leading to concerns over their cost-effectiveness. Because of the inherent compromise between validity, reliability, and cost effectiveness, a mix of input, process, and output measures is often adopted. However, output measures are the measures most closely linked with the objective of accounting education – the development of competence.

PART TWO: IAESB PUBLICATIONS AND IFAC MEMBER BODY OBLIGATIONS

International Education Standards

33. IESs establish standards for IFAC member bodies for both IPD and CPD.

34. The IESs address the principles of learning and development for professional accountants. The IESs prescribe good practice in learning and development for professional accountants; they should be incorporated into the educational requirements of IFAC member bodies.

35. The IAESB is conscious of (a) the diversity of culture and language, educational, legal, and social systems globally, and (b) the variety of roles performed by professional accountants. Therefore, the IESs may be complied with in a variety of different ways. The IAESB recognizes that, in implementing the IESs, IFAC member bodies may choose to emphasize one type of learning and development over another. Each IFAC member body needs to determine how best to implement the requirements of the IESs. The IAESB also recognizes that individual IFAC member bodies may adopt learning and development requirements that go beyond the IESs.

36. The IESs are written in accordance with the set of drafting conventions that appear in the Appendix to this document.

Related IAESB Publications

37. In support of the IESs, the IAESB issues two other types of publications: International Education Practice Statements (IEPSs) and International Education Information Papers (IEIPs). It may also issue additional support material from time to time.

International Education Practice Statements (IEPSs)

38. IEPSs assist in implementing generally accepted good practice in learning and development for professional accountants. IEPSs may interpret, illustrate, or expand on matters related to IESs. In this function, IEPSs assist IFAC member bodies to implement and achieve good practice, as prescribed by the IESs. The IEPSs may also include commendable methods or practices, including those recognized as current best practice, that IFAC member bodies may wish to adopt.

International Education Information Papers (IEIPs)

39. IEIPs may critically assess emerging learning and development issues and practices. The aim of such IEIPs is to (a) promote consideration of these issues, and (b) encourage comment and feedback. In this way, they may be useful forerunners of IESs and IEPSs. Alternatively, the IEIPs may simply be

descriptive in nature. In this function, they promote awareness of learning and development issues or practices relating to the accountancy profession.

Additional Support Material

40. From time to time, the IAESB may issue additional material, such as toolkits or interpretation guidance, to assist IFAC member bodies in achieving good practice in learning and development, as prescribed by the IESs.

IFAC Member Body Obligations Relating to IESs

41. Individual IFAC member bodies determine the competences and criteria for membership that are appropriate to the professional accountancy roles their members undertake. The IFAC Statements of Membership Obligations (SMOs) set out the obligations of IFAC members and associates. Obligations related to the IESs may be found in SMO 2, International Education Standards for Professional Accountants and Other IAESB Guidance, on the IFAC website.

42. Some IFAC member bodies are subject to the requirements of law or regulation within their jurisdictions. IESs cannot legally override educational requirements or restrictions placed on individual IFAC member bodies by such laws or regulations. In cases where IESs set a higher requirement than laws or regulations, the IFAC member body should use its best endeavors to persuade those responsible to incorporate the essential elements of IESs into those laws or regulations.

Appendix

IAESB DRAFTING CONVENTIONS

Language and Structure

The sole approved text of an Exposure Draft, IES, IEPS, or other form of guidance is that published by the IAESB in the English language. In developing the IESs, the selection of appropriate wording will be guided, wherever possible, by these *IAESB Drafting Conventions*. Definitions found in the IESs and IEPSs will be included in a separate document, entitled the IAESB Glossary of Terms. The Glossary is intended to support translation, interpretation, and application. The definitions are not intended to override definitions of other documents that may be established for other purposes, whether in law, regulation or otherwise.

The structure of the IESs shall be organized to include the following as separate sections: Introduction, Objectives, Requirements, and Explanatory Material.

Introduction

The introductory material includes information regarding the purpose and scope that provides context relevant to a proper understanding of each IES.

Objectives

The IESs contain a clear statement of the objectives to be achieved by the IFAC member body. The objectives assist an IFAC member body to understand what needs to be accomplished, and to decide whether more needs to be done to achieve the objectives.

Requirements

The objectives are supported by clearly stated requirements that are necessary to achieve the objectives. The requirements apply where the IES is relevant. Requirements are always expressed using the term "shall."

Explanatory Material

The explanatory material provides additional explanation and guidance to the requirements. The material is intended to explain more fully what a requirement means, and may include examples of how to meet the requirements. The explanatory material does not in itself impose any additional requirements; its purpose is to assist in their application.

IAESB GLOSSARY OF TERMS

1. This glossary comprises a collection of defined terms, many of which have been specifically defined within existing IAESB pronouncements. Some of the existing terms may be modified, and other terms added to the glossary, as they are reviewed during the current revision of the International Education Standards or other future publications. It is expected that a revised version of the IAESB Glossary of Terms will be published once the revision of the IESs is completed.

2. The IAESB acknowledges that terms may be understood to have different common meanings, nuances of meaning, and applications among the various countries in which member bodies operate. The glossary does not prescribe the use of terms by member bodies. Rather, the glossary is a list of defined terms, with special meanings, for their use within the IESs, IEPSs and IEIPs produced by the IAESB.

3. Words marked with an asterisk (*) indicate terms that are defined elsewhere in the glossary.

Assessment	Measurement of professional competence* developed throughout learning and development*. ***Explanation:*** *The following measurement approaches can be employed to assess the effectiveness of a learning and development process: input measures; process measures; and output measures. In choosing a measurement approach, the following characteristics should be considered: validity, reliability, and cost effectiveness.*
Audit professional	A professional accountant who has responsibility, or has been delegated responsibility, for significant judgments in an audit of historical financial information. ***Explanation:*** *The engagement partner retains overall responsibility for the audit. The definition of audit professional does not apply to experts who undertake specific tasks within an audit (e.g., taxation, information technology or valuation experts).*
Best practice	Practices considered to be exemplary, of the highest order, the most advanced, or leading in a particular area in the education of professional accountants.*

Best practice

Explanation:

"Best practice" refers to the best examples of established practice in the preparation of professional accountants. "Best practice" will often go beyond "good practice" and, as such, is at a higher level than the considered minimum requirements. Statements and examples of "best practice" are essential for the advancement of accountancy education and provide useful guidance to member bodies for the continual improvement of their education programs.

Candidate

Any individual who is enrolled for assessment as part of a professional accounting education program.

Explanation:

A candidate is an individual who is undergoing, or about to undergo, a formal assessment as part of accountancy education. The term refers to an individual who is still in the process of demonstrating the capabilities or competences required for a particular purpose (e.g. professional examination). The assessment may relate to either a program for qualifying as a professional accountant or a post-qualifying education program. The term does not relate to an individual at the stage following completion of an education program (i.e., it excludes those who have completed the requirements for membership of a professional body and are in the process of applying for membership).

Capabilities

The professional knowledge;* professional skills;* and professional values, ethics, and attitudes* required to demonstrate competence.*

Explanation:

Capabilities are the attributes held by individuals that enable them to perform their roles, whereas competence refers to the actual demonstration of performance. The possession of capabilities gives an indication that an individual has the ability to perform competently in the workplace. Capabilities include content knowledge; technical and functional skills; behavioral skills; intellectual abilities (including professional judgment); and professional values, ethics, and attitudes. They are sometimes referred to, in other literature, as competencies, capacities, abilities, key skills, core skills, fundamental skills and values, attitudes, distinguishing characteristics, pervasive qualities, and individual attributes.

Competence

Ability to perform a work role to a defined standard with reference to working environments.

Explanation:

Competence emphasizes the ability of individuals to perform to standards expected of professional accountants, and requires an appropriate level of knowledge, skills, values, ethics, and attitudes to achieve that competence. The appropriate level of competence will vary, depending on such factors as the complexity of the environment, the complexity of tasks, the variety of tasks, required specialist knowledge, influence on the work of others, reliance on the work of others, level of autonomy, and required level of judgment. Competence may be assessed by a variety of means, including workplace performance, workplace simulations, written and oral tests of various types, and self-assessment.

Continuing professional development (CPD)

Learning and development* that maintains and develops capabilities* to enable professional accountants* to perform their roles* competently.

Explanation:

CPD is aimed at the development and maintenance of professional competence. CPD provides continual development of the professional knowledge, professional skills, professional values, ethics and attitudes, and the competence achieved during Initial Professional Development.

Cost effectiveness

Quality or state describing whether the benefits outweigh the costs of a measurement approach.

Development

1. The acquisition of capabilities,* which contribute to competence.*
2. The state at which capabilities have been acquired.

Explanation:

Development, as a process, refers to the growth of capabilities, which contribute to competence, however achieved. Individuals may develop their abilities through a wide range of processes such as learning, including education and training; experience; reflection; observation or receipt of information; or through natural growth over time.

Development	*Development may also refer to the final stage of growth at which an individual is considered to be fully developed, as a result of the development process. However, it is recognized that, with the need for continual learning, the process of developing one's capabilities and the subsequent reaching of a targeted stage of development are not fixed or permanent states.*
Distributed learning	An education process in which either the majority of the instruction is delivered at a different time from when the instruction is received or when the instructor and student are in different places. ***Explanation:*** *A primary feature of distributed learning is that instructors and students are not required to be in the same place at the same time. "Distributed learning" includes, but is not restricted to, "distance learning." Distributed learning can take place over short or long distances, whereas distance learning implies distribution across only significant distances.*
Education	Systematic process aimed at acquiring and developing knowledge, skills, and other capabilities within individuals, a process that is typically but not exclusively conducted in academic environments. ***Explanation:*** *Education is a systematic learning and development process whereby individuals develop capabilities considered desirable by society. Education is usually characterized by the growth of an individual's mental and practical abilities, as well as maturing in attitude, resulting in an enhanced ability of the individual to function and contribute to society, in either specific or non-specific contexts. Education is, by nature, somewhat planned and structured and therefore excludes casual, unsystematic learning and developmental processes.*
Engagement partner	The partner or other person in the audit organization who is responsible for the engagement and its performance, and for the audit report that is issued on behalf of the firm, and who, where required, has the appropriate authority from a professional, legal or regulatory body. ***Explanation:*** *This term is consistent with that established by the International Auditing and Assurance Standards Board (IAASB).*

Formal education The non-workplace based component of an accounting education program.

General education Broad-based education to develop the skills necessary as a foundation for coping with the demands of professional accounting education and practical experience.

Good practice Those elements considered essential to the education* and development* of professional accountants* and performed at a standard necessary to the achievement of competence.*

Explanation:

"Good practice" relates not only to the range of content and processes of education and development programs, but also to the level or standard at which they are performed (i.e., the depth and quality of the programs). The IAESB is conscious of the wide diversity of culture; language; and educational, legal, and social systems in the countries of the member bodies and of the variety of functions performed by accountants. Different factors within these environments may vary the ability of member bodies to adopt some aspects of "good practice." Nevertheless, member bodies should continuously aspire to "good practice" and achieve it wherever possible.

Higher education Education* beyond secondary school level, usually at universities or colleges.

Explanation:

Primary and secondary education refers to the mainly compulsory element of schooling required by the governments of many countries. "Higher" education refers to a third order of education, which succeeds secondary education and for which a secondary education qualification (or equivalent) is often a prerequisite. It is at a higher level than "higher secondary" or "upper secondary" education and is sometimes referred to as "tertiary education."

Information technology Hardware and software products, information system operations and management processes, and the human resources and skills required to apply those products and processes to the task of information production and information system development, management and control.

Initial professional development (IPD) Learning and development* through which individuals first develop competence* leading to performing a role* in the accountancy profession.

Initial professional development (IPD)	***Explanation:*** *IPD is the first stage of a learning continuum that continues throughout a professional accountant's career. IPD includes general education, professional accounting education, practical experience, and assessment. IPD continues until individuals can demonstrate the competence required for their chosen roles in the accountancy profession. IPD goes beyond knowledge of principles, standards, concepts, facts, and procedures at a given point in time. It includes the ability to integrate (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes. There are significant legal and regulatory differences in the point of qualification (or licensing) internationally; qualification may occur from very early to very late in a career. Each IFAC member body may define the appropriate link between the end of IPD and the point of qualification (or licensing) for its members.*
Input measure	An input-based measure focuses on the investment made in learning and development, for example, the number of hours an individual is expected to attend a course or the subject areas covered. ***Explanation:*** *Input-based measures have traditionally served as proxies for measuring the development of competence, primarily because they are easy to measure and verify. They do not, however, measure the competence developed.*
Learning	A broad range of processes whereby an individual acquires capabilities.* ***Explanation:*** *Learning can be achieved by systematic and relatively formal processes such as education (including training) or processes such as day-to-day work experience, reading published material, observation, and reflection, for which the process of acquiring capabilities tends to be less systematic and relatively informal.*
Learning and Development	Ongoing process of acquiring, maintaining, and renewing competence at an appropriate level throughout a professional accountant's career.

Learning and Development

Explanation:

In addition to education, practical experience, and training, the term learning and development includes activities such as (a) coaching, (b) networking, (c) observation, (d) reflection, and (e) self-directed and unstructured gaining of knowledge. The extent to which each of the different forms of learning and development are used may vary. Learning and development incorporates all the different processes, activities, and outcomes contributing to the achievement of competence. The IAESB uses the term "education" in its own title and publications; however, its terms of reference include the entire learning and development process.

Mentor

Professional accountants* who are responsible for guiding and advising trainees and for assisting in the development of the trainees' competence.*

Output measure

An output-based approach focuses on whether the professional accountant* has developed the specified competence.*

Explanation:

*Competence can be assessed by a variety of means, including workplace performance, workplace simulations, written examinations, and self-assessment. Competence-based assessment begins with the creation of competence statements*1 *as benchmarks.*

Post-qualification

The period after qualification* as an individual member of an IFAC member body.

Explanation:

The term "post-qualification" is usually associated with activities and requirements relating to the professional development of those who have already obtained a professional qualification. It is often associated with action relating to the maintenance or further development of professional competence. While "post-qualification" refers to the period after qualifying as a professional accountant, the term is not restricted to formal qualifications obtained after qualifying as a professional accountant.

[1] Also known as competency frameworks, competency profiles, competency models, competency maps, or functional maps.

Practical experience	Workplace activities that are relevant to developing competence.* ***Explanation:*** *The practical experience part of the learning and development process is intended to facilitate the development and direct application of professional knowledge; professional skills; and professional values, ethics, and attitudes.*
Pre-qualification	The period before qualification* as an individual member of an IFAC member body. ***Explanation:*** *The term "pre-qualification" is usually associated with activities and requirements relating to the development of those who have not yet obtained a professional qualification.*
Process measure	A process-based approach focuses on the design and delivery of learning and development*, for example, a course curriculum that is regularly reviewed and updated. ***Explanation:*** *Process measures are proxies for the competence developed.*
Professional Accountant	A person who is a member of an IFAC member body.
Professional Accounting Education	Education and training that builds on general education, and imparts (a) professional knowledge*, (b) professional skills*, and (c) professional values, ethics, and attitudes.*
Professional Knowledge	Those topics that make up the subject of accountancy as well as other business disciplines that, together, constitute the essential body of knowledge for professional accountants.*
Professional skills	The various types of abilities required to apply professional knowledge, and professional values, ethics, and attitudes* appropriately and effectively in a professional context. ***Explanation:*** *Professional accountants are required to possess a range of skills, including technical and functional skills, organizational and business management skills, personal skills, interpersonal and communication skills, a variety of intellectual skills, and skills in forming professional judgments.*

Professional values, ethics and attitudes

The professional behavior and characteristics that identify professional accountants* as members of a profession. They include the principles of conduct (i.e., ethical principles) generally associated with and considered essential in defining the distinctive characteristics of, professional behavior.

Explanation:

Professional values, ethics, and attitudes include a commitment to technical competence, ethical behavior (e.g., independence, objectivity, confidentiality, and integrity), professional manner (e.g., due care, timeliness, courteousness, respect, responsibility, and reliability), pursuit of excellence (e.g., commitment to continual improvement and life-long learning), and social responsibility (e.g., awareness and consideration of the public interest).

Qualification

Qualification as a professional accountant* means, at a given point in time, an individual is considered to have met, and continues to meet, the requirements for recognition as a professional accountant.*

Explanation

Qualification is the formal recognition of an individual as having attained a professional designation, or having been admitted to a class of professional membership, that signifies the individual is a professional accountant. Qualification implies that the individual has been assessed as competent in terms of meeting the requirements prescribed for obtaining professional accountant status. While the term "qualification" can be applied to various stages of professional development and classes of membership, its usage in IAESB documents (unless otherwise indicated) relates to the benchmark for recognition as a professional accountant.

Relevant experience

Participation in work activities in an environment appropriate to the application of professional knowledge;* professional skills;* and professional values, ethics, and attitudes.*

Reliability

Quality or state describing whether a measurement approach consistently produces the same result, given the same set of circumstances.

Role	A function that has a specific set of expectations attached. ***Explanation*** *Roles, such as audit professionals, are widely practiced areas of specific public interest internationally and occur in many different areas of accountancy, including auditing, financial accounting, management accounting, and tax accounting.*
Specialization	The formal recognition by a member body of a group of its members possessing distinctive competence* in a field, or fields, of activity related to the work of the professional accountant.*
Student	An individual following a course of study, including a trainee.* ***Explanation:*** *In the context of professional education, a student is an individual undertaking a course or program of study deemed necessary for the education of professional accountants, whether general or professional in nature.*
Technical accounting staff	Staff engaged in technical accounting work who are directed by or support professional accountants.* ***Explanation:*** *"Technical accounting staff" includes staff customarily known as "accounting technicians" and covers staff engaged in technical support roles across all areas of accountancy. The term does not refer to trainees who are in the process of qualifying as professional accountants.*
Trainee	An individual undertaking pre-qualification* work experience and training* within the workplace. ***Explanation:*** *A trainee is an individual who is undertaking a practical experience or workplace training program for qualification as a professional accountant.*
Training	Learning and development* activities that complement education and practical experience. It has a practical bias, and is usually conducted in the workplace or a simulated work environment.

Training	***Explanation*** *Training includes workplace-based education and experience activities for developing an individual's competence to perform tasks relevant to the role of the professional accountant. Training may be undertaken while performing actual tasks (on-the-job training) or indirectly through instruction or workplace simulation (off-the-job training). Training is conducted within the context of the workplace, with reference to the specific roles or tasks performed by professional accountants. It can include any activity purposefully designed to improve the ability of an individual to fulfill the practical experience requirements for qualification as a professional accountant.*
Validity	Quality or state describing whether a measurement approach measures what needs to be measured.

IAESB INTERNATIONAL EDUCATION STANDARDS

CONTENTS

INTERNATIONAL EDUCATION STANDARD

IES 1

ENTRY REQUIREMENTS TO A PROGRAM OF PROFESSIONAL ACCOUNTING EDUCATION

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) lays down the entry requirements for an IFAC member body's program of professional accounting education and practical experience. It also provides some commentary on how to assess entry-level qualifications.
2. The aim of this IES is to ensure that students hoping to become professional accountants have an educational background that enables them to have a reasonable possibility of achieving success in their studies, qualifying examinations and practical experience period. To fulfill this requirement, member bodies may require certain entrants to take pre-entry proficiency tests.

Introduction

3. Fundamentally, the quality of a profession cannot be maintained and improved if the individuals who enter it are not prepared to meet the necessary standards. All IFAC member bodies should try to attract the best quality individuals to the study of accountancy. Ultimately, the quality of the profession depends on the quality of the candidates it can attract. Entry requirements are the first step in this process. Higher entry requirements may allow professional education and practical experience requirements to be met in a shorter period of time.

4. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

5. This IES is effective from January 1, 2005.

Entry Requirements to a Program of Professional Accounting Education

6. **For an individual seeking to begin a program of professional accounting education leading to membership of an IFAC member body, the entry requirement should be at least equivalent to that for admission into a recognized university degree program or its equivalent.**

7. An individual needs to bring to a program of professional accounting education an appropriate level of prior education and learning to provide the foundation necessary to acquire the professional knowledge, professional skills, and professional values, ethics and attitudes needed to become a professional accountant.

8. Candidates starting on a program of professional accountancy education will have a certain mix of knowledge, skills, and professional values, ethics and attitudes. The extent of these capabilities will determine the entry point of

candidates into professional programs. The lower the requirement at the point of entry, the more the program of professional accounting education has to cover.

9. The starting point of a program of professional accounting education can vary. Many programs of professional accounting education start at the post-graduate level. Other programs start at the immediate post-secondary education level or at some point at a higher education level that is below that of an undergraduate degree. Many of these programs are organized by professional bodies themselves rather than by universities or colleges. Some programs recognize work experience, mature students, candidates joining the program part way through their career, and other types of learning.

10. Whichever route is chosen, the entry requirements adopted should fit together consistently with the overall program of professional accounting education laid down by the professional body concerned. It is important that candidates from all possible educational routes, whether starting from secondary, further or higher education, achieve a comparable level of professional competence at the point of qualification. The entry level needs to be high enough to provide assurance of an individual's likely success in the program of professional accounting education.

11. The assessment of equivalence of qualifications to university degree entry standard should be cross-checked with standard reference sources, together with information available to the member bodies of IFAC (see note below). Even with these aids, evaluating qualifications can be complicated and difficult, with an accurate evaluation possible only after reviewing specific, detailed information about courses and curricula.

12. University degree programs may be recognized by statute, an approved non-statutory body or the market. Recognition and evaluation of degree programs can focus on the content, length and other quality aspects.

Note:

The length of degree programs can vary. In an attempt to standardize practice, the Bologna Declaration, signed by 29 European countries in 1999, supported the adoption of two main types of degrees – undergraduate and graduate. Undergraduate degrees are expected to take at least three years to complete. The NARIC database compares the standard of qualifications to degree entry standards, undergraduate degrees and postgraduate degrees (see below).

Standard reference sources used by member bodies include the following:

International Comparisons, published by the National Academic Recognition Information Centre in the UK (NARIC), under contract to the UK government. It includes both secondary and higher-level qualifications worldwide and covers some 180 countries. NARIC helps to identify qualifications that are equivalent to a university degree and those that are equivalent to a university entry standard. The

UK NARIC is part of a network of NARICs throughout the European Union.

The World of Learning, published by Europa Publications, lists institutions worldwide that are considered to be higher education institutions, including universities and colleges.

In a large number of countries, "Country Education Profiles" together with an indication of the standard of the degrees, are published by the National Office of Overseas Skills Recognition (NOOSR), a branch of the Australian Commonwealth Department of Education, Science and Training.

INTERNATIONAL EDUCATION STANDARD

IES 2

CONTENT OF PROFESSIONAL ACCOUNTING EDUCATION PROGRAMS

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) prescribes the knowledge content of professional accounting education programs that candidates need to acquire to qualify as professional accountants.

2. The aim of this IES is to ensure that candidates for membership of an IFAC member body have enough advanced professional accountancy knowledge to enable them to function as competent professional accountants in an increasingly complex and changing environment. The issue of maintaining this competence is dealt with in IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence*.

3. The primary knowledge part of professional accounting education programs is shown under three major headings:

   (a) accounting, finance and related knowledge;

   (b) organizational and business knowledge; and

   (c) information technology knowledge and competences.

   The professional skills required and the content of general education, professional values, ethics and attitudes, and the requirements related to practical experience are set out in IES 3, *Professional Skills and General Education*, IES 4, *Professional Values, Ethics and Attitudes* and IES 5, *Practical Experience Requirements*.

Introduction

4. Professional accounting education may take place in an academic environment or in the course of studying for a professional qualification but should be at least equivalent to degree level study. Candidates need to acquire the professional knowledge, professional skills, and professional values, ethics and attitudes, and need to be able to integrate these elements.

5. The knowledge component of professional accounting education programs can also be used to develop professional skills. Current knowledge may be obsolete later in a career. Therefore, a surface approach to learning knowledge across a very broad range of subjects is not in the long-term interests of prospective professional accountants and the profession. The intellectual skills required include understanding, application, analysis and evaluation. Over a lifetime's career, professional skills, values, ethics and attitudes are more important than the professional knowledge base obtained at the point of qualification.

6. Just as important is the development of skills to identify problems, and to know what knowledge is required to both identify and to solve problems. Instilling a commitment to lifelong learning is, in the long run, more

important than any piece of knowledge. Lifelong learning is a skill that needs to be acquired, an attitude of mind that needs to be developed and a value that society endorses.

7. The body of knowledge professional accountants need to acquire to function competently is constantly changing and expanding. Local conditions also call for variations in the knowledge base required. In addition, professional accountants will specialize during their careers. For these reasons, this IES sets out only broad subject headings on the premise that professional accountants will need to continually update their knowledge.

8. While this IES focuses mainly on the professional knowledge required to function as a professional accountant, it also includes competences for the IT component of the program.

9. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

10. This IES is effective from January 1, 2005.

Content of Professional Accounting Education Programs

11. **Professional accounting study should be a part of the pre-qualification program. This study should be long enough and intensive enough to permit candidates to gain the professional knowledge required for professional competence.**

12. **The professional accountancy knowledge component of pre-qualification education should consist of at least two years of full-time study (or the part-time equivalent).**

13. **Students should pursue a degree in accounting, or a professional qualification, to gain this knowledge.**

14. **The content of professional accounting education should consist of:**

    - **accounting, finance and related knowledge;**
    - **organizational and business knowledge; and**
    - **information technology knowledge and competences.**

15. The professional knowledge component complements the non-professional knowledge, and the intellectual, personal, interpersonal, communication, and organizational and management skills developed in general education.

16. The subjects discussed in this IES are not necessarily intended to be completed in the order shown. For example, professional accounting

education may be gained alongside general education, while pursuing a university degree, or it may be obtained in advanced study after completing another program of study at university degree level. Students may take non-accounting degrees, or no degrees at all, and then acquire the necessary knowledge of professional accountancy subjects through studying for the examinations of a professional body. In this case, the syllabus of the professional body needs to cover all the subject content listed here. In addition, the subjects and elements of the program may be integrated, for example, incorporating aspects of IT knowledge in specific accounting courses. This may assist the learning process and help candidates understand how the individual components are interrelated.

17. The professional accountancy knowledge component is only part of the pre-qualification education program. It may or may not be acquired in an academic environment. Some degree programs may, in addition to requiring up to two years of general studies, devote at least another two years to accounting studies. More specialist accounting degrees may incorporate general studies within a three-year program. The exact combination of general studies, accounting studies and practical experience may differ from one program to another as long as the equivalent professional competences are achieved.

18. Accounting, finance and related knowledge provide the core technical foundation essential to a successful career as a professional accountant. The mix of topics may differ according to the sectors or locations in which individuals work. The accounting curriculum is itself changing and will continue to change in response to rapidly changing market demands. New topics are entering the curriculum and the relative emphasis among topics is altering. Member bodies may wish to add topics, or alter the balance of their programs, to meet the needs of their particular environments.

19. Organizational and business knowledge provides the context in which professional accountants work. A broad knowledge of business, government and not-for-profit organizations is essential for professional accountants. Organizational and business knowledge includes: how businesses are organized, financed and managed, and the global environment in which business operates.

20. Information technology has transformed the role of the professional accountant. The professional accountant not only uses information systems and exercises IT controls skills, but also plays an important role as part of a team in the evaluation, design and management of such systems.

21. The weighting of subjects can vary from one program to another. The three knowledge areas are not set out to indicate relative importance or order. A competency study is a useful way of deciding the relative weighting of subjects.

22. The subjects listed below represent the minimum subject areas in professional accounting education programs. However, the relative depth and weighting of coverage will depend on the needs of individual IFAC member bodies and any restrictions placed on them by statutory authorities.

23. **The accounting, finance and related knowledge component should include the following subject areas:**

- **Financial accounting and reporting**
- **Management accounting and control**
- **Taxation**
- **Business and commercial law**
- **Audit and assurance**
- **Finance and financial management**
- **Professional values and ethics**

24. The accounting, finance and related knowledge part further develops and integrates the knowledge, skills and professional values, ethics and attitudes from elsewhere into the subject areas all professional accountants need to study. It gives students the necessary theoretical and technical accounting knowledge and intellectual skills, including an understanding of professional values and ethics. This part needs to be delivered at least at the level of an accounting degree. This part includes:

(a) history of the accountancy profession and accounting thought;

(b) 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;

(c) national and international accounting and auditing standards;

(d) the regulation of accounting;

(e) management accounting, including planning and budgeting, cost management, quality control, performance measurement, and benchmarking;

(f) the concepts, methods and processes of control that provide for the accuracy and integrity of financial data and safeguarding of business assets;

(g) taxation and its impact on financial and managerial decisions;

(h) a knowledge of the business legal environment, including securities and companies law, appropriate for the role of the profession in the particular country;

(i) the nature of auditing and other assurance services, including risk assessment and fraud detection, and the intellectual and procedural bases for performing them;

(j) a knowledge of finance and financial management, including financial statement analysis, financial instruments, capital markets—both domestic and international—and managing resources;

(k) ethical and professional responsibilities of a professional accountant in relation to both the professional and wider public environment (see also IES 4, *Professional Values, Ethics and Attitudes)*;

(l) governmental and not-for-profit accounting issues; and

(m) the use of non-financial performance measures in business.

25. **The organizational and business knowledge component should include the following subject areas:**

- **Economics**
- **Business environment**
- **Corporate governance**
- **Business ethics**
- **Financial markets**
- **Quantitative methods**
- **Organizational behavior**
- **Management and strategic decision making**
- **Marketing**
- **International business and globalization**

26. Organizational and business education equips prospective professional accountants with knowledge of the environment in which employers and clients operate. It also provides the context for the application of all the professional skills acquired during the pre-qualification process. Being able to understand is different from having the ability and experience to undertake, participate in and contribute to organizational and business management.

27. Organizational and business education provides:

(a) a knowledge of macro- and micro-economics;

(b) a knowledge of business and financial markets and how they operate;

(c) the application of quantitative methods and statistics to business problems;

(d) an understanding of the role of the professional accountant in corporate governance and business ethics;

(e) an understanding of organizations and of the environments in which they operate, including the major economic, legal, political, social, technical, international and cultural forces and their influences and values;

(f) an understanding of environmental issues and sustainable development;

(g) an understanding of interpersonal and group dynamics in organizations, including the methods for creating and managing change in organizations;

(h) an understanding of personnel and human resource issues, managing people, project management, and marketing;

(i) an understanding of decision support and strategy, including business advice, strategic management and general management;

(j) an understanding of organizational and operational risk;

(k) a basic knowledge of international trade and finance and the ways in which international business is conducted, as well as the processes of globalization; and

(l) an ability to integrate the above components in accomplishing strategic objectives.

28. **The information technology component should include the following subject areas and competences:**

- **general knowledge of IT;**
- **IT control knowledge;**
- **IT control competences;**
- **IT user competences; and**
- **one of, or a mixture of, the competences of, the roles of manager, evaluator or designer of information systems.**

29. As part of their pre-qualification education, all professional accountants are expected to participate in at least one of the roles of manager, designer or evaluator of information systems, or, a cluster of these roles.

30. At the point of qualification, candidates are expected to have a knowledge and understanding of the competency elements in at least one of these roles.

This may be evidenced by the ability to describe or explain the significance of the issues related to the listed competences in a relevant business setting. A candidate needs to be able to participate effectively in the activities listed in this section as part of a team or under supervision, but would not to be expected to demonstrate proficiency in all the competences.

31. Users of the various information technologies employ information systems tools and techniques to help them meet their own objectives and to help others meet their objectives. The following broad areas of competency relate to the user role:

    (a) apply appropriate IT systems and tools to business and accounting problems;

    (b) demonstrate an understanding of business and accounting systems; and

    (c) apply controls to personal systems.

32. The information technology knowledge component may be provided in a variety of ways, perhaps as separate courses or by integrating the subject into the organizational and business knowledge component or into the accounting and accounting-related knowledge component. Competence may also be acquired through work experience in addition to the IT knowledge component. For the formal IT education component, case studies, interactions with experienced professionals and similar techniques should be used to enhance the presentation of subject matter and to help students develop practical skills, in combination with relevant IT work experience.

INTERNATIONAL EDUCATION STANDARD
IES 3
PROFESSIONAL SKILLS AND GENERAL EDUCATION

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) prescribes the mix of skills that candidates require to qualify as professional accountants. Part of the purpose of this IES is to show how a general education, which may be gained in a variety of ways and within different contexts, can contribute to the development of these skills.

2. The aim of this IES is to ensure that candidates for membership of an IFAC member body are equipped with the appropriate mix of skills (intellectual, technical, personal, interpersonal and organizational) to function as professional accountants. This enables them to function throughout their careers as competent professionals in an increasingly complex and demanding environment.

3. The skills professional accountants require are grouped under five main headings:

   (a) Intellectual skills

   (b) Technical and functional skills

   (c) Personal skills

   (d) Interpersonal and communication skills

   (e) Organizational and business management skills

4. This IES also addresses the non-business related studies that contribute to the development of these skills and may form part of general education. It does not cover professional accounting education, professional values, ethics and attitudes, practical experience requirements, or assessment of professional competence (please refer to IES 2, *Content of Professional Accounting Education Programs*, IES 4, *Professional Values, Ethics and Attitudes,* IES 5, *Practical Experience Requirements* and IES 6, *Assessment of Professional Capabilities and Competence).*

Introduction

5. Skills are part of the set of capabilities required by professional accountants to demonstrate competence. These capabilities include knowledge, skills, professional values, ethics and attitudes. Capabilities are an indication of potential competence that can be transferred across different environments. It is important to ensure that professional accounting education programs integrate the development of knowledge, skills, professional values, ethics and attitudes.

6. Rising expectations of employers, clients and the public as to what professional accountants contribute at work and toward society generally have prompted an increased emphasis on professional skills.

7. Various lists of skills have been classified and described in several ways. The lists set out in paragraphs 13–18 are not exhaustive.

8. Appropriate skills enable the professional accountant to make successful use of the knowledge gained through general education. These skills are not always acquired from specific courses devoted to them but, rather, from the total effect of the program of professional accounting education as well as practical experience, and further developed through lifelong learning. Professional skills will always be most effectively applied if used in an ethical manner (see IES 4, *Professional Values, Ethics and Attitudes*). Some skills are contained implicitly within education programs. It may be necessary to highlight how the various learning activities develop these skills.

9. Relevant skills can give professional accountants a competitive edge in the market place and are useful throughout an individual's career. Not all these skills will, however, be fully developed at the point of qualification. Some may be the focus of continuing professional development.

10. A good foundation of general education, although not an end in itself, is one way of helping candidates become broad-minded individuals who think and communicate effectively and who have the basis for conducting inquiry, carrying out logical thinking and undertaking critical analysis. This foundation will enable candidates to make decisions in the larger context of society, to exercise good judgment and professional competence, to interact with diverse groups of people, to think globally, and to begin the process of professional growth. The acquisition of these skills is more important than the way in which they are learnt.

11. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

12. This IES is effective from January 1, 2005.

Professional Skills

13. **Individuals seeking to become professional accountants should acquire the following skills:**

    (a) **Intellectual skills**

    (b) **Technical and functional skills**

    (c) **Personal skills**

    (d) **Interpersonal and communication skills**

    (e) **Organizational and business management skills**

14. Intellectual skills are often divided into six levels. In ascending order, these are: knowledge, understanding, application, analysis, synthesis (to combine knowledge from several areas, predict and draw conclusions) and evaluation. It

is important that candidates have reached the highest levels at the point of qualification.

Intellectual skills enable a professional accountant to solve problems, make decisions and exercise good judgment in complex organizational situations. These skills are often the product of a broad general education. The required intellectual skills include the following:

(a) The ability to locate, obtain, organize and understand information from human, print and electronic sources;

(b) The capacity for inquiry, research, logical and analytical thinking, powers of reasoning, and critical analysis; and

(c) The ability to identify and solve unstructured problems which may be in unfamiliar settings.

15. Technical and functional skills consist of general skills as well as skills specific to accountancy. They include:

(a) Numeracy (mathematical and statistical applications) and IT proficiency

(b) Decision modeling and risk analysis

(c) Measurement

(d) Reporting

(e) Compliance with legislative and regulatory requirements

16. Personal skills relate to the attitudes and behavior of professional accountants. Developing these skills helps individual learning and personal improvement. They include:

(a) Self-management

(b) Initiative, influence and self learning

(c) The ability to select and assign priorities within restricted resources and to organize work to meet tight deadlines

(d) The ability to anticipate and adapt to change

(e) Considering the implications of professional values ethics and attitudes in decision making

(f) Professional skepticism

17. Interpersonal and communication skills enable a professional accountant to work with others for the common good of the organization, receive and transmit information, form reasoned judgments and make decisions effectively. The components of interpersonal and communication skills include the ability to:

(a) work with others in a consultative process, to withstand and resolve conflict;

(b) work in teams;

(c) interact with culturally and intellectually diverse people;

(d) negotiate acceptable solutions and agreements in professional situations;

(e) work effectively in a cross-cultural setting;

(f) present, discuss, report and defend views effectively through formal, informal, written and spoken communication; and

(g) listen and read effectively, including a sensitivity to cultural and language differences.

18. Organizational and business management skills have become increasingly important to professional accountants. Professional accountants are being asked to play a more active part in the day-to-day management of organizations. While previously their role might have been limited to providing the data that would be used by others, today, professional accountants are often part of the decision-making team. As a result, it is important that they understand all aspects of how an organization works. Professional accountants therefore need to develop a broad business outlook as well as political awareness and a global outlook.

Organizational and business management skills include:

(a) Strategic planning, project management, management of people and resources, and decision making

(b) The ability to organize and delegate tasks, to motivate and to develop people

(c) Leadership

(d) Professional judgment and discernment

General Education

19. **All professional education programs should include some portion of general education.**

20. A broad general education can contribute significantly to the acquisition of professional skills (see also IES 1, *Entry Requirements to a Program of Professional Accounting Education)*. General education requirements vary greatly from program to program and from country to country. General education focuses on the development of non-professional knowledge, intellectual skills, personal skills, interpersonal and communication skills, and organizational and management skills.

21. A broad general education can encourage lifelong learning and provide a foundation on which to build professional and accounting studies. It may consist of:

    (a) an understanding of the flow of ideas and events in history, the different cultures in today's world and an international outlook;

    (b) basic knowledge of human behavior;

    (c) a sense of the breadth of ideas, issues and contrasting economic, political and social forces in the world;

    (d) experience in inquiry and evaluation of quantitative data;

    (e) the ability to conduct inquiry, carry out logical thinking and understand critical thinking;

    (f) an appreciation of art, literature and science;

    (g) an awareness of personal and social values and of the process of inquiry and judgment; and

    (h) experience in making value judgments.

22. A general education may be gained in a number of different ways and within different settings. General education may take place at any stage in a degree program with the balance of the program devoted to professional accountancy topics, including accounting, finance and related knowledge, organizational and business knowledge and information technology knowledge (see IES 2, *Content of Professional Accounting Education Programs).* General education may also be fully integrated into accountancy degree programs, with provision for the acquisition of key skills spread throughout the program.

23. Candidates may also take non-accountancy degrees and then acquire the necessary knowledge of professional accountancy subjects through studying for the examinations set by professional bodies. Candidates may also acquire key skills through experience at work, combined with studying for the examinations. This combination would include elements of general knowledge and skills and thus develop the competence and capabilities, including the underlying technical knowledge, required to qualify as a professional accountant.

24. How these skills can be acquired may, therefore, differ from one IFAC member body to the next. Implementation of this IES depends on the cultural environment in which each body operates and the prevailing educational infrastructure. As a result, part of general education may be acquired during a broad and perhaps extended period of secondary education prior to higher education.

INTERNATIONAL EDUCATION STANDARD
IES 4
PROFESSIONAL VALUES, ETHICS AND ATTITUDES

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) prescribes the professional values, ethics and attitudes professional accountants should acquire during the education program leading to qualification.

2. The aim of this IES is to ensure that candidates for membership of an IFAC member body are equipped with the appropriate professional values, ethics and attitudes to function as professional accountants.

3. IFAC recognizes that the accountancy profession throughout the world operates in environments with different cultures and regulatory requirements. The International Ethics Standards Board for Accountants (IESBA) has, nevertheless, established an international *Code of Ethics for Professional Accountants* (IESBA Code). Professional values and ethics relate directly to IFAC's mission to develop and enhance the profession to enable it to provide services of consistently high quality in the public interest.

Introduction

4. Society has high expectations of the accountancy profession. It is essential for professional accountants to accept and observe ethical principles regulating all their relationships. Professional values, ethics and attitudes identify professional accountants as members of a profession and should shape everything they do as professionals. It is the responsibility of member bodies to ensure that their members have an adequate understanding of the principles of professional ethics and the underlying rationale of the constraints that professional ethics place on professional accountants.

5. Since professional accountants have a role to play in decision making, they need to have a thorough appreciation of the potential ethical implications of professional and managerial decisions. They also need to be aware of the pressures of observing and upholding ethical principles that may fall on those involved in the decision-making process. This is true whether they are working in public practice, industry or commerce, the public sector or education.

6. Professional accountants operate in a world of change. Good governance, both corporate and public, depends greatly on adherence to professional values, ethics and attitudes. In such circumstances, a clear understanding of, and education in, ethical principles is essential.

7. IFAC considers that member bodies have an obligation to their current and future members, as well as to society at large, to ensure that their members have a continuing understanding of professional values, ethics and attitudes. This understanding needs to be sufficient to enable them to operate

effectively and with integrity and discernment in an environment of change. The purpose of this IES is to assist member bodies in this task.

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

9. Educators and professional bodies need to distinguish between teaching students about professional values, ethics and attitudes and developing and instilling ethical behavior. Developing professional values, ethics and attitudes needs to begin early in the education of a professional accountant and be re-emphasized throughout a career. The professional accountant needs to consider this as part of life-long learning.

10. Education programs need to deal with ethical rules in a positive, participative way, for example, by exploring links between ethical behavior, corporate failure and fraud. It is important for professional accountants to learn from their experiences. With this in mind, education programs need to include reflection when students are required to consider an experience, what went well, what did not work and what approach should be taken in the future in similar circumstances.

11. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

12. This IES is effective from January 1, 2005.

Professional Values, Ethics and Attitudes

13. **The program of professional accounting education should provide potential professional accountants with a framework of professional values, ethics and attitudes for exercising professional judgment and for acting in an ethical manner that is in the best interest of society and the profession.**

14. **The required values, ethics and attitudes of professional accountants include a commitment to comply with the relevant local codes of ethics which should be in conformity with the IESBA Code.**

15. **The coverage of values and attitudes in education programs for professional accountants should lead to a commitment to:**

    (a) **the public interest and sensitivity to social responsibilities;**

    (b) **continual improvement and lifelong learning;**

(c) **reliability, responsibility, timeliness, courtesy and respect; and**

(d) **laws and regulations.**

16. **While the approach of each program to the learning of professional values, ethics and attitudes will reflect its own national and cultural environment and objectives, as a minimum all programs should include:**

(a) **The nature of ethics;**

(b) **Differences of detailed rules-based and framework approaches to ethics, their advantages and drawbacks;**

(c) **Compliance with the fundamental ethical principles of integrity, objectivity, commitment to professional competence and due care, and confidentiality;**

(d) **Professional behavior and compliance with technical standards;**

(e) **Concepts of independence, skepticism, accountability and public expectations;**

(f) **Ethics and the profession: social responsibility;**

(g) **Ethics and law, including the relationship between laws, regulations and the public interest;**

(h) **Consequences of unethical behavior to the individual, to the profession and to society at large;**

(i) **Ethics in relation to business and good governance; and**

(j) **Ethics and the individual professional accountant: whistle-blowing, conflicts of interest, ethical dilemmas and their resolution.**

Teaching Professional Values, Ethics and Attitudes

17. Because of the importance of professional values, ethics and attitudes to future professional accountants, the presentation of the topic may at first be treated as a separate subject. As students progress, and gain a wider knowledge of other subjects, it will be appropriate to integrate subject matters. This will encourage students to look for and consider the possible ethical implications of problems being discussed in their study of other subjects.

18. Students need to understand that values, ethics and attitudes run through everything that professional accountants do and how they contribute to confidence and trust in the market. Subsequent treatment might address the particular ethical issues likely to be faced by all professional accountants and those more likely to be encountered by professional accountants in public practice in any particular cultural environment.

19. Students need to be encouraged to study the role of, and critically appraise, relevant codes of ethics. Students may be invited to view professional pronouncements in this area as a positive effort to create a framework of trust and integrity within which professional accountants can operate. Students need to be encouraged to examine the ethical pronouncements of other professions and examine and discuss other potential approaches for the accountancy profession. Rote learning of codes and subsequent tests of memory will not produce the desired effect.

20. The presentation of professional values, ethics and attitudes to accounting students can be enhanced greatly through the use of participative approaches. These may include:

    (a) The use of teaching materials such as multi-dimensional case studies;

    (b) Role playing;

    (c) Discussion of selected readings and videos;

    (d) Analysis of real life business situations involving ethical dilemmas;

    (e) Discussion of disciplinary pronouncements and findings; and

    (f) Seminars using speakers with experience of corporate or professional decision making.

21. Such participative work will lead those involved to a greater awareness of the ethical implications and potential conflicts for individuals and businesses that may arise from having to make complex management decisions. Distance learning programs may be limited in offering all these participative experiences, however, as many approaches as possible can be used to enhance the learning experience.

22. It is important for professional accountants to learn from their ethical experiences. With this in mind, education programs need to include reflection when students are required to consider an experience, what went well, what did not work, and what approach may be taken in the future in similar circumstances.

Workplace Learning and Professional Values, Ethics and Attitudes

23. Professional values, ethics and attitudes affect the work of all professional accountants. Proper ethical behavior is as important as technical competence. Member bodies will require trainees to gain appropriate training and practical experience prior to admission to membership. Accordingly, the period of training and practical experience needs to be structured to give trainees an opportunity to observe the application of professional values, ethics and attitudes in the work situation.

24. Those responsible for the supervision of practical experience need to stress to their trainees the ethical dimensions of the role professional accountants play in the workplace. This may be done by encouraging them to identify any apparent ethical implications and conflicts in their work, to form preliminary views on such occurrences and to discuss them with their superiors.

25. In addition to discussions with the supervisors or mentors, there are other ways for trainees to discuss ethical issues, for example, discussions or interviews with other staff within the organization.

26. Trainees, and those recently qualified as professional accountants, would also benefit from exposure to, and involvement in, discussions on relevant issues relating to the work of their employers that are perceived to have potential ethical implications, for example conflicts of interest related to:

    (a) Professional accountants' job responsibilities (including responsibilities defined by the policies of organizations and the instructions of supervisors) and their professional responsibilities (as defined by their professional codes of conduct amongst other sources);

    (b) Confidentiality of information, including the limits of confidentiality;

    (c) The structure and purpose of professional associations (including lobbying activities on behalf of members); and

    (d) The variety of ways in which professional accountants can face conflicts of interest, including, for example, inappropriate advocacy and earnings management.

27. Ethical problems and potential dilemmas may occur. Where there is doubt about the ethical aspects of a course of action or situation, trainees need to consult some recognized ethical reference point, within their work environment or member body, whichever may be the appropriate course of action.

INTERNATIONAL EDUCATION STANDARD
IES 5
PRACTICAL EXPERIENCE REQUIREMENTS

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) prescribes the practical experience IFAC member bodies should require their members to obtain before qualification as professional accountants.

2. The aim of this IES is to ensure that candidates seeking to qualify as professional accountants have acquired the practical experience considered appropriate at the time of-qualification to function as competent professional accountants.

3. Further development may be required after qualification to bring candidates up to the level of a statutory auditor or some other form of specialization. In any event, lifelong learning will be required to develop and maintain professional competence (see also IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence*).

Introduction

4. Practical experience, gained by performing the work of professional accountants, in addition to the acquisition of knowledge through professional accounting education programs, is considered necessary before candidates can present themselves to the public as professional accountants (see also IES 3, *Professional Skills and General Education*). Given the variety of circumstances surrounding professional accountancy bodies throughout the world, the requirement for practical experience may vary from one body to another.

5. The balance between practical experience and academic study or studying for professional qualifications may vary from one qualification to another. IFAC member bodies need to adapt their practical experience requirements to meet their own needs and requirements, the requirements of the relevant regulatory authorities, as well as public expectations that professional accountants are competent.

6. No single combination of education and experience required for preparation for qualification as a professional accountant is used throughout the world. When education requirements are extended to include practical business and accounting applications, then a part of this education may contribute to some of the practical experience requirements.

7. Employers, work colleagues and mentors play important roles in planning and monitoring practical experience gained by trainees.

8. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

9. This IES is effective from January 1, 2005.

Practical Experience Requirements

10. **The period of practical experience in performing the work of professional accountants should be a part of the pre-qualification program. This period should be long enough and intensive enough to permit candidates to demonstrate they have gained the professional knowledge, professional skills, and professional values, ethics and attitudes required for performing their work with professional competence and for continuing to grow throughout their careers.**

11. **The period of practical experience should be a minimum of three years. A period of relevant graduate (beyond undergraduate, e.g., master's) professional education with a strong element of practical accounting application may contribute no more than 12 months to the practical experience requirement.**

12. The overall goal is to produce competent professional accountants through an appropriate mix of general education, professional education and practical experience. The exact combination may vary, as long as the requirements of paragraphs 10 and 11 are achieved. Simply spending the amount of time necessary to meet the practical experience requirement is not sufficient. Trainees need to demonstrate the competences achieved.

13. A sufficient period of practical experience is considered necessary before candidates can present themselves to the public as professional accountants, that is, in addition to academic study or studying for a professional qualification. The exact combination of practical experience and education will vary according to the rules laid down by individual member bodies and in accordance with national and local laws, and the requirements of regulatory authorities and public expectations.

14. For example, some extended education programs that place a strong emphasis on practical application may contribute some part of the practical experience requirement. Studying for academic or professional qualifications are useful methods of acquiring and demonstrating professional accountancy knowledge gained. However, this studying does not necessarily demonstrate that professional competence in the workplace has been achieved. Experience gained at work equips trainees with many of the practical skills needed to become competent professional accountants.

15. Trainees need to gain practical experience in roles considered appropriate by the professional body to which they are applying.

16. Practical experience may be obtained after a program of study or alongside a program of study.

17. Practical experience provides a professional environment in which trainees develop competence by:

    (a) enhancing their understanding of organizations, of how business works and of work relationships;

    (b) being able to relate accounting work to other business functions and activities;

    (c) becoming aware of the environment in which services are provided;

    (d) developing the appropriate professional values, ethics and attitudes in practical, real-life situations (see also IES 4, *Professional Values, Ethics and Attitudes*); and

    (e) having an opportunity to work at progressive levels of responsibility.

Monitoring and Control

18. **The member body and/or regulatory authority should ensure that the practical experience candidates have gained is acceptable. Experience leading to qualification as a professional accountant should be conducted under the direction of a mentor who is an experienced member of an IFAC member body. For a program of practical experience to be effective, it is necessary for the professional body or regulatory authority, the trainee, mentor and the employer to work together.**

19. **The program of practical experience should be mutually beneficial to both the trainee and the employer and be developed together. A record of the practical experience gained should be reviewed periodically by the mentor.**

20. Prior to qualifying as a professional accountant, IFAC member bodies should assess the practical experience gained on the basis of written submissions reviewed by supervisors or mentors and possibly supported by oral submissions made by trainees.

21. The mentor may be assisted in performing the mentoring function by others in the organization, some of whom may not be professional accountants.

22. The program of practical experience needs to be designed and implemented to meet the experience requirements set by the professional body. It also needs to be efficient and cost-effective for the employer, whether that employer is in industry, commerce, government or public practice.

23. Mentors can represent an important link between trainees and member bodies. They may be responsible for the planning of the practical experience period and provide guidance to trainees. Member bodies may wish to provide training for mentors and put in place reporting arrangements.

24. IFAC member bodies, whose members are eligible for an audit license at the point of qualification, need to ensure that appropriate audit experience is acquired during the pre-qualification period. If the license is granted by an external agency, or after qualification, that agency will formulate the necessary requirements for qualification. Those requirements might also be fulfilled during the post-qualification period (see also IES 8, *Competence Requirements for Audit Professionals*).

25. The record of experience needs to be regularly compared with the overall program established for the trainee to ensure that the requirements set by the professional body or regulatory authority are being met. If progress within the program does not match the anticipated development rate, the situation needs to be reviewed to discover the reasons why and what can be done to improve it. This regular comparison will provide another opportunity for all parties to comment on the practical experience and contribute to the trainee's future development.

26. Steps that member bodies can take to ensure the achievement of appropriate experience include:

    (a) Establishing a monitoring system, normally on a sampling basis, that provides for monitoring and reporting of the practical experience obtained;

    (b) Providing detailed written guidance for employers, mentors and trainees regarding the program of practical experience and their roles and responsibilities;

    (c) Establishing a mechanism for approving employers as suitable for providing the appropriate experience for trainees;

    (d) Assessing and approving the practical experience environment before commencement of experience. (For example, the nature and scope of practical experience and the training arrangements of employers need to be reviewed to ensure that trainees would receive proper direction, supervision, mentoring, counseling and evaluation);

    (e) Assessing, prior to membership, the practical experience gained on the basis of written submissions possibly supported by oral submissions made by trainees appropriately supported (see also IES 6, *Assessment of Professional Capabilities and Competence)*;

    (f) Providing feedback to trainees and certifying when competences have been achieved;

    (g) Monitoring employers and mentors previously approved. The review may advise on areas that need improvement or may recommend that approval be withdrawn if conditions have changed to the extent that relevant experience criteria are not being met;

(h) Establishing a system of periodic reporting to cover changes, if any, in the nature, scope and content of the trainees' practical experience if it is impractical to visit all approved employers; and

(i) Undertaking a periodic study of the competences required by professional accountants to help to ensure that the practical experience gained is relevant and appropriate.

INTERNATIONAL EDUCATION STANDARD

IES 6

ASSESSMENT OF PROFESSIONAL CAPABILITIES AND COMPETENCE

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) prescribes the requirements for a final assessment of a candidate's professional capabilities and competence before qualification.

2. This IES deals with the assessment of the professional capabilities (i.e. the professional knowledge, professional skills and professional values, ethics and attitudes) acquired through professional education programs (see also the IES 2, *Content of Professional Accounting Education Programs*, IES 3, *Professional Skills and General Education* and IES 4, *Professional Values, Ethics and Attitudes*).

3. In the *Framework for International Education Standards for Professional Accountants*, professional knowledge, professional skills, and professional values, ethics and attitudes are discussed. Capabilities are the attributes held by individuals that enable them to perform their roles competently. The possession of capabilities gives a good indication that an individual has the potential to perform competently in the workplace.

4. Certain professional skills and values may be better acquired through practical experience and assessed in the workplace or through workplace simulations. IES 5, *Practical Experience Requirements*, deals with the monitoring, control and review of practical experience.

Introduction

5. It is the responsibility of IFAC member bodies to have in place assessment procedures that ensure candidates admitted to membership are appropriately qualified. A series of continual assessments might be made leading up to the final assessment of capabilities and competence.

6. The final assessment of capabilities and competence is normally in addition to purely academic qualifications and is beyond undergraduate degree level. This IES prescribes that a significant proportion of this assessment should be in recorded form. It should test underpinning theoretical knowledge as well as the practical application of knowledge.

7. Candidates need to be able to demonstrate that they:

   (a) have a sound technical knowledge of the specific subjects of the curriculum;

   (b) can apply technical knowledge in an analytical and practical manner;

   (c) can extract from various subjects the knowledge required to solve many-sided or complex problems;

   (d) can solve a particular problem by distinguishing the relevant information from the irrelevant in a given body of data;

(e) can, in multi-problem situations, identify the problems and rank them in the order in which they need to be addressed;

(f) appreciate that there can be alternative solutions and understand the role of judgment in dealing with them;

(g) can integrate diverse areas of knowledge and skills;

(h) can communicate effectively with users by formulating realistic recommendations in a concise and logical fashion; and

(i) can identify ethical dilemmas.

8. The practical experience part of the qualifying process is intended to facilitate the development and direct application of professional knowledge, professional skills, and professional values, ethics and attitudes. Ultimately, it is through practical experience that trainees will demonstrate their competence to perform the roles of professional accountants. Details regarding the assessment of the practical experience can be found in IES 5, *Practical Experience Requirements.*

9. Definitions and explanations of the key terms used in the IESs are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Effective Date

10. This IES is effective from January 1, 2005.

Assessment of Professional Capabilities and Competence

11. **The professional capabilities and competence of candidates should be formally assessed before the qualification of professional accountant is awarded. This assessment is the responsibility of the IFAC member body, and should be carried out by an IFAC member body, or the relevant regulatory authority with substantive input from an IFAC member body.**

12. **The assessment of professional capabilities and competence should:**

(a) **require a significant proportion of candidates' responses to be in recorded form;**

(b) **be reliable and valid;**

(c) **cover a sufficient amount of the whole range of professional knowledge, professional skills, and professional values, ethics and attitudes for the assessment to be reliable and valid; and**

(d) **be made as near as practicable to the end of the pre-qualification education program.**

13. The assessment of professional capabilities and competence is the responsibility of the IFAC member body. The assessment needs to be carried out by an IFAC member body or by a regulatory authority with substantive input from an IFAC member body. Member bodies may, however, wish to cooperate with other member bodies in making their assessment arrangements, in whole or in part. In these cases, the responsibility for the assessment remains with the professional bodies whose qualifications will be awarded.

14. The assessment of professional capabilities and competence serves several purposes. First, professional bodies and regulatory authorities have a responsibility to ensure that professional accountants have the capabilities and competence expected of them by employers, clients and the public. Second, individuals who owe a duty of care to their clients, employers and relevant stakeholders, need to demonstrate their ability to discharge this responsibility in a competent manner. Third, the public interest is protected and the credibility of the profession is enhanced when only those who meet the profession's competency standards are permitted to be professional accountants.

15. The critical consideration is whether the assessments are reliable, valid and credible. Reliable assessments produce consistent, objective results over time. Valid assessment methods assess the desired outcomes and may use quantitative and qualitative measures. Assessments need to be acceptable to stakeholders and the public interest.

16. The assessments need to be appropriate for the professional knowledge, professional skills and professional values, ethics and attitudes being evaluated.

17. Although it is not practicable to assess the whole range of capabilities and competences at any single session, over a number of sessions the whole range needs to be covered. Some material may have been covered before, and assessors are entitled to assume that this material is known and understood. In other cases, the assessment of some of the competences may have been assessed during the practical experience period.

18. IFAC acknowledges that the nature of an assessment of professional capabilities and competence is the responsibility of its member bodies and that there is no single preferred method for such an assessment. Because of the diversity of capabilities and competences being evaluated, IFAC members need to use a variety of assessment methods which would be appropriate for the capabilities and competences being evaluated.

19. The methods adopted will also depend on factors specific to each member body, including:

    (a) Geographical location

    (b) Educational and other resources available

    (c) The number of candidates being tested and their backgrounds

(d) Training opportunities

20. To provide sufficient evidence for the assessment of candidates' professional capabilities and competence, the assessment needs to assign a significant weighting to responses in recorded form.

21. Candidates also need to demonstrate that they can integrate all the various elements across a range of situations and apply them in the context of a professional accountant at work.

22. The assessment might also include elements of oral and group assessments as well as objective testing. Scenario-based questions and case studies may be used to test higher-level intellectual skills. The assessment needs to be at a level of difficulty appropriate for professional accountants, to preserve the credibility of the final test of capabilities and competence.

23. Professional capabilities and competence may be assessed through a series of parts spread over an individual's pre-qualification program. However, the final qualifying part of the assessment needs to be administered as near as practicable to the end of the individual's pre-qualification program leading to qualification. This final assessment needs to cover enough of the body of professional knowledge, professional skills, and professional values, ethics and attitudes necessary to demonstrate that the individual has the capabilities and competence to qualify as a professional accountant.

INTERNATIONAL EDUCATION STANDARD

IES 7

CONTINUING PROFESSIONAL DEVELOPMENT: A PROGRAM OF LIFELONG LEARNING AND CONTINUING DEVELOPMENT OF PROFESSIONAL COMPETENCE

CONTENTS

Purpose and Scope of this Standard

1. This Standard (IES) proscribes that member bodies:

   (a) Foster a commitment to lifelong learning among professional accountants;

   (b) Facilitate access to continuing professional development opportunities and resources for their members;

   (c) Establish for members benchmarks for developing and maintaining the professional competence necessary to protect the public interest; and

   (d) Monitor and enforce the continuing development and maintenance of professional competence of professional accountants.

2. This IES is based on the principle that it is the responsibility of the individual professional accountant to develop and maintain professional competence necessary to provide high quality services to clients, employers and other stakeholders.

Introduction

3. This IES prescribes that member bodies implement a continuing professional development (CPD) requirement as an integral component of a professional accountant's continued membership. Such a requirement contributes to the profession's objective of providing high-quality services to meet the needs of the public (including clients and employers).

4. This IES introduces the concepts of continuing professional development as relevant, verifiable and measurable learning activities and outcomes.

5. Continuing professional development refers to learning and development that develops and maintains capabilities to enable professional accountants to perform their roles competently (see *Framework for International Education Standards for Professional Accountants*).

6. IFAC's mission is to serve the public interest, strengthen the worldwide accountancy profession, and contribute to the development of strong international economies by establishing and promoting adherence to high-quality professional standards, furthering the international convergence of such standards, and speaking out on public interest issues where the profession's expertise is most relevant. A fundamental principle of the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code) states, "A professional accountant has a continuing duty to maintain professional knowledge and skill at the level required to ensure that a client or employer receives the advantage of competent professional service based on current developments in practice, legislation and techniques. A professional accountant should act diligently and in accordance with applicable

technical and professional standards in all professional and business relationships."

This IES addresses how professional accountants meet their obligations of ongoing competence.

7. The knowledge needed to function effectively as a professional accountant in public practice, industry, commerce, education and the public sector continues to expand and change at a rapid rate. Professional accountants face increased knowledge and skill expectations. They and their professional associations also face unprecedented scrutiny about the quality of internal control, governance, financial statements and independent audits. These pressures apply to professional accountants in both the private and public sectors. In addition, the need to be competitive in a worldwide economy has prompted a more intense focus on the role and responsibilities of professional accountants in entities of all types. Professional accountants in all sectors have important contributions to make. Continued development of professional competence and lifelong learning are critical if the professional accountant is to meet these expectations.

8. The profession has a responsibility to ensure that professional accountants continue to develop and maintain the competence demanded by their professional roles and the users of their services. IFAC member bodies are encouraged to promote to their members, stakeholders and the public, the benefits of CPD highlighting the importance of continuous improvement of competence and a commitment to lifelong learning.

9. On its own, CPD does not provide assurance that all members will provide high quality professional service all the time. Doing so involves more than maintaining professional competence; it involves applying knowledge with professional judgment and an objective attitude. Also, there cannot be assurance that every person who participates in a CPD program will obtain the full benefits of that program, because of variances in individual commitment and capacity to learn. Nevertheless, it is certain that members who are not up-to-date on current technical and general knowledge pertinent to their work will not be able to provide professional services competently. Therefore, despite the inherent limitations of any CPD program, a CPD requirement is important to maintaining public confidence.

10. The accountancy profession operates in an environment of change making it necessary for member bodies to periodically review their CPD policies and the application of this IES.

11. Member bodies need to consider a variety of quality assurance methods when considering their responsibility to protect the public interest. CPD is only one method. Others include quality assurance reviews of professional accountants'

work and investigation and disciplinary regimes for misconduct, as documented in IFAC's Statements of Membership Obligations (SMOs) 1 and 6, respectively.

Effective Date

12. This IES is effective from January 1, 2006.

Promotion of Lifelong Learning

13. **Member bodies should promote the importance of continuous improvement of competence and a commitment to lifelong learning for all professional accountants.**

14. All professional accountants have an obligation to develop and maintain their professional competence, relevant to the nature of their work and professional responsibilities. This obligation applies to all professional accountants, irrespective of whether they are involved in traditional accounting fields or other areas.

15. The process of lifelong learning commences early, continuing with the education program to become qualified as a professional accountant, and on through an individual's career. CPD is an extension of the education process that led to qualification as a professional accountant. The professional knowledge, professional skills, and professional values, ethics and attitudes gained by the time of qualification continue to develop and are refined appropriately for the professional activities and responsibilities of the individual.

Access to CPD

16. **Member bodies should facilitate access to CPD opportunities and resources to assist professional accountants in meeting their responsibility for lifelong learning.**

17. Member bodies may directly provide relevant CPD programs for professional accountants and facilitate access to programs offered by others, encompassing all learning methods.

Mandatory CPD for all Professional Accountants

18. **Member bodies should require all professional accountants to develop and maintain competence relevant and appropriate to their work and professional responsibilities. The responsibility for developing and maintaining competence rests primarily with each professional accountant.**

19. CPD is applicable for all professional accountants, regardless of sector or size of business in which they operate, because:

    (a) All professional accountants have an ethical obligation of due care to their clients, employers and relevant stakeholders and need to

demonstrate their ability to discharge this responsibility in a competent manner.

(b) Professional accountants in all sectors hold positions of importance involving financial reporting, public accountability and maintaining the public trust.

(c) The public is likely to rely on the designation or professional standing of the professional accountant. Moreover, all professional accountants carry the professional designation, and any lack of competence or ethical behavior has the same consequences to the reputation and standing of the profession, irrespective of the sector or role in which they operate.

(d) All sectors are affected by the rapidly changing environment and the consequential need to adapt the strategic or business plans of those organizations relying on the professional accountant's professional competence.

(e) Employers hiring professional accountants in any sector rely, at least to some extent, on the professional designation as proof of professional competence.

20. In setting the requirement for CPD, member bodies will need to consider what is relevant and appropriate for professional accountants in circumstances such as career breaks and retirement.

Relevance

21. CPD contributes to the competence of professional accountants and therefore acceptable CPD activities are expected to develop the professional knowledge, professional skills and professional values, ethics and attitudes of the professional accountant, relevant to their current and future work and professional responsibilities.

22. Some member bodies may choose to develop requirements or other guidance regarding which types of CPD activities are considered professionally relevant. Other member bodies may choose to rely on the professional judgment of individual members to make decisions on the relevance of CPD activities. Others may choose to set requirements in certain areas, and allow members the flexibility to choose relevant learning activities in other areas.

23. Member bodies may prescribe specific or additional CPD for members working in specialist areas or areas of high risk to the public.

24. Professional accountants are encouraged to consult with employers, colleagues, member bodies and others to help them identify competency or learning gaps and then specify learning opportunities to meet these needs.

Measurement

25. Professional accountants are required to measure learning activities or outcomes to meet the member body's CPD requirements.

26. Learning activity can be measured in terms of effort or time spent, or through a valid assessment method which measures competence achieved or developed.

Verification

27. This IES is based on the principle that a certain portion of the learning activities professional accountants engage in are verifiable. This means that the learning is able to be objectively verified by a competent source. Some learning activities may be measured but not verified.

28. Professional accountants are responsible to retain appropriate records and documents related to their CPD and, upon request by the member body, provide sufficient evidence to demonstrate their compliance with the requirements of the member body.

CPD Approaches

29. The objective of CPD is to assist professional accountants to develop professional competence to provide services of high quality in the public interest. Measurement of completion of CPD can be achieved by at least three different approaches:

    (a) Input-based approaches—by establishing a set amount of learning activity that is considered appropriate to develop and maintain competence.

    (b) Output-based approaches—by requiring professional accountants to demonstrate, by way of outcomes, that they develop and maintain professional competence.

    (c) Combination approaches—by effectively and efficiently combining elements of the input- and output-based approaches, setting the amount of learning activity required and measuring the outcomes achieved.

30. Input-based systems traditionally have served as a proxy for measuring development and maintenance of competence because of the ease of measurement and verification. Input-based approaches have limitations, for example, they do not always measure the learning outcomes or competence developed. As a result, some professional accountants may not apply themselves in seminars or courses and yet meet the input-based criteria for measurement and verification. This "form over substance" approach can undermine the real objective of continuous improvement of competence. Member bodies may

overcome these limitations by communicating the underlying objectives of continuous improvement of competence and a commitment to lifelong learning.

31. Output-based approaches concentrate on measuring the development and maintenance of competence achieved through learning, rather than measuring the various learning activities completed.

32. The measurement and verification system would differ between input, output and combination approaches.

Input-based Approach

33. **Member bodies operating an input-based approach should require the professional accountant to:**

    (a) **Complete at least 120 hours or equivalent learning units of relevant professional development activity in each rolling three-year period, of which 60 hours or equivalent learning units should be verifiable**

    (b) **Complete at least 20 hours or equivalent learning units in each year**

    (c) Track and measure learning activities to meet the above requirements

34. This IES measures CPD activity in hours or equivalent learning units. Member bodies may choose to use another term for the unit of measurement that will be understood by professional accountants (such as credit points or learning units). This other unit of measurement is to represent one hour of classroom time or its substantial equivalent.

35. Some learning activities may be measurable, but not able to be verified. These activities also contribute to development and maintenance of competence but would not be considered to form part of the 60 hours of verifiable CPD in the three-year rolling period.

Output-based Approach

36. **Member bodies implementing an output-based approach should require the professional accountant to demonstrate the maintenance and development of relevant competence by periodically providing evidence that has been:**

    (a) **Objectively verified by a competent source**

    (b) **Measured using a valid competence assessment method**

37. Member bodies need to require professional accountants to obtain evidence that competence was developed or maintained. The professional accountant is responsible for providing the evidence to the member body on request and for ensuring the evidence filed is sufficient and reliable.

38. Verification of competence for output-based systems is an objective assessment that competence has been developed or maintained. Verification is to be provided by a competent source in a position to confirm that the competence has been developed and maintained using a valid method or technique. The assessment should clearly identify the outcome or competence achieved, which may be the result of a particular learning activity or an extended development program that involves numerous learning activities, the achievement of performance outcomes (e.g., from the work environment) or other means (e.g., professional re-examinations).

39. The evidence may take many forms. Examples of verification can be found in the Appendix to this IES.

Combination Approach

40. **Member bodies implementing a combination of input- and output-based approaches should follow the principles of input and output systems, as applicable, set out in this IES.**

41. There are several alternatives for adopting a combination approach to CPD. For example, member bodies may choose to:

    (a) Adopt an input-based approach for some sectors or other grouping of members and an output-based approach for others;

    (b) Use the concepts of both input- and output-based systems, whereby input-based learning units contribute to the output competences being measured for a portion of the knowledge areas in a predominantly output-based system;

    (c) Allow professional accountants who may not meet the input-based learning units requirement to provide verification that competence has been developed and maintained;

    (d) Specify a certain number of learning units as an indication of likely effort required to achieve competence and monitor this together with verification of competence achieved as a result of the learning activities; or

    (e) Introduce a combination approach before moving towards a comprehensive output-based system.

Monitoring and Enforcement

42. **Member bodies should establish a systematic process to monitor whether professional accountants meet the CPD requirement and provide for appropriate sanctions for failure to meet the requirement, including failure to report or failure to develop and maintain competence.**

43. In designing their approach to monitoring, member bodies may consider which of their members have the greatest responsibility to the public or pose the greatest risk to the public and adopt more rigorous monitoring for those operating in high risk roles.

44. A monitoring process could require professional accountants to periodically:

    (a) submit a declaration as to whether they meet their ethical obligation to maintain knowledge and skill to perform competently;

    (b) submit a declaration as to compliance with any specific CPD requirements imposed by the member body; and/or

    (c) provide evidence of learning activities or verification of competence developed and maintained.

45. Reporting cycles of greater than five years would be unlikely to meet the objectives of this IES.

46. Other monitoring processes could involve:

    (a) Auditing a sample of professional accountants to check compliance with CPD requirements;

    (b) Including the review and assessment of learning plans or CPD documents in practice inspection programs; and/or

    (c) Requiring public practice employers to include CPD programs and effective monitoring systems in their quality assurance programs and to track CPD activities as part of their time recording systems.

47. Member bodies need to require professional accountants to maintain evidence for a sufficient period of time to support the prescribed reporting requirements.

48. Verification needs to be in the form of documentation that can be provided easily to the member body for review purposes. Examples are provided in the Appendix to this IES.

49. A system of mandatory CPD will operate effectively and in the public interest only if professional accountants who fail to comply with the requirement are brought into compliance on a timely basis or, if they persist in willful non-compliance, are appropriately sanctioned. Member bodies are encouraged to determine punitive sanctions after considering the legal and environmental conditions in their countries. Some member bodies may have the legal authority to expel non-compliant professional accountants or to deny the right to practice. Publication of the names of professional accountants who willfully fail to comply is one option to be considered in this process. This can act as a general deterrent for professional accountants and provides a clear signal to the public of the profession's commitment to maintaining competence.

50. The initial steps taken to address non-compliance are likely to focus on bringing the professional accountant into compliance within a reasonable period. Care needs to be taken to strike a balance between a sanction that, in substance, amounts to permitting a professional accountant to defer or avoid compliance with the CPD requirement and one that is excessively punitive.

51. Expulsion or denial of the right to practice may be reserved for professional accountants who have made it clear, through a pattern of non-compliance or through their response to the member body's inquiries, that they are likely to continue to disregard the importance of complying with the CPD requirements.

52. Imposing sanctions is not an action to be taken lightly. A professional accountant's willful failure to maintain and develop his or her professional competence is, however, a violation of a significant professional duty that justifies disciplinary action.

53. A member body needs to ensure the monitoring and enforcement process is adequately resourced. Member bodies may also consider establishing a board or committee of volunteers to oversee the CPD requirements and the monitoring and enforcement process.

54. As a public interest step, member bodies are encouraged to report publicly the extent to which their members comply with the CPD requirements set out in this IES.

Appendix

The Appendix is illustrative only and does not form part of the IES. The purpose of the Appendix is to illustrate the application of the IES to assist in clarifying its meaning.

This Appendix provides examples of different types of learning activities and how such learning can be verified under input- and output-based approaches to Continuing Professional Development (CPD).

Examples of Planning Tools

The following tools may assist professional accountants to identify learning and development needs, and plan ways of addressing these needs.

Tools, such as competency maps and learning plans, may be useful to member bodies and professional accountants to identify relevant learning needs and opportunities. Competency maps help identify development needs. Learning plans help identify learning opportunities to meet these needs. These tools need to be reviewed periodically and modified as competency needs change.

Competency Map

A competency map can assist professional accountants to identify training and development needs before identifying relevant learning activities. Competency maps provide a list of key competences for certain roles or sectors of the profession, at different levels (e.g. basic, intermediate, advanced). The competency map can assist professional accountants to assess their current levels of competence and identify targets for development. Competency maps have been developed by some IFAC member bodies, and by some employers to assist professional accountants plan and develop their careers.

Learning Plan

A learning plan assists professional accountants to identify training and development needs and ways in which to meet those needs. Professional accountants are encouraged to review their current skills and competences (a competency map, described above, can assist with this) against a target. Once these development needs have been identified, the professional accountant can then source relevant learning activities to help develop the required skills and competences. More than one learning activity may be required to develop the required skills and competences. Some member bodies have developed interactive tools to help assess competence and plan how to develop and maintain competence.

Learning Activities, Measurement Tools, and Evidence

The following lists provide examples of different learning activities, how learning could potentially be measured, and the different types of evidence for input- and output-based approaches. Any of these could be carried out using electronic means and e-learning opportunities. In considering these examples, member bodies are expected to comply with the intent of paragraphs 35, 37 and 38 of this IES. The following examples may constitute CPD to the extent the individual professional accountant has developed capabilities in the course of undertaking the activity.

Examples of Learning Activities

- Participation in courses, conferences, seminars
- Self-learning modules or organized on-the-job training for new software, systems, procedures or techniques for application in professional role
- Published professional or academic writing
- Participation and work on technical committees
- Teaching a course or CPD session in an area related to professional responsibilities
- Formal study related to professional responsibilities
- Participation as a speaker in conferences, briefing sessions, or discussion groups
- Writing technical articles, papers, books
- Research, including reading professional literature or journals, for application in a professional role
- Professional re-examination or formal testing

One single, repetitive activity, for example, teaching introductory accounting to different audiences, should not constitute a member's total CPD activity.

Examples of Measurement Units

In considering the following measurement units, it should be noted that the IES measures input-based approaches in terms of hours. Any alternative unit of measurement should be equivalent to one hour of classroom time or its substantial equivalent (refer to paragraphs 33 and 34).

- Time spent on an activity
- Units allocated to an activity by a CPD provider
- Units prescribed by a member body

Evidence for Verification in an Input-based Approach

- Course outlines, teaching materials
- Attendance record, registration forms or confirmation of registration from provider
- Independent assessments that a learning activity has occurred
- Confirmation by an instructor, mentor or tutor of participation
- Confirmation by an employer of participation in an in-house program

Evidence for Verification in an Output-based Approach

- Verification of learning achieved through learning or performance outcomes
- Evaluation of written or published material by a reviewer
- Assessments of learning outcomes achieved
- Publication of a professional article or of the results of a research project
- Periodic re-examination
- Specialist or other qualification
- Work logs that have been objectively verified with reference to an external competency map
- Competency maps developed by the member body against which the member completes a self-assessment and provides supporting evidence on request
- Objective assessments against a competency map developed either by the employer or by the professional body as to the individual's level of competence

The following sources of evidence, if verified as applying to the individual member, may provide evidence of competence about that individual member:

- Independent practice inspections
- Assessments or signoffs by specialty associations that document enhancements of competences, and assessments by regulators, e.g., government reviews of licensed banks

INTERNATIONAL EDUCATION STANDARD

IES 8

COMPETENCE REQUIREMENTS FOR AUDIT PROFESSIONALS

CONTENTS

SECTION 1: GENERAL

Introduction

1. Auditing is a structured process that:

   (a) involves the application of analytical skills, professional judgment and professional skepticism;

   (b) is usually performed by a team of professionals, directed with managerial skills;

   (c) uses appropriate forms of technology and adheres to a methodology;

   (d) complies with all relevant technical standards, such as International Standards on Auditing (ISAs), International Standards on Quality Control (ISQCs), International Financial Reporting Standards (IFRS), International Public Sector Accounting Standards (IPSAS), and any applicable international, national or local equivalents; and

   (e) complies with required standards of professional ethics.

2. Auditing is also an integral part of the evolving systems of accountability and responsibilities within organizations and society worldwide. Although audits of historical financial information may be mandated by regulation and laws, they may also be required as a condition of borrowing, a matter of contract, or for other reasons. In addition, organizations may voluntarily undertake audits to evaluate the fairness of financial representations and assertions or to provide a credible report of the financial stewardship of their resources to their stakeholders.

3. Entities subject to audit operate with diverse organizational structures in public, private and not-for-profit sectors. Auditing has to adapt to complex and changing environments. Within an audit assignment, many factors must be understood and evaluated appropriately, including:

   (a) The entity and its environment;

   (b) The industry, and regulatory and other external factors; and

   (c) The applicable financial reporting framework.

4. Globalization of business has dramatically increased the need for consistent and high-quality financial reporting within countries and across borders. This directly affects both accounting and auditing. Many stakeholders in today's global business environment expect compliance with recognized international standards in accounting and auditing. Establishing internationally accepted benchmarks for the competence of audit professionals[1] will help to promote internationally accepted standards in accounting and auditing.

[1] The term "audit professional" is defined in Paragraph 9.

Purpose of this Standard

5. This International Education Standard (IES) prescribes competence requirements for audit professionals, including those working in specific environments and industries. IFAC member bodies need to establish policies and procedures that will allow members to satisfy the requirements of this IES before they take on the role of an audit professional. The responsibility for the development and assessment of the required competence is shared by IFAC member bodies, audit organizations, regulatory authorities, and other third parties.

6. A specific IES for audit professionals is necessary not only because of the specialist knowledge and skills required for competent performance in this area, but also because of the reliance the public and other third parties place on the audit of historical financial information.[2] This IES is based on the platform for all professional accountants established by IES 1 to 7.

7. The aim of this IES is to ensure that professional accountants acquire and maintain the specific capabilities required to work as competent audit professionals.

Definitions

8. Terms used in this IES which have already been defined by either the International Accounting Education Standards Board (IAESB) or other IFAC groups are set out below. Definitions and explanations of other key terms used in this IES are set out in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*.

Capabilities: The professional knowledge; professional skills; and professional values, ethics, and attitudes required to demonstrate competence.

Explanation: *Capabilities are the attributes held by individuals that enable them to perform their roles, whereas competence refers to the actual demonstration of performance. The possession of capabilities gives an indication that an individual has the ability to perform competently in the workplace. Capabilities include content knowledge; technical and functional skills; behavioral skills; intellectual abilities (including professional judgment); and professional values, ethics, and attitudes. They are sometimes referred to, in other literature, as competencies, capacities, abilities, key skills, core skills, fundamental skills and values, attitudes, distinguishing characteristics, pervasive qualities, and individual attributes.*

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[2] The IAASB distinguishes between engagements reporting on historical financial information and assurance engagements dealing with information other than historical financial information. *(IAASB Terms of Reference).* IES 8 prescribes requirements for professional accountants assuming the role of audit professionals and having responsibility for significant judgments in an audit of historical financial information.

Competence: Being able to perform a work role to a defined standard, with reference to real working environments.

Explanation: *Competence refers to the demonstrated ability to perform relevant roles or tasks to the required standard. Whereas capability refers to the attributes held by individuals that give them the potential to perform, competence refers to the actual demonstration of performance. Competence may be assessed by a variety of means, including workplace performance, workplace simulations, written and oral tests of various types, and self-assessment.*

Engagement partner is the partner or other person in the audit organization who is responsible for the engagement and its performance, and for the audit report that is issued on behalf of the firm, and who, where required, has the appropriate authority from a professional, legal or regulatory body.

Explanation: *This term is consistent with that established by the International Auditing and Assurance Standards Board (IAASB).*

Professional accountant is a person who is a member of an IFAC member body.

9. The following definition has been created for the purpose of this IES:

Audit professional is a professional accountant who has responsibility, or has been delegated responsibility, for significant judgments in an audit of historical financial information.

Explanation: *The engagement partner retains overall responsibility for the audit. The definition of audit professional does not apply to experts who undertake specific tasks within an audit (e.g., taxation, information technology or valuation experts).*

Effective Date

10. This IES is effective from July 1, 2008 for all audit professionals. Earlier adoption is encouraged.

Scope of this Standard

11. International Education Standards prescribe standards of generally accepted "good practice" in learning and development for professional accountants. They establish the essential elements of the content and process of education and development of professional accountants (e.g. subject matter, skills, ethics and practical applications) at a level that is aimed at gaining international recognition, acceptance and application. Although they cannot override authoritative local pronouncements, they are prescriptive in nature.

12. This IES prescribes the minimum competence requirements IFAC member bodies are expected to require any members to obtain before they take on the role of an audit professional.

13. This IES also prescribes the minimum levels of professional knowledge; professional skills; and professional values, ethics and attitudes audit professionals require. It does not address the full range of capabilities and competence needed by the entire audit engagement team. Audit professionals may work as a member of an audit team, or as an individual with sole responsibility in smaller audit assignments. Different levels of responsibility within an audit assignment will demand different levels of competence.

14. Consulting with experts within or outside the audit organization is often required during an audit assignment. Capability and competence requirements for such experts are covered in IAASB standards and guidance and are not addressed in this IES.

15. Section 2 of this IES applies to all audit professionals. Section 3 discusses the competence requirements for engagement partners. Section 4 applies to audit professionals involved in specific environments and industries, including transnational audits.

16. This IES is consistent with the requirements and guidance contained in the various standards and statements in the International Framework for Assurance Engagements developed by the IAASB and through pronouncements such as *International Standard on Quality Control 1*. These specify the requirements and responsibilities of the organization and professional accountants regarding the competence of engagement teams to perform audit and assurance engagement functions.

17. IFAC member bodies may impose specific requirements for professional accountants working as audit professionals beyond those required in this IES. In particular, IFAC member bodies may consider prescribing specific CPD activities for audit professionals.

Professional Accountants and Audit Professionals

18. Although some professional accountants deliver a wide range of accounting and business-related services, others will choose to specialize in one or more areas. No one professional accountant can master all areas of accountancy. Specialization is necessary to ensure services can be provided by professional accountants having sufficient depth of knowledge and expertise.

19. One area of specialization is in audit of historical financial information. Competence in this area requires a higher level of education and training in audit and related areas than is required of other professional accountants.

20. Audit professionals involved in audits of historical financial information in specific industries may be more specialized. The nature of the industry, and

applicable laws and accounting treatments, may require levels of knowledge and skills beyond those required for other audit professionals.

21. Audit engagements vary in complexity and size, requiring different experience and competence levels. An audit team could include the engagement partner, other audit professionals, other professional accountants, individuals working towards qualification as professional accountants, and other support staff who do not intend to qualify as professional accountants. The engagement partner is responsible for ensuring that the work of all individuals assigned to an audit engagement is appropriately reviewed by other members of the engagement team to provide reasonable assurance that the work meets appropriate standards of quality.

Developing and Maintaining Capabilities and Competence

22. The International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code) requires all professional accountants to take steps to ensure that they, and those working under their authority in a professional capacity, have appropriate training and supervision and are competent to undertake the work they perform.

23. To acquire the capabilities and competence required of audit professionals, individuals may need further education and development beyond that needed to qualify as professional accountants. These additional education and development requirements can be met during the education and development program for qualifying as a professional accountant, or after.24. Education and development for acquiring and maintaining the capabilities of audit professionals can include:

    (a) Advanced professional education pursued at academic institutions or through the programs of professional bodies

    (b) On-the-job training and experience programs

    (c) Off-the-job training

    (d) Continuing professional development (CPD) courses and activities.

25. IFAC recognizes that each member body needs to determine not only how best to comply with this IES, but also what emphasis to place on the various parts of the education and development process.

26. In addition to acquiring the necessary knowledge and skills, professional accountants will have to be assessed (as outlined in paragraphs 63 and 64) to demonstrate the capabilities and competence needed to take on responsibility for significant judgments in an audit of historical financial information. The IAESB recognizes that when assessing capabilities measuring output is likely to be superior to measuring inputs. Output-based approaches concentrate on measuring the development and maintenance of competence actually achieved

through learning, rather than measuring the various learning activities.

27. Audit professionals will need further development to progress, through supervisory and managerial roles, to acting as the engagement partner.

28. All professional accountants are obliged to engage in lifelong learning to keep up-to-date on developments influencing the profession and the quality of the services they provide, as outlined in IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence.*

SECTION 2: COMPETENCE REQUIREMENTS FOR AUDIT PROFESSIONALS

General

29. **Member bodies should require individuals to:**

    (a) **Qualify as a professional accountant**

    (b) **Hold an undergraduate degree, or its equivalent**

    (c) **Satisfy all other requirements prescribed in this section**

    before these individuals take on the role of an audit professional.

30. The appropriate level of education and learning of the intellectual and personal skills necessary to become an audit professional is generally found in a combination of undergraduate degree and professional education programs. Where a member body does not require an undergraduate degree, the member body needs to be able to demonstrate that the intellectual and personal skills have been developed to the required level in other ways.[3]

31. The requirements in paragraph 29 (c) may be met at the same time as the requirements in paragraph 29 (a) and (b), or after.

Knowledge Content

32. **The knowledge content within the education and development program for audit professionals should include the following subject areas:**

    (a) **audit of historical financial information at an advanced level (refer to paragraph 36);**

    (b) **financial accounting and reporting at an advanced level (refer to paragraph 38); and**

    (c) **information technology (refer to paragraph 40).**

33. IES 2, *Content of Professional Accounting Education Programs*, sets out the knowledge requirements for professional accountants. "Advanced level" refers to a level of knowledge that is deeper and broader than what is prescribed for individuals qualifying as professional accountants in IES 2.

34. IFAC member bodies may determine the levels of depth and breadth of knowledge, and the means for gaining that knowledge, as appropriate for their environment.

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[3] The reference to undergraduate degrees in this standard is in line with the principles of the Bologna Declaration, agreed by 29 European countries in 1999. Further details may be found at:

http://ec.europa.eu/education/policies/educ/bologna/bologna_en.html

Reference sources comparing the standard of qualifications throughout the world are listed in the note which forms part of IES 1.

35. Audit professionals are expected to have sufficient knowledge of current developments in the field of audit of historical financial information to respond to issues in the business environment. It is important, therefore, that education and continuing development programs for audit professionals include coverage of relevant current issues and developments.

36. **The knowledge content of the audit of historical financial information subject area should include the following at an advanced level:**

    (a) **best practices in the audits of historical financial information, including relevant current issues and developments; and**

    (b) **International Standards on Auditing (ISAs) and International Auditing Practice Statements (IAPSs); and/or**

    (c) **any other applicable standards or laws.**

37. In addition to the knowledge listed in paragraph 36, audit professionals may also require knowledge of International Standards on Quality Control (ISQCs), International Standards on Review Engagements (ISREs), International Standards on Assurance Engagements (ISAEs), and International Standards on Related Services (ISRSs), or local equivalents.

38. **The knowledge content of the financial accounting and reporting subject area should include the following at an advanced level:**

    (a) **financial accounting and reporting processes and practices, including relevant current issues and developments; and**

    (b) **International Financial Reporting Standards (IFRSs);**[4] **and/or**

    (c) **any other applicable standards or laws.**

39. If an audit client is required to prepare financial reports in accordance with standards specific to the public sector, statements equivalent to those listed in paragraph 38 will include International Public Sector Accounting Standards (IPSAS) and any applicable international, national and/or local equivalents of these.

40. **The knowledge content of the information technology subject area should include the following:**

    (a) **information technology systems for financial accounting and reporting, including relevant current issues and developments; and**

    (b) **frameworks for evaluating controls and assessing risks in accounting and reporting systems as appropriate for the audit of historical financial information.**

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[4] The term "International Financial Reporting Standards" refers to IFRSs, IFRIC Interpretations, IASs and SIC Interpretations.

41. Further information on the information technology knowledge and competences for professional accountants can be found in IES 2, *Content of Professional Accounting Education Programs.*

Professional Skills

42. **The skills requirement within the education and development program for audit professionals should include:**

    (a) **Applying the following professional skills in an audit environment:**

        (i) **identifying and solving problems;**

        (ii) **undertaking appropriate technical research;**

        (iii) **working in teams effectively;**

        (iv) **gathering and evaluating evidence;**

        (v) **presenting, discussing, and defending views effectively through formal, informal, written, and spoken communication; and**

    (b) **Developing the following professional skills at an advanced level in an audit environment:**

        (i) **applying relevant audit standards and guidance;**

        (ii) **evaluating applications of relevant financial reporting standards;**

        (iii) **demonstrating capacity for inquiry, abstract logical thought, and critical analysis;**

        (iv) **demonstrating professional skepticism;**

        (v) **applying professional judgment; and**

        (vi) **withstanding and resolving conflicts.**

43. IES 3, *Professional Skills and General Education*, sets out the professional skills requirements for professional accountants. In the context of IES 8, "advanced level" refers to a level of skill that is higher than that prescribed for individuals qualifying as professional accountants in IES 3.

44. IFAC member bodies may determine the appropriate levels of skills development and the means for developing those skills.

Professional Values, Ethics and Attitudes

45. **Individuals should be able to apply the required professional values, ethics and attitudes in an audit environment before taking on the role of an audit professional.**

46. IES 4, *Professional Values, Ethics and Attitudes*, sets out the professional values, ethics and attitudes professional accountants must have. IFAC member bodies need to establish a program of education that provides a framework for exercising professional judgment and for acting ethically in the best interests of both society and the profession.

47. All professional accountants need a thorough understanding of the potential ethical implications of professional and managerial decisions. They need to be aware that decision-makers can be under tremendous pressure when it comes to upholding ethical principles.

48. Audit professionals, like all professional accountants, are expected to apply the professional values, ethics and attitudes outlined in IES 4 throughout their professional careers. During their period of practical experience, they should receive guidance on the:

    (a) professional approach to ethics;

    (b) practical application of the fundamental principles;

    (c) consequences of unethical behavior; and

    (d) resolution of ethical dilemmas.

49. Learning about professional ethics needs to continue after qualification. Audit professionals need to see this as a career-long process.

50. The fundamental ethical principles that apply to all professional accountants have an added dimension in the audit domain, because of the heavy public reliance on and public interest in this aspect of the profession worldwide.

51. These fundamental principles are essential to the development of the profession and society as a whole. The IESBA Code sets out these fundamental principles:

    (a) *Integrity;*

    (b) *Objectivity;*

    (c) *Professional competence and due care;*

    (d) *Confidentiality; and*

    (e) *Professional behavior*.

52. In addition, the IESBA Code requires all members of assurance teams and organizations to be independent of assurance clients. All members of assurance teams and organizations are required to apply the independence conceptual framework outlined therein.

53. It is important that audit professionals are

    (a) aware of potential new ethical dimensions and conflicts in their work; and

(b) keep current on the expectations of their professional accounting bodies and the public in terms of professional ethics.

Practical Experience

54. **Professional accountants should complete a period of relevant practical experience before taking on the role of an audit professional. This period should be long enough and intensive enough to permit them to demonstrate that they have acquired the necessary professional knowledge; professional skills; and professional values, ethics, and attitudes. A substantial proportion of the period of practical experience should be in the area of audit of historical financial information.**

55. IES 5, *Practical Experience Requirements*, sets out the practical experience requirements for all professional accountants. Professional accountants assuming the role of an audit professional are also required to demonstrate application of the knowledge and skills specifically required by this section of IES 8, and in an audit environment in accordance with the professional values, ethics and attitudes set out in IES 4.

56. Practical experience that contributes to the competence of an audit professional needs to be relevant to the type and size of audit assignments audit professionals are, or are likely to be, involved in. The period of experience should permit them to:

(a) apply, in a properly supervised environment, the requisite knowledge and skills; and

(b) develop and demonstrate the competence required by this IES.

57. The period of practical experience relevant to an audit professional may come during or after qualification as a professional accountant. Practical experience gained for the purposes of meeting the requirements of IES 5, *Practical Experience Requirements*, may contribute to the requirements prescribed in this IES.

58. A period of practical experience relevant to an audit professional would normally be not less than three years, of which at least two years should normally be spent in the area of audit of historical financial information under the guidance of an engagement partner. Where a member body does not require the completion of this minimum period of experience, the member body needs to be able to demonstrate that the application of the knowledge and skills specifically required by this IES has been achieved in an audit environment and has resulted in candidates developing the necessary competence and capability to apply professional judgment in the audit assignment.

59. **The required audit experience should be obtained with an organization that can provide suitable audit experience under the guidance of an engagement partner.**

60. Organizations making available suitable audit experience may include private and public sector audit organizations. IFAC member bodies need to be satisfied that audit organizations providing experience have in place policies and procedures that will provide an appropriate environment. An appropriate environment is one that allows individuals to develop and demonstrate the professional knowledge; professional skills; and professional values, ethics and attitudes that will permit them to take on responsibility for making significant judgments in an audit of historical financial information.

Continuing Professional Development

61. IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence*, sets out the CPD requirements for all professional accountants, including audit professionals.

62. Professional accountants seeking to become audit professionals may rely on CPD activities to help them meet some of the competence requirements set out in this IES. CPD will also be necessary to ensure that audit professionals develop and maintain further competence. IFAC member bodies may consider prescribing specific CPD activities for audit professionals or professional accountants seeking to become audit professionals.

Assessment

63. **Professional capabilities and competence should be assessed before individuals take on the role of audit professionals.**

64. **The assessment should be comprehensive enough to permit demonstration of the professional knowledge; professional skills; and professional values, ethics and attitudes required to competently perform the work of audit professionals.**

65. The assessment of the capabilities and competence of audit professionals may be carried out by:

    (a) the IFAC member body of which an individual is a member (including through the member body's peer review process);

    (b) another IFAC member body;

    (c) a third party (e.g., education or training organization, government or regulatory authority, or workplace assessor under the authority of the member body);

    (d) an audit organization (including through the organization's quality control systems); or

    (e) a combination of these.

    Where external agencies are responsible for qualifying audit professionals, member bodies should encourage them to adopt IFAC standards.

SECTION 3: THE ENGAGEMENT PARTNER

General

66. Specific professional, legal or regulatory requirements exist which govern the scope, performance and conduct of the audit engagement. In some instances, specific requirements regulate who may act as the engagement partner on an audit engagement. Such requirements are referred to below as licensing regimes. This term is used to refer to the range of instances where the authority or permission to act as the engagement partner is restricted to certain individuals who meet specific requirements. These specific requirements may be set by a professional, legal or regulatory body.

67. Audit licensing regimes differ. Where IFAC member bodies have the legal authority to license auditors, it is expected that professional accountants will have met the requirements prescribed in Section 2 of this IES to be issued with an audit license or be permitted to sign reports of audits of historical financial information. Where other bodies license auditors, IFAC member bodies are obliged to notify their legislative, regulatory or licensing authorities about this IES, encouraging its adoption.

68. In some jurisdictions, professional accountants are licensed to sign audit reports at the time of qualification, but may not have gained the practical experience prescribed in this IES. In such cases, IFAC member bodies need to make sure that individuals with responsibility for making significant judgments in an audit of historical financial information have the required practical experience and competence. This obligation may be fulfilled through a member body's quality assurance review program (i.e., practice inspections) or through an audit organization's quality control procedures.

69. It is expected that audit professionals permitted to sign statutory audit reports will acquire practical audit experience beyond what this IES prescribes. All audit professionals have a professional and ethical obligation to develop and maintain competence appropriate to their professional responsibilities.

70. IFAC recognizes the different types, size and complexities of audits of historical financial information, and the different levels of professional competence required to perform such engagements. It is the obligation of individual professional accountants to comply with the IESBA Code by not accepting assignments they are not competent to perform.

Competence Requirements for the Engagement Partner

71. To assume the greater responsibilities of the engagement partner will require the development of additional professional knowledge; professional skills; and professional values, ethics and attitudes. An engagement partner would be expected to demonstrate a comprehensive understanding of the audit process and an ability to communicate a wide range of matters to a broad range of parties.

72. As audit professionals progress into positions such as engagement partners, they will need to demonstrate competence in the following areas:

(a) Leadership responsibility for the quality of audits;

(b) Formation of conclusions on compliance with applicable independence requirements;

(c) Acceptance and continuation of client relationships and specific audit engagements

(d) Assignment of engagement teams, ensuring the collective capabilities and competence to perform the engagement and issue an audit report;

(e) Direction, supervision and performance of the audit engagement in compliance with professional standards and regulatory and legal requirements;

(f) Consultation, review and discussion of work performed; and

(g) Development of the audit report that is appropriate and supported by sufficient appropriate audit evidence.

SECTION 4: COMPETENCE REQUIREMENTS FOR AUDIT PROFESSIONALS IN SPECIFIC ENVIRONMENTS AND INDUSTRIES

General

73. IFAC member bodies and audit organizations need to make sure that audit professionals responsible for significant judgments in an audit of historical financial information of specific environments or industries have the required professional knowledge and practical experience relevant to that environment or industry.

74. When professional accountants have acquired the capabilities and demonstrated the competence required of audit professionals, they may need further development before they take on responsibility for making significant judgments in an audit of historical financial information of a specific industry (such as banking and finance, extractive industries and insurance) or environment (such as transnational audits).

Transnational Audits

75. Transnational audits are, or may be, relied upon outside the entity's home jurisdiction for purposes of significant lending, investment or regulatory decisions; this will include all companies with listed equity or debt and other public interest entities which attract particular public attention because of their size, products or services provided.[5]

76. **Before individuals take on the role of an audit professional in transnational audits of historical financial information they should:**

    (a) **satisfy the requirements to take on the role of an audit professional (Section 2 of this IES); and**

    (b) **satisfy the requirements in paragraph 77.**

77. **The knowledge content of the education and development program for audit professionals involved in transnational audits should cover the following subject areas, for the jurisdictions for which the transnational audit is conducted:**

    (a) **applicable financial reporting and auditing standards;**

    (b) **controlling of multi-location and group audits;**

    (c) **applicable listing requirements;**

    (d) **applicable corporate governance requirements;**

    (e) **applicable national regulatory frameworks; and**

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5 *TAC Guidance Statement 1*—revised April 2006

(f) **the global and local economies and business environments.**

78. Audit professionals engaged in transnational audits may find that the application of professional values, ethics and attitudes can be complicated by multiple cultural contexts (e.g., norms, customs, behaviors and expectations).

Specific Industries

79. Some entities operate in heavily regulated industries (such as banks and chemical companies). Laws and regulations governing financial statements may vary considerably in specific industries and environments. Furthermore, accounting treatments may differ, resulting in different recognition and measurement practices.

80. It is not practicable to prescribe the additional knowledge required of those operating in specific industries. IFAC member bodies, individual professional accountants and audit organizations share the responsibility for ensuring that audit professionals have the required competence for their roles.

Practical Experience

81. Audit professionals need practical audit experience in a specific environment or industry before assuming responsibility for making judgments in an audit of historical financial information in that environment or industry. This experience needs to be long enough and intensive enough to permit audit professionals to demonstrate:

(a) the necessary knowledge; and

(b) that they can apply the necessary skills and the professional values, ethics and attitudes required to competently perform the work in that specific environment or industry.

This practical experience may be in addition to what is prescribed elsewhere in this IES.

IAESB INTERNATIONAL EDUCATION PRACTICE STATEMENTS

CONTENTS

INTERNATIONAL EDUCATION PRACTICE STATEMENT

IEPS 1

APPROACHES TO DEVELOPING AND MAINTAINING PROFESSIONAL VALUES, ETHICS AND ATTITUDES

CONTENTS

Purpose and Scope of International Education Practice Statement 1

1. International Education Practice Statements (IEPSs) assist IFAC member bodies in the implementation of generally accepted good practice in the education and development of professional accountants.

2. International Education Standard (IES) 4, Professional Values, Ethics and Attitudes, requires IFAC member bodies to devote a portion of the pre-qualification education program for professional accountants to developing professional values, ethics, and attitudes. IEPS 1 provides guidance to IFAC member bodies on implementing IES 4, and on developing professional values, ethics and attitudes in accordance with that standard.

3. IEPS 1 sets out two possible approaches to the development of professional values, ethics and attitudes. It also contains guidance on a number of methods for the delivery of ethics education, stressing the importance of workplace learning and assessment.

4. In addition, IEPS 1 provides guidance on how member bodies may ensure professional accountants continue to develop professional values, ethics, and attitudes throughout their careers through Continuing Professional Development (CPD).

5. The International Accounting Education Standards Board (IAESB) recognizes (a) the wide diversity of culture, language, and educational, legal, and social systems in the countries of IFAC member bodies; (b) the variety of functions performed by accountants; and (c) that member bodies are at different stages in developing their ethics education programs.

6. Some IFAC member bodies may already have addressed some or all of the issues considered in this IEPS. Other member bodies may have yet to consider such issues. The IAESB suggests that all member bodies assess their implementation of IES 4 in light of the guidance contained in IEPS 1.

Definitions

7. The following terms used in IEPS 1 are defined in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*:

   Assessment—all forms of tests of professional competence, whether in writing or otherwise, including examinations, carried out at any time throughout the learning process.

   Capabilities—the professional knowledge; professional skills; and professional values, ethics, and attitudes required to demonstrate competence.

   Competence—being able to perform a work role to a defined standard, with reference to real working environments.

Continuing Professional Development (CPD)—learning activities for developing and maintaining the capabilities of professional accountants to perform competently within their professional environments.

Education—a systematic process aimed at developing knowledge, skills and other capabilities within individuals. It includes training.

Formal education—the non-workplace based component of an accounting education program.

Learning—*a broad range of processes whereby an individual acquires capabilities.*

Post-qualification—the period after qualification as an individual member of an IFAC member body.

Pre-qualification—the period before qualification as an individual member of an IFAC member body.

Professional accountant—a person who is a member of an IFAC member body.

Professional values, ethics and attitudes—the professional behavior and characteristics that identify professional accountants as members of a profession. They include the principles of conduct (i.e., ethical principles) generally associated with and considered essential in defining the distinctive characteristics of, professional behavior.

Qualification—qualification as a professional accountant means, at a given point in time, an individual is considered to have met, and continues to meet, the requirements for recognition as a professional accountant.

Student—an individual following a course of study, including a trainee. In the context of professional education, a student is an individual undertaking a course or a program of study deemed necessary for the education of professional accountants, whether general or professional in nature.

Trainee—an individual undertaking pre-qualification work experience and training within the workplace.

Training—pre- and post-qualification educational activities, within the context of the workplace, aimed at bringing a student or professional accountant to an agreed level of professional competence.

Background

8. The actions of accountants impact others. Professional values, ethics and attitudes that identify professional accountants as members of a profession involve a commitment to enhancing the interests of the community. This is generally referred to as “serving the public interest.” The public relies on the

ethical integrity of the profession and its members to ensure that professional responsibilities are upheld and the public interest is safeguarded.

9. The Ethics Education Continuum (EEC) set out in this IEPS is aligned with the International Ethics Standards Board for Accountants' *Code of Ethics for Professional Accountants* (IESBA Code). This establishes ethical requirements for all professional accountants, and sets out five fundamental principles of professional ethics: integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.[1]

10. Professional accountants may encounter situations that threaten compliance with the fundamental principles of professional ethics. Many threats to compliance with these principles fall into the five categories outlined in the IESBA Code: self-interest threats, self-review threats, advocacy threats, familiarity threats, and intimidation threats.[2]

11. The IESBA Code also sets out a number of safeguards that may eliminate or reduce such threats to an acceptable level. These include: (a) safeguards created by the profession, legislation or regulation; and (b) safeguards in the work environment.[3] The former include, but are not restricted to, educational, training and experience requirements for entry into the profession and continuing professional development requirements.[4] IEPS 1, by suggesting principles of good practice for pre- and post-qualification ethics education, can help member bodies create such safeguards.

12. Ethical decision-making requires choosing from a number of alternatives, each with its own consequences for stakeholders. It is in the public interest that professional accountants approach ethical decision-making with an understanding of and an ability to apply the fundamental principles set out in the IESBA Code.

13. This requires the development of professional values, ethics, and attitudes through IFAC member bodies' education programs. These values, ethics and attitudes are formed and developed during and after qualification as a professional accountant. The aim of ethics education programs is to enhance professional accountants' ethical decision-making and behavior.

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1 *IESBA Code of Ethics for Professional Accountants,* 100.5

2 *IESBA Code of Ethics for Professional Accountants,* 100.12

3 *IESBA Code of Ethics for Professional Accountants,* 100.13

4 *IESBA Code of Ethics for Professional Accountants,* 100.14

SECTION 1: DEVELOPING ETHICAL COMPETENCE

The Ethics Education Continuum

14. The Ethics Education Continuum (EEC), outlined in this section of IEPS 1, is represented in Figure 1 overleaf. The EEC identifies four stages in a learning continuum, based on the four objectives of ethics education:

    Stage 1: Enhancing ethics knowledge

    Stage 2: Developing ethical sensitivity

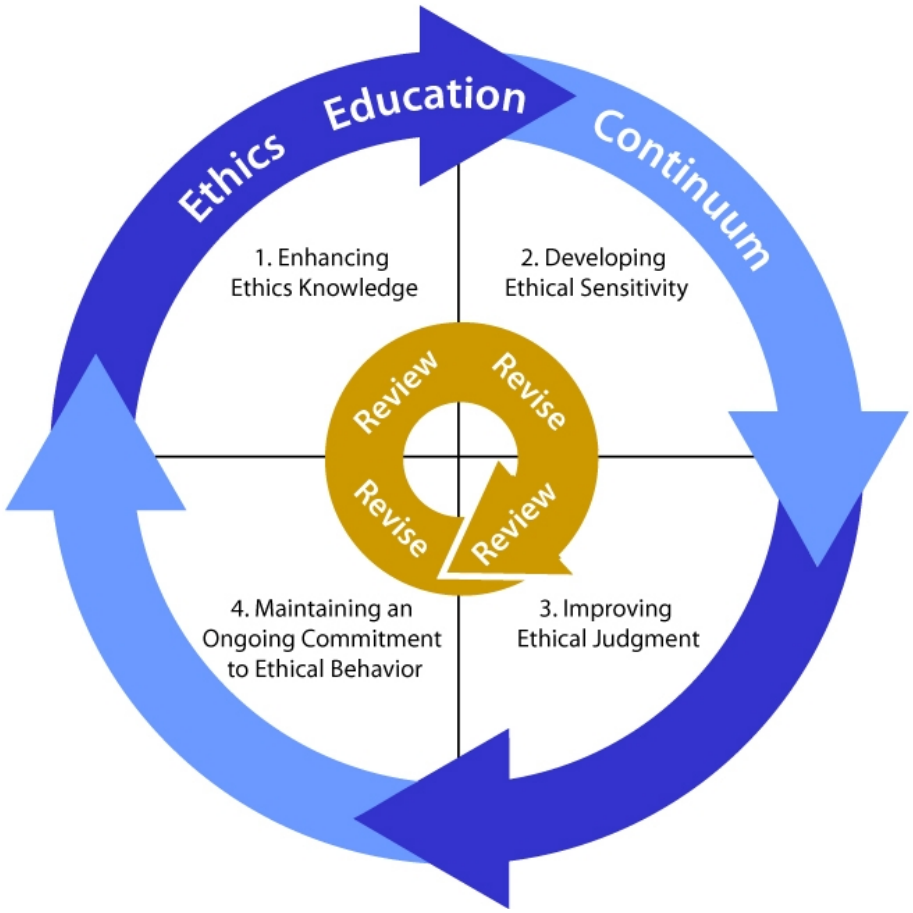
    Stage 3: Improving ethical judgment

    Stage 4: Maintaining an ongoing commitment to ethical behavior

15. Ethics education is a lifelong commitment that begins early in a pre-qualification program, and continues throughout a professional accountant's career. Each stage of the EEC relates to a particular level of advancement in the development of professional values, ethics and attitudes. The four stages of the EEC are described in more detail in paragraphs 19 to 30 below, with suggested learning outcomes and a description of competence provided for each stage.

16. The EEC recognizes that the development of professional values, ethics and attitudes is an iterative process, requiring individuals to reflect on their learning between stages, and to continue to review and revise their ethics knowledge, ethical sensitivity and ethical judgment. Maintaining an ongoing commitment to ethical behavior presupposes that professional accountants will continue to enhance their ethical knowledge, develop their ethical sensitivity, and improve their ethical judgment throughout their careers.

Figure 1: The Ethics Education Continuum



17. The EEC is supplemented by eight essential subject areas, based on the topics prescribed in IES 4 which are to be included in all pre-qualification education programs. These are outlined in Figure 2 below. In addition, suggested knowledge content to support each subject area is provided, for illustrative purposes only, in Appendix 1.

18. While ethics knowledge, ethical sensitivity and ethical judgment are initially developed during a pre-qualification accounting education program, ethical behavior is expected of students throughout their period of pre-qualification accounting education.

Stage 1: Enhancing Ethics Knowledge

19. Students need to develop an understanding of relevant ethical and professional standards relating to the accounting profession. Knowledge of general ethical principles and of the fundamental principles of professional ethics, outlined in the IESBA Code, is required for the development of ethical decision-making and behavior in a professional context.

20. Stage 1 of the EEC teaches fundamental knowledge on matters concerning professional values, ethics, and attitudes. It focuses on developing an understanding of:

    (a) The environment that influences decisions, including:

        (i) Relevant standards and codes; and

        (ii) Expectations of ethical and professional conduct.

    (b) The fundamental theories and principles of:

        (i) Ethics

        (ii) Virtues

        (iii) Individual moral development

21. Competence in this area will be demonstrated by an understanding of traditional ethical concepts and theories, and of those relating to the professional accountant's work.

Stage 2: Developing Ethical Sensitivity

22. Students need to develop ethical sensitivity, which is the (a) ability to recognize an ethical threat or issue, (b) awareness of alternative courses of action leading to an ethical solution, and (c) knowledge of the effects of each alternative course of action on stakeholders.

23. Stage 2 applies the knowledge of basic ethical principles introduced in Stage 1 to the relevant functional disciplines (e.g., financial accounting, management accounting, auditing, and taxation) of accounting. At this stage,

IFAC member bodies should consider developing ethics education programs that focus on developing a sense of professional responsibility with ethical sensitivity and an appreciation of ethical threats to the fundamental ethical principles facing professional accountants in the workplace.

24. Competence in this area will be demonstrated by the ability to identify and to discuss ethical issues and threats, as well as the ability to apply ethics knowledge in the functional disciplines of accounting.

Stage 3: Improving Ethical Judgment

25. Core ethical values are the foundation of professional judgment. Making choices consistent with the fundamental principles set out in the IESBA Code requires ethics knowledge and ethical sensitivity.

26. Stage 3 is an application stage, where students and professional accountants learn how to integrate and apply ethics knowledge and ethical sensitivity to form reasoned and well-informed decisions. This stage is designed to assist individuals in applying a well-founded process for making ethical decisions. At Stage 3, IFAC member bodies should consider developing ethics education programs that focus on improving professional judgment by sharpening ethical decision-making skills through the application of ethical theories, social responsibilities, codes of professional conduct and ethical decision-making models.

27. Competence in this area will be demonstrated by the ability to make ethical judgments and decisions based on an understanding and application of ethics knowledge and ethical sensitivity.

Stage 4: Maintaining an Ongoing Commitment to Ethical Behavior

28. Professional accountants need to be able to deal with ethical threats to the fundamental ethical principles and be able to choose a course of action consistent with the fundamental principles set out in the IESBA Code.

29. At Stage 4, IFAC member bodies should consider developing ethics education such as CPD programs that focus on developing and reinforcing ethical decision-making and an ongoing commitment to ethical behavior in a professional context.

30. Competence will be demonstrated through an understanding of organizational and situational contexts and the application of ethical knowledge, sensitivity and judgment into ethical behavior in accordance with the IESBA Code.

SECTION 2: APPROACHES TO IMPLEMENTING THE ETHICS EDUCATION CONTINUUM

Flexible Approaches to Implementing the Ethics Education Continuum

31. This IEPS sets out two possible approaches to implementing the EEC: the Topic Approach (See paragraph 34), and the Stage-by-Stage Approach (See paragraph 37). IFAC member bodies may choose to follow one approach, or to mix elements of both, as appropriate for their local circumstances.

32. Both approaches stress the importance of integrating ethics education into pre-qualification accounting education programs, and the importance of reviewing and revising knowledge and capabilities learned through CPD. Both approaches also emphasize the role of workplace learning and assessment in the development of professional values, ethics and attitudes. These are covered in detail in Section 3 of this IEPS.

The Topic Approach

33. IES 4 prescribes[5] a number of topics to be included in all pre-qualification education programs. These have been aligned with the eight subject areas that supplement the EEC, as demonstrated in Figure 2 below.

[5] IES 4 *Professional Values, Ethics and Attitudes*, paragraph 16

Figure 2: The Topic Approach

EEC Subject Areas[6]	**IES 4 Topics**
(i) A framework approach (ii) Concepts and values	The nature of ethics Differences between detailed rules-based and principles-based approaches to ethics, their advantages and drawbacks
(iii) The environment: corporate, professional, and regulatory (iv) Professional ethics	Compliance with the fundamental ethical principles of integrity, objectivity; commitment to professional competence and due care, and confidentiality Professional behavior and compliance with technical standards Concepts of independence, skepticism, accountability, and public expectations Ethics and law, including the relationship between laws, regulations, and the public interest
(v) Decision-making	Ethics and the individual professional accountant: whistle blowing, conflicts of interest, and ethical dilemmas and their resolution
(vi) Ethical threats and safeguards	Consequences of unethical behavior to the individual, to the profession, and to society at large
(vii) Corporate governance (viii) Social and environmental issues	Ethics and the profession: social responsibility Ethics in relation to business and good governance

[6] Suggested content for each subject area is set out in Appendix 1, *Ethics Education Continuum Subject Areas.*

34. The Topic Approach integrates the first three stages of the EEC subject by subject in relevant parts of the pre-qualification program. Each subject can be learned progressively following the first three stages of the EEC learning continuum. Stage 4 of the EEC is primarily post-qualification (CPD).

35. The IAESB recognizes that the detailed content of member bodies' ethics education programs will reflect their national and cultural environment and education system. IFAC member bodies may incorporate the EEC subject areas in any sequence as required in their pre- or post-qualification programs. Each subject area is expanded upon in Appendix 1, which gives examples of suggested content for each subject that member bodies may wish to include in their ethics education programs.

36. IFAC member bodies that choose to adopt the Topic Approach should consider how they may best ensure that all four developmental stages of the EEC are covered during pre- and post-qualification accounting education programs.

The Stage-by-Stage Approach

37. The Stage-by-Stage Approach follows the EEC as outlined in Figure 1, and incorporates (a) the first three stages of the EEC in pre-qualification education programs, and (b) the fourth stage in both pre- and post-qualification education programs. Figure 3 below illustrates this approach.

Figure 3: The Stage-by-Stage Approach

Stage	Attribute	Learning Outcome	Illustrative Method
1	Enhancing Ethics Knowledge	Enhancing the *knowledge* of (i) relevant standards and (ii) expectations of ethical and professional conduct.	Separate, assessed course or module in ethics early in the program.
2	Developing Ethical Sensitivity	Developing a sense of professional responsibility with ethical *sensitivity* and an appreciation of ethical threats and safeguards.	Integration of ethical issues across existing functional disciplines, such as financial accounting, management accounting, auditing, and taxation.
3	Improving Ethical Judgment	Improving professional *judgment* by sharpening ethical decision-making skills.	Integrated final course or module and assessment including ethics (e.g. case study) and/or a separate, assessed final course or module in ethics.
4	Maintaining an Ongoing Commitment to Ethical Behavior	Maintaining an ongoing commitment to *ethical behavior*.	Combination of ongoing experience and continuing professional development, including ethics education.

38. This approach typically begins by introducing ethics early in the pre-qualification program (Stage 1), followed by ethical discussion in the existing accounting modules or courses (Stage 2), and culminating in a final module/course that ties together previous ethics material (Stage 3).

39. The nature of ethics education means that post-qualification programs need to review and revise the knowledge and capabilities learned and acquired in pre-qualifying programs. It is important that professional accountants continue to develop their professional values, ethics and attitudes throughout their careers.

Continuing Professional Development

40. Ethics education is a lifelong process. Continually changing public expectations result in changes in ethical standards. Ethics education through CPD is therefore necessary for continued development of ethical decision-making and an ongoing commitment to ethical behavior. Ethics education in CPD focuses on assisting individuals to make better ethical choices at critical junctures, and to reinforce through continuous review and revision ethical concepts introduced in pre-qualifying education programs.

41. The nature of ethics education means that post-qualification programs need to review and revise the knowledge and capabilities learned and acquired in pre-qualifying programs. IFAC member bodies should, therefore, consider requiring continuing ethics education for professional accountants as part of their CPD program.

SECTION 3: DELIVERY AND ASSESSMENT OF ETHICS EDUCATION

Overview

42. Different models are used for the delivery and assessment of ethics education. These will combine elements of workplace learning and formal education. In all cases, IFAC member bodies should consider how best to establish clear objectives for ethics education that focus on (a) increasing ethical sensitivity, (b) fostering a commitment to professional responsibility, and (c) developing ethical decision-making skills.

43. IFAC member bodies should consider exposing students and professional accountants to exercises in ethical awareness and ethical decision-making. These contribute to the development of ethical sensitivity and judgment. IFAC member bodies should also consider including, in pre- and post-qualification education programs, practical examples of ethical threats and issues, and how these may be resolved in a positive manner, to reinforce theoretical knowledge.

44. Students develop knowledge of fundamental ethical principles during pre-qualification education programs. They learn how to apply fundamental principles in real-life situations through work experience, both pre- and post-qualification, through observing their colleagues and experiencing organizational practices and cultural norms.

Workplace Learning

45. Learning ethics in the workplace is as important as learning ethics during formal educational programs. IFAC member bodies should consider ways of working with employers to promote positive ethical behavior, and a supportive environment conducive to the development of professional values, ethics, and attitudes, at both pre- and post-qualification levels.

46. IFAC member bodies can also work with employers to develop induction training that highlights for students the importance of developing professional values, ethics and attitudes.

Ethical Courage

47. All decisions made by a professional accountant are likely to have an impact on others, as well as on the professional accountant themselves. Professional accountants may need to demonstrate ethical courage when making decisions in accordance with the fundamental principles set out in the IESBA Code. For example, “whistle-blowing” may lead to serious consequences for individuals and organizations.

48. Professional accountants and students develop ethical courage as they observe the decisions of others made in accordance with the fundamental principles of the IESBA Code. IFAC member bodies can work with employers, mentors and

others to highlight examples of ethical courage, and bring this to the attention of students and professional accountants during pre- and post-qualification accounting education programs. This could include the development of case studies, and/or discussions with mentors and superiors to explore ethical issues and dilemmas.

Ethical Leadership

49. Ethical leadership in an organization has a strong, positive influence on the ethical behavior of all those working in that organization, and helps others within the organization act with ethical courage. Professional accountants and students learn and modify ethical attitudes as they internalize the values of the organization demonstrated by their superiors and colleagues. Professional accountants in leadership roles need to ensure that they liaise with students and other professional accountants on the responsibilities and ethical issues professional accountants face in the workplace, including the positive benefits of acting in accordance with the fundamental principles set out in the IESBA Code. IFAC member bodies can facilitate such sessions, especially where students work without direct supervision by professional accountants.

50. IFAC member bodies can work with employers to designate professional accountants as "ethics leaders" within an organization, responsible for organizing and facilitating ethics education sessions in which examples of ethical leadership and ethical courage are discussed and debated.

Supervised Practical Experience

51. During pre-qualification programs, students undertake a period of supervised practical experience under the guidance of a supervisor or mentor. Relationships with supervisors or mentors help students in many ways, including the development of the skills required of professional accountants, and the development of ethical sensitivity and judgment through relationships with supervisors or mentors acting as role models.

52. IFAC member bodies should consider how to encourage supervisors or mentors to provide feedback (including positive feedback) on students' ethical judgment and behavior, in addition to feedback on other aspects of their programs.

Performance Review and Appraisal

53. Professional accountants and students often work in environments where regular performance reviews and appraisals are held. IFAC member bodies should consider encouraging professional accountants to ask for feedback (including positive feedback) on their ethical judgment and behavior as part of such a review. If professional accountants are responsible for conducting performance reviews and appraisals for others, member bodies should consider encouraging them to include such feedback on ethical judgment and behavior.

Teaching Methods

54. A number of teaching methods are advocated in ethics education literature, including:

- Lectures
- Ethics discussions
- Small-group and collaborative learning
- Case studies based on ethical threats and challenges
- Role-play
- Guest speakers and practitioner participation
- E-learning

These teaching methods may be used in any combination. Further guidance on the above is included in Appendix 2.

Assessment Methods

55. Member bodies should consider ways in which the assessment of ethics education programs establishes that students and professional accountants have developed ethical sensitivity and judgment to an appropriate level.

56. Assessment methods may be broadly divided into two types. Summative assessment provides information about the level of performance at certain points in the learning process, usually at the end of a course of study. This may be more appropriate for assessing knowledge of ethical theories and concepts. Formative assessment is ongoing, providing assessors with information about current progress in order to support future learning. This may be more appropriate for assessing the development of ethical sensitivity and judgment in the workplace.

57. Assessing the development of ethical sensitivity and judgment may be accomplished through formal assessment, assessment in the workplace, or self-assessment. In most cases, member bodies may choose to combine elements of these approaches.

58. Formal assessment can test the fundamental knowledge of ethical principles and the ability to critically evaluate ethical situations. In addition to traditional examinations, there are a number of means by which formal assessment may be carried out:

- Creating databanks of case studies requiring individuals to complete tests based on these case studies which might for instance be disseminated in professional magazines/journals;
- A case analysis system requiring students to maintain journals and notes on particular public domain cases;

- Objective testing of ethical aspects of the pre-qualification programs; and
- Using case study group assignments and workshops to assess individuals' competence in ethical analysis and decision-making.

59. Learning ethics from experience gained in the workplace is as important as learning ethics in the classroom. The assessment of learning from experience gained in a workplace differs from, and in many respects is more difficult than, assessment of classroom learning. Means for assessing the development of ethical sensitivity and judgment in the workplace may include:

- Discussion and facilitated resolution of ethical dilemmas as they arise in the workplace;
- Retrospective reviews of ethical decision-making combined with performance reviews and appraisals; and
- Using online forums to broaden ethical discussion about real issues that face professionals in the workplace.

Self-assessment

60. IFAC member bodies are not recommended to rely solely on self-assessment in assessing ethical sensitivity, judgment and decision-making. Self-assessment, however, may often form an important part of a supervised practical work experience and performance review/appraisal system. Member bodies can develop tools that enable students and professional accountants to compare their response to ethical issues and threats with those of their peers.

61. IFAC member bodies are encouraged to try a range of assessment techniques to better test individuals' abilities to consider and resolve real ethical issues. IES 6, *Assessment of Professional Capabilities and Competence* prescribes the requirements for a final assessment of a candidate's professional capabilities and competence before qualification.

Appendix 1

Ethics Education Continuum Subject Areas

	STAGE 1	**STAGE 2**	**STAGE 3**	**STAGE 4**
COMPETENCE REQUIRED	An understanding of traditional ethical concepts and theories, and of those relating to the professional accountant's work.	Ability to identify and discuss ethical issues and threats in the functional disciplines of accounting.	Ability to make ethical judgments and decisions based on an understanding and application of ethics knowledge and ethical sensitivity.	An understanding of organizational and situational contexts and the application of ethical knowledge, sensitivity and judgment into an ongoing commitment to ethical behavior.
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(i) **A Framework Approach**	• Nature of ethics • The ethics framework for accountants • Rules-based and principles-based approaches • The foundations of a profession	• Ethics and the profession • Accountants and their stakeholders	• Interests of stakeholders and conflicts • Professional conduct and the public interest	• Behavior and influences of stakeholders

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(ii) **Concepts and values**	• Commonly used theories and principles (e.g., Utilitarianism and Deontology) • Theories of moral development • Virtue ethics theory and values-based education	• Ethics and culture • Professional values, ethics and attitudes and the code of conduct for accountants • Importance of ethical courage and ethical leadership	• Importance of ethical courage and ethical leadership	• Importance of ethical courage and ethical leadership
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(iii) **The environment: corporate, professional and regulatory**	• The corporation and its interests • The accountant and the stakeholders • Professional responsibilities	• The accounting profession and public expectations • Professional and legal requirements in financial reporting and auditing	• Investigative reports and professionalism • Developments in the profession to enhance professional values, ethics, and attitudes, including codifications and education initiatives	• Learning with and managing professional responsibilities through case studies

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
		• The concept of accountability • The regulatory environment • The legal framework for businesses and accountants • The role of accountants in the globalization context • The impact of legal and other reforms		
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(iv) **Professional ethics**		• Compliance with fundamental ethical principles • Codes of ethics, including corporate codes and underlying rationale	• Self-regulation and oversight functions • Quality and peer reviews • Case analyses of professional issues	• Current developments in professional ethics and conduct • Case analyses of professional issues

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
		• Technical and ethical standards • Independence, professional skepticism, accountability and the public interest		
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(v) **Decision-making**		• Ethical decision making models	• Ethical decision making models	
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(vi) **Ethical threats and safeguards**	• Definition and scope of ethics threats and issues in accounting and related areas • Introduction of safeguards at professional and firm levels	• Conflicts of interest in corporate and professional environments • Different types of ethics threats and ethical issues	• Specific ethics threats and safeguards in accounting, e.g., earnings management situations • Ethics threats in auditing and assurance services e.g., threats and safeguards to independence and integrity	• A discussion of current controversial ethical issues relevant to the profession • Analyses of threats and safeguards

	STAGE 1	**STAGE 2**	**STAGE 3**	**STAGE 4**
			• Ethics threats in other financial services and safeguards • Whistle-blowing cases and solutions	
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(vii) **Corporate governance**	• The nature, significance and scope of enterprise governance and threats to effective governance • Theoretical framework including agency problems • Minimizing the threats of agency costs	• Corporate and other social responsibilities • Stakeholder relationships • Regulatory framework for corporate and enterprise governance • The role of accountants and auditors in governance frameworks	• Governance: good practice and issues • Analyses of cases of failures • Global developments in enterprise and corporate governance	• Benchmarking governance cases in practice

	STAGE 1	**STAGE 2**	**STAGE 3**	**STAGE 4**
SUBJECT AREA	**SUGGESTED CONTENT AT STAGE 1**	**SUGGESTED CONTENT AT STAGE 2**	**SUGGESTED CONTENT AT STAGE 3**	**SUGGESTED CONTENT AT STAGE 4**
(viii)**Social and environmental issues**	• The scope, background and concept of corporate social responsibility • The accountant and society including agency problems • Minimizing the threats of social costs and liabilities • Developments in social and environmental frameworks	• Measurement and accountabilities in social and environmental reporting • Issues in social responsibilities and accountabilities	• Regulatory framework • The role of accountants and auditors in society and businesses • Analyses of cases of social and environmental failures • Social and environmental accounting and issues	

Appendix 2

Teaching Methods

A number of teaching methods are advocated in ethics education literature, and are presented below for the guidance of member bodies.

Lectures

1. The conventional lecture method is a long-standing approach to instruction that emphasizes the transfer of knowledge, rather than the process of learning. The lecture method may be suitable for introducing and describing basic ethical theories and concepts.

Ethics discussions

2. Students and professional accountants are more likely to develop ethical judgment and behavior through exposure to and discussion of ethical issues with others, especially those holding alternative viewpoints. This helps individuals to (a) become familiar with important concepts, (b) gain practice in using the language of ethics, and (c) develop ethical sensitivity and judgment.

Small-group and collaborative learning

3. Small-group learning, which develops skills in leadership, decision making, trust building, communication, and conflict management, is an effective method for exposing students to examples of ethical threats. Interaction with other students and/or professional accountants in peer-led ethical discussions promotes greater learning than can be achieved individually.

Case studies and examples of ethical threats and challenges

4. The case study method effectively develops ethical awareness and analytical skills. Advantages of case studies include (a) the development of critical thinking and reflective learning skills, and (b) the integration of technical skills and knowledge with ethical decision making frameworks. Case studies involve students and/or professional accountants in real life events, and provide insight into what it feels like to experience such problems. By reviewing past events, individuals can identify predicaments previously faced by other professional accountants, and learn how they were resolved.

5. By learning to analyze case studies and examples of ethical threats, individuals realize that problems and ethical dilemmas do have solutions. In the case of complex ethical situations it is unlikely that there will be only one “right” answer. While analysis may not give a single “right” answer to a problem or dilemma, it may lead to one or more answers that are more consistent with the fundamental principles set out in the IESBA Code.

6. In addition to case studies presenting ethical threats and dilemmas resulting in potentially negative outcomes for individuals and organizations, IFAC member bodies should consider developing and using case studies presenting positive outcomes for individuals and employers to reinforce the positive benefits of acting in accordance with the fundamental principles.

Role-play

7. Role-play brings issues to life and engages students and professional accountants in learning. Role-play may be combined with the use of case studies and ethical dilemmas to immerse learners in real-life situations. Methods that fully engage learners are more likely to foster ethical sensitivity, judgment and behavior.

Guest speakers and practitioner participation

8. Inviting senior professionals to the classroom to share their personal experiences is a valuable method of communicating ethical sensitivity, judgment and behavior in accounting, and of demonstrating ethical leadership.

E-learning

9. E-learning combines computer technology and communication software to provide courses to learners. E-learning packages may combine some, or all of the delivery methods outlined above, and share the same advantages and disadvantages. E-learning is a particularly effective delivery mechanism for individuals in remote locations, where it can engage them in learning about ethics through case study analysis and online discussion which might otherwise be difficult to achieve.

INTERNATIONAL EDUCATION PRACTICE STATEMENT

IEPS 2

INFORMATION TECHNOLOGY FOR PROFESSIONAL ACCOUNTANTS

CONTENTS

Introduction

1. International Education Practice Statements (IEPSs) assist IFAC member bodies in the implementation of generally accepted good practice in the education and development of professional accountants.

2. International Education Standard (IES) 2, *Content of Professional Accounting Education Programs*, prescribes the knowledge content of professional accounting education programs that candidates need to acquire to qualify as professional accountants. IEPS 2 provides guidance for IFAC member bodies and other educators in implementing IES 2 in relation to the IT knowledge component of pre-qualification professional accounting education programs.

3. This IEPS also provides guidance for IFAC member bodies in implementing IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence*, and IES 8, *Competence Requirements for Audit Professionals*, in relation to the further development of IT knowledge and competences post-qualification.

4. The International Accounting Education Standards Board (IAESB) recognizes (a) the wide diversity of culture, development, language, and educational, legal, and social systems in the countries of IFAC member bodies, (b) the wide variety of functions accountants perform, and (c) that IFAC member bodies are at different stages in developing their pre- and post-qualification professional accounting education programs. The guidance provided in IEPS 2 is intended to assist all IFAC member bodies in implementing IES 2, but in doing so they will take into account the environmental factors outlined in this paragraph.

Definitions

5. The following terms used in this IEPS are defined in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*:

   Assessment—all forms of tests of professional competence, whether in writing or otherwise, including examinations, carried out at any time throughout the learning process.

   Candidate—any individual who is enrolled for assessment as part of a professional accountancy education program.

   Capabilities—the professional knowledge; professional skills; and professional values, ethics, and attitudes required to demonstrate competence.

   Competence—being able to perform a work role to a defined standard, with reference to real working environments.

   Continuing Professional Development (CPD)—learning activities for developing and maintaining the capabilities of professional accountants to perform competently within their professional environments.

Education—a systematic process aimed at developing knowledge, skills and other capabilities within individuals. It includes training.
Formal education—the non-workplace based component of an accounting education program.

Learning—a broad range of processes whereby an individual acquires capabilities.

Mentor—professional accountants who are responsible for guiding and assisting trainees and for assisting in the development of the trainees' competence.

Post-qualification—the period after qualification as an individual member of an IFAC member body.

Practical Experience—work experience, undertaken by a trainee or a qualified professional accountant that is relevant to the work of professional accountants. The program of experience enables the individual's development of professional competence (including professional behavior) in the workplace and provides a means whereby individuals can demonstrate the achievement of professional competence in the workplace.

Pre-qualification—the period before qualification as an individual member of an IFAC member body.

Professional accountant—a person who is a member of an IFAC member body.

Qualification—qualification as a professional accountant means, at a given point in time, an individual is considered to have met, and continues to meet, the requirements for recognition as a professional accountant.

Student—an individual following a course of study, including a trainee. In the context of professional education, a student is an individual undertaking a course or a program of study deemed necessary for the education of professional accountants, whether general or professional in nature.

Trainee—an individual undertaking pre-qualification work experience and training within the workplace.

Training—pre- and post-qualification educational activities, within the context of the workplace, aimed at bringing a student or professional accountant to an agreed level of professional competence.

The following term used in this IEPS is defined in IES 8, *Competence Requirements for Audit Professionals*:[1]

[1] IES 8 *Competence Requirements for Audit Professionals*, paragraph 9

Audit professional—a professional accountant who has responsibility, or has been delegated responsibility, for significant judgments in an audit of historical financial information.

Scope and Structure of IEPS 2

6. In implementing IESs, IFAC member bodies need to ensure that candidates possess the necessary general IT and IT control knowledge and competences required for qualification. Guidance on this is provided in Section 1 of IEPS 2, and is supported by Appendices 1, 2 and 3. These contain subject matter that IFAC member bodies can include in the IT knowledge component of pre-qualification professional accounting education programs, as appropriate.

7. In addition, all candidates are expected, for qualification as a professional accountant, to have a knowledge and understanding of at least one of the three roles set out in IES 2 (manager, evaluator and designer of information systems), or a combination of these roles. Section 1 of this IEPS provides good practice guidance on these roles, supported by Appendices 4, 5 and 6. These contain competency elements that IFAC member bodies can include in the IT knowledge component of pre-qualification professional accounting education programs.

8. Section 1 of IEPS 2 also provides good practice guidance for IFAC member bodies on teaching and assessing IT at the pre-qualification stage.

9. Section 2 of IEPS 2 provides guidance for IFAC member bodies on implementing IES 7, in relation to the post-qualification development of IT knowledge and competences.

10. The IAESB is not able to provide detailed guidance for every possible role undertaken by a professional accountant. IFAC member bodies may find some or all of the competency elements set out in Appendices 4, 5 and 6 helpful, however, in developing CPD requirements for professional accountants.

11. Section 3 of IEPS 2 provides guidance for IFAC member bodies on implementing IES 8, in relation to the education and assessment of audit professionals. IFAC member bodies may find some or all of the competency elements set out in Appendix 7 helpful in developing the IT component of an education program for audit professionals.

12. Professional accountants can, with more specialized training, work in more complex IT-related areas, such as information systems design, information systems management, and control and information systems evaluation. IEPS 2 does not prescribe the specific IT knowledge and competences that such specialists may require. It sets out the knowledge and skills professional accountants may require (a) to formulate the questions to be answered by specialists such as the IT auditor, and (b) to understand the outcome of the activities of such specialists.

SECTION 1: PRE-QUALIFICATION IT KNOWLEDGE AND COMPETENCY REQUIREMENTS

Overview

13. In implementing the requirements[2] of IES 2 IFAC member bodies should include the following subject areas and competences:

    (a) general knowledge of IT;

    (b) IT control knowledge;

    (c) IT control competences;

    (d) IT user competences; and

    (e) one of, or a mixture of, the competences of, the roles of manager, evaluator or designer of information systems.

14. IFAC member bodies will set detailed criteria for knowledge and understanding in these areas, as appropriate for their environment, but in doing so should consider the guidance contained in IEPS 2.

15. Subject areas and competences (a) to (d) above contain the common IT knowledge and competences required by all professional accountants, at point of qualification. Guidance on the content of a pre-qualification professional accounting education program in this area is given in paragraphs 17 to 24 below.

16. Competence area (e) above requires professional accountants, at point of qualification, to have a knowledge and understanding of at least one of the roles of manager, evaluator and/or designer of information systems, or a combination of these roles. Guidance on the content of a pre-qualification professional accounting education program relating to these roles is given in paragraphs 25 to 34 below.

IT Subject Areas and Competences

General Knowledge of IT

17. In order for candidates to demonstrate knowledge and understanding in this subject area, they need to demonstrate their ability to explain, describe or discuss a range of topics relating to the general knowledge of IT. IFAC member bodies should consider including, as part of the IT component of a pre-qualification professional accounting education, the topics set out in Table 1:

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2 IES 2 *Content of Professional Accounting Education Programs*, paragraph 28

Table 1: General Knowledge of IT Topics

Competences	Topics
Information Technology Strategy (Topic 1 in Appendix 1)	
Candidates can explain, describe or discuss the importance of aligning IT strategy with business strategy.	Enterprise strategy and vision Current and future IT environment IT strategic planning Ongoing governance and outcomes of monitoring
Information Technology Architecture (Topic 2 in Appendix 1)	
Candidates can explain, describe or discuss how IT architecture relates to the entity's business model.	General systems concepts Transaction processing in business systems Hardware components Software Protocols, standards and enabling technologies Data organization and access methods IT Professionals
IT as a Business Process Enabler (Topic 3 in Appendix 1)	
Candidates can explain, describe or discuss how IT impacts on the business model and business processes, and associated risks.	Stakeholders and their requirements The entity's business models Risks and opportunities related to IT Impact of IT on the entity's business models, processes and solutions
Systems Acquisition and Development Process (Topic 4 in Appendix 1)	
Candidates can explain, describe or discuss the stages of the systems acquisition and development process and understand the role of the accountant within it.	Systems acquisition/development life cycle phases, tasks Investigation and feasibility studies Requirements analysis and initial design Systems design, selection,

Competences	Topics
	acquisition/development Systems implementation Systems maintenance and program changes Project management, project planning, project control methods and standards
Management of Information Technology (Topic 5 in Appendix 1)	
Candidates can explain, describe or discuss how IT is managed within an organization, with a focus on accounting systems, (b) performance monitoring, and (c) change management and procedures for updating hardware and software.	IT organization Management of IT operations, effectiveness, and efficiency IT asset management Change control, upgrades and problem management IT security management Performance monitoring and financial control over IT resources Software for professional use
Communication and IT (Topic 6 in Appendix 1)	
Candidates can explain, describe or discuss IT, and the benefits and risks of IT, in relation to communication.	General concepts of IT communication Networks and electronic data transfer Risks in communication supported by IT

18. Appendix 1, based on Table 1 above, sets out in more detail subject matter for each of the topics included in the table. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in developing the IT component of a pre-qualification professional accounting education program.

IT Control Knowledge

19. In order for candidates to demonstrate knowledge and understanding in this subject area, they need to demonstrate their ability to explain, describe or discuss a range of IT control knowledge topics. IFAC member bodies should consider including, as part of the IT component of a pre-qualification professional accounting education, the following topics:

- IT internal control environments
- IT objectives
- IT risk events
- IT risk assessments
- IT risk responses
- IT control activities
- Information and communication in relation to IT
- Monitoring in relation to IT

20. Appendix 2, based on paragraph 19 above, sets out in more detail subject matter for each of the topics above. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in developing the IT component of a pre-qualification professional accounting education program.

IT Control Competences

21. Candidates need to demonstrate a range of IT control competences. These are most likely to be developed through a period of practical experience. IFAC member bodies should consider including, as part of the IT component of a pre-qualification professional accounting education program, the following topics:

- Suitable control criteria for analyzing and evaluating controls
- The IT internal control environment
- Selected IT objectives
- Identified IT events
- IT risk assessment
- Selected IT risk responses
- IT control activities
- Information and communication in relation to IT
- The monitoring process and actions taken in relation to IT
- The application of appropriate IT systems and tools to business/accounting problems
- Understanding of business and accounting systems
- The application of controls to personal systems

22. Appendix 3, based on paragraph 21 above, sets out in more detail competency elements for each of the topics above. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in

developing the IT component of a pre-qualification professional accounting education program.

IT User Competences

23. Candidates need to demonstrate a range of IT user competences. These are most likely to be developed through a period of practical experience. Three broad areas of competence relating to the user role3 are set out in IES 2 (paragraph 32).

    (a) Apply appropriate IT systems and tools to business and accounting problems;

    (b) Demonstrate an understanding of business and accounting systems; and

    (c) Apply controls to personal IT systems.

24. These will be demonstrated by the candidates' ability to perform their work using appropriate IT systems and tools.

Manager of Information Systems Role

25. Candidates who concentrate on the manager of information systems role need to have a knowledge and understanding of (but not necessarily proficiency in) the following topics:

    - Managing an entity's IT strategy
    - Managing an IT organization
    - Managing IT operations' effectiveness and efficiency
    - Maintaining financial control over IT
    - Managing IT controls
    - Managing systems acquisition, development and implementation
    - Managing systems change and related problem management

26. Knowledge and understanding are evidenced by the candidate's ability to (a) describe or explain some or all of the above topics and their significance in a relevant business setting, and (b) participate effectively in some or all of the above as part of a team or under supervision.

27. Appendix 4, based on paragraph 25 above, sets out in more detail competency elements for each of the topics above. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in developing the IT component of a pre-qualification professional accounting education program.

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[3] IES 2, *Content of Professional Accounting Education Programs*, paragraph 32

Evaluator of Information Systems Role

28. Candidates who concentrate on the role of evaluator of information systems need to have a knowledge and understanding of (but not necessarily proficiency in) the following topics:

    - Planning systems evaluation
    - Evaluating systems
    - Communicating results of evaluations and following-up

29. Knowledge and understanding are evidenced by the candidate's ability to (a) describe or explain some or all of the above topics and their significance in a relevant business setting, and (b) participate effectively in some or all of the above as part of a team or under supervision.

30. Appendix 5, based on paragraph 28 above, sets out in more detail competency elements for each of the topics above. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in developing the IT component of a pre-qualification professional accounting education program.

Designer of Information Systems Role

31. Candidates who concentrate on the designer of information systems role need to have a knowledge and understanding of (but not necessarily proficiency in) the following topics:

    - Analyzing and evaluating the role of information in an entity's business processes and organization
    - Applying project management methods
    - Applying systems investigation and project initiation methods
    - Applying user requirements determination and initial design methods
    - Applying detailed systems design and acquisition/development methods
    - Applying systems implementation methods
    - Applying systems maintenance and change management methods

32. Knowledge and understanding are evidenced by the candidate's ability to (a) describe or explain some or all of the above topics and their significance in a relevant business setting, and (b) participate effectively in some or all of the above as part of a team or under supervision.

33. Appendix 6, based on paragraph 31 above, sets out in more detail competency elements for each of the topics above. This Appendix is not meant to be prescriptive; it is intended to be of further assistance to IFAC member bodies in

developing the IT component of a pre-qualification professional accounting education program.

Mixed Role

34. The IAESB recognizes that, in many environments, the tasks performed by students and professional accountants may not fall into just one of the three roles (manager, evaluator and/or designer of information systems) outlined above. IFAC member bodies may, therefore, choose to combine some of the topics, subject matter and competency elements listed in the appendices to this IEPS to reflect the role or occupation of some or all of its members at point of qualification. For example, a member body may combine some of these competences to create a set of competences relating to the role of an IT Project Manager, as illustrated in Table 2 below:

Table 2: Example of IT Project Management Competences

Candidates can (a) describe or explain some or all of the following, and their significance in a relevant business setting, and (b) participate effectively in some or all of these as part of a team or under supervision:

- The role of information in the entity's business processes and organization
- Identification of business and user needs relating to IT
- Investigations and feasibility studies
- Project management methods and approaches
- Management of project budget(s), timeline(s) and personnel
- Systems acquisition, development and implementation
- Systems change, problem management and risk management
- Installation, deployment and testing of IT systems
- Evaluation of the efficiency and effectiveness of IT systems and project outcomes

Teaching and Assessment of IT

Teaching

35. IFAC member bodies should consider ways in which the IT component of a pre-qualification professional accounting education program can be integrated with the other components of such programs required by IES 2, i.e., accounting, finance and related knowledge, and organizational and business knowledge. For example:

- Coverage of some aspects of computer-based business systems could be integrated within a financial accounting course;
- Coverage of some aspects of management information systems could be integrated within a management accounting course; and
- Coverage of some aspects of internal control in a computer environment could be integrated within an auditing course.

36. The development of IT knowledge and competence will typically involve a combination of formal education (classroom-based training, or similar), computer-based training, and on-the-job training.

37. In terms of formal education in IT, IFAC member bodies may consider using case studies, simulations, interactions with experienced professionals and similar techniques to enhance the presentation of subject matter and to help students develop an understanding of the practical implications of theoretical IT knowledge.

38. IFAC member bodies may consider their practical experience requirements with the aim of incorporating, as appropriate, some or all of the IT knowledge subject areas and competences outlined in this IEPS.

Assessment

39. IFAC member bodies should also consider how the information technology component of a pre-qualification accounting education program can be effectively assessed. A range of assessment techniques may be considered, including but not limited to:

- Tests and examinations of IT knowledge, either stand-alone or integrated with tests and examinations of other components of the accounting education program, including objective testing (e.g. multiple-choice questions) and longer, essay-style questions or mini case studies;
- Case studies and other simulations of the workplace; and
- Mentor's evaluation of trainees' capability and competence.

40. Whichever form(s) of assessment are used to assess candidates' IT knowledge, IFAC member bodies should consider whether the assessment(s) include sufficient coverage of IT knowledge and practical application.

41. Where tests and examinations of IT knowledge are integrated with tests and examinations of other components of the pre-qualification accounting education program IFAC member bodies should consider whether the weight given to IT is sufficient.

SECTION 2: POST-QUALIFICATION IT KNOWLEDGE AND COMPETENCY REQUIREMENTS

Overview

42. This section of IEPS 2 provides guidance for IFAC member bodies in implementing IES 7 in relation to the further development of IT knowledge and competences post-qualification. IES 7 requires professional accountants to develop and maintain the skills and competences relevant to their work.

43. Given the great diversity of roles played by professional accountants, the IAESB (and IFAC member bodies) are not able to provide detailed guidance for every possible role. The following sections discuss post-qualification knowledge and competence requirements for each of the roles set out in Section 1 of this IEPS. In setting CPD requirements, IFAC member bodies may consider some or all of the guidance set out in this section of this IEPS.

Post-Qualification IT Knowledge and Competences

Manager of Information Systems Role—Post-Qualification

44. Professional accountants who concentrate on the manager of information systems role need to have a knowledge and understanding of some or all of the following topics:

- Managing an entity's IT strategy
- Managing an IT organization
- Managing IT operations' effectiveness and efficiency
- Maintaining financial control over IT
- Managing IT controls
- Managing systems acquisition, development and implementation
- Managing systems change and problem management

45. Knowledge and understanding are evidenced by the professional accountant's ability to undertake some or all of the above in a relevant business setting.

46. IFAC member bodies may find some or all of the competency elements set out in Appendix 4 helpful in developing CPD requirements for professional accountants.

Evaluator of Information Systems Role—Post-Qualification

47. Professional accountants who concentrate on role of evaluator of information systems need to have a knowledge and understanding of some or all of the following topics.

- Planning systems evaluation

- Evaluating systems
- Communicating results of evaluations and following-up

48. Knowledge and understanding are evidenced by the professional accountant's ability to undertake some or all of the above in a relevant business setting.

49. IFAC member bodies may find some or all of the competency elements set out in Appendix 5 helpful in developing CPD requirements for professional accountants.

Designer of Information Systems Role – Post-Qualification

50. Professional accountants who concentrate on the designer of information systems role need to have a knowledge and understanding of some or all of the following topics:

- Analyzing and evaluating the role of information in the entity's business processes and organization
- Applying project management methods
- Applying systems investigation and project initiation methods
- Applying user requirements determination and initial design methods
- Applying detailed systems design and acquisition/development methods
- Applying systems implementation methods
- Applying systems maintenance and change management methods

51. Knowledge and understanding are evidenced by the professional accountant's ability to undertake some or all of the above in a relevant business setting.

52. IFAC member bodies may find some or all of the competency elements set out in Appendix 6 helpful in developing CPD requirements for professional accountants.

SECTION 3: IT KNOWLEDGE AND COMPETENCE REQUIREMENTS FOR AUDIT PROFESSIONALS

IT Knowledge and Competences for Audit Professionals

53. IES 8 prescribes that competence4 should be assessed before an individual takes on the role of audit professional. IES 8 prescribes the knowledge5 content of the IT subject area for the education of audit professionals. This should include:

    (a) information technology systems for financial accounting and reporting, including relevant current issues and developments; and

    (b) frameworks for evaluating controls and assessing risks in accounting and reporting systems as appropriate for the audit of historical financial information.

54. This section of IEPS 2 provides guidance for IFAC member bodies in implementing IES 8 in relation to the specific IT knowledge and competences required of an Audit Professional. The IT knowledge and competences in this section are drawn from the relevant pre-qualification knowledge and competences referred to earlier in this practice statement and adapts them to the specific context of the audit of historical financial information.

55. IFAC member bodies, in developing the IT subject area for the education of audit professionals, may consider including the following topics:

    - Evaluating an entity's overall IT control environment
    - Planning financial accounting and reporting systems evaluation
    - Evaluating financial accounting and reporting systems
    - Communicating results of evaluations and following-up

56. Appendix 7 sets out a number of competency elements based on the topics above that IFAC member bodies may consider in developing the IT subject area for the education of audit professionals. This appendix is not intended to be prescriptive.

57. IFAC member bodies may also find some or all of the competency elements set out for Audit Professionals in Appendix 7 and for Evaluators of Information Systems Role Competences in Appendix 5 helpful in developing CPD requirements for the Audit Professional.

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4 IES 8, *Competence Requirements for Audit Professionals,* paragraphs 63–64

5 IES 8, *Competence Requirements for Audit Professionals,* paragraph 40

Appendix 1

General Knowledge of IT Topics

Appendix 1 is based on Table 1 in this IEPS. It sets out, in more detail, subject matter for the general knowledge of IT subject area that may be of assistance to IFAC member bodies developing the information technology component of accounting education programs. This appendix is not intended to be prescriptive.

Topic 1: Information Technology Strategy

Candidates can explain, describe or discuss enterprise strategy and vision	
Main topic coverage	**Subject matter**
Internal and external business issues	Business focus of the entity Position of the entity within its industry Relationship of IT strategy and business strategy Operational dynamics that influence the business Business processes as they relate to the strategic plan
Factors that impact IT	Flexibility of changes in technology or business Speed to market Legal, regulatory and assurance requirements Business units (customers, markets, industries) Budgets Service level and operational requirements: availability, scalability, security, integrity, extensibility, maintainability, manageability
Current status of entity's use of IT to support business processes	Infrastructure Software People Procedures and controls Knowledge Data

Candidates can explain, describe or discuss the current and future IT environment	
Main topic coverage	**Subject matter**
IT risks and opportunities	Trends, issues concerns in current environment Business and IT alignment **Compliance with service level agreements/targets** Capacity and performance capabilities Stakeholder attitudes Political and social concerns relating to IT

Candidates can explain, describe or discuss IT strategic planning	
Main topic coverage	**Subject matter**
Envision future status of the entity's systems	Communicating with stakeholders Sourcing strategy Critical success factors, appropriate measurements
Align future IT strategy with business strategy	IT management's goals and objectives Overall feasibility and scope Business constraints (quality, time, cost) Action plans, timelines, transition elements Sponsor and stakeholder approval

Candidates can explain, describe or discuss ongoing governance and outcomes of the monitoring process	
Main topic coverage	**Subject matter**
Framework for IT governance	Control environment/culture Risk assessment

Candidates can explain, describe or discuss ongoing governance and outcomes of the monitoring process	
	Policies and procedures Information and communication Monitoring of controls and risks Impact on IT of compliance with professional standards and codes
Outcome measurement	Cost-effectiveness of IT processes Utilization of IT infrastructure Satisfaction of stakeholders Staff productivity Sharing of knowledge and information Linkages between IT and enterprise governance

Topic 2: Information Technology Architecture

Candidates can explain, describe or discuss general systems concepts	
Main topic coverage	**Subject matter**
Nature and types of systems	General systems theory, systems objectives: • Open/closed systems • Well/ill-structured • Formal/informal Operational/tactical/strategic Transaction processing vs. operational vs. decision support
Information systems architectures (components and relationships)	Subsystems, networks, client server, remote systems, distributed systems, mobile facilities, hardware (mainframe, server, router, workstation, etc.) Networks, telecommunication systems, electronic data transfer Software: systems software, application software, utilities: • Application development environment • Data organization and access methods: Files, tables, data bases, data base management systems Protocols, standards, enabling technologies IT professionals and career paths in IT organizations
Control and feedback in systems	Objectives, measures, monitoring, feedback and follow-up
Systems development life cycle	Systems acquisition/development phases, tasks: • Investigation and feasibility study • Requirements analysis and initial design • Detailed design specification/ documentation

Candidates can explain, describe or discuss general systems concepts	
Main topic coverage	**Subject matter**
	• Systems installation/ implementation • Maintenance • Project management
Nature and types of information	Routine, exception, ad hoc, predictive Quantitative, qualitative Transaction documents, screens, reports, messages, etc. Data vs. information vs. knowledge
Attributes of information	Quality, relevance, reliability, cost Completeness, accuracy, level of aggregation, timeliness, currency, frequency, accessibility, availability, authorization, authenticity, privacy, confidentiality, etc. Decision value, competitive advantage
Role of information within business	Users: internal, external Monitoring, problem finding, action, decision support, etc. Decision theory Human information processing strengths, limitations Communication of information Reporting concepts and systems
Types of business systems	Transaction Processing Systems (TPS) Production support systems Management Information Systems (MIS) Knowledge Management Systems (KMS) Executive Information Systems (EIS)

Candidates can explain, describe or discuss general systems concepts	
Main topic coverage	**Subject matter**
	Decision Support Systems (DSS) Expert Systems (ES), Neural Networks (NN)

Candidates can explain, describe or discuss transaction processing in business systems	
Main topic coverage	**Subject matter**
Transaction processing phases	Data entry Edit/validation Transmission File look-ups, calculations, logical comparisons Master file update Storage, record retention, back-up Accounting, control, management and reporting Query, audit trail, ad hoc reports Error prevention, detection, correction
Processing modes	Batch processing Transaction processing On-line processing Real-time processing Distributed processing Multi-programming, multi-tasking and multi-processing
Business documents, accounting records, data bases, control/ management reports	Revenue/receivables/receipts Purchases/payables/payments Inventories/cost of sales

Candidates can explain, describe or discuss transaction processing in business systems	
	Fixed assets Production planning, scheduling and control Distribution management, logistics Project management Human resources and payroll Delivery of services Logistics Treasury Administration

Candidates can explain, describe or discuss physical and hardware components of a system	
Main topic coverage	**Subject matter**
Processing units	Personal/workstation/mini/mainframe/ supercomputer Standalone or multi-user/network Multi-processor vs. single processor Server, server farm Central processing unit (CPU), main memory, etc. Bus-lines, cables, integrated circuit cards, micro-code, registers, instruction sets, etc.
Input/output devices	Keyboard, mouse, scanner, Radio Frequency Identification (RFID), text recognition, voice recognition, web cam, smart card, pen display, tape, disk, printer, barcode scanning, biometrics, etc. Control units, buffers, channels, etc.
Data communication devices	Modem, switch, router, concentrator, bridge, monitor, etc. Wireless transmitter, receiver, Bluetooth, infrared devices etc.

Candidates can explain, describe or discuss physical and hardware components of a system	
Main topic coverage	**Subject matter**
Physical storage devices	Data representation by computer, data compression Tape, disk, Compact Disk Read Only Memory (CD-ROM), Digital Video Discs (DVD), Storage Area Network (SAN), Network Attached Storage (NAS).

Candidates can explain, describe or discuss software	
Main topic coverage	**Subject matter**
Components of a software configuration	Distinction between systems and application software Workflow managers, middleware and other utilities Software designs for various processors Open vs. proprietary systems
Operating systems	Graphical user interfaces Network, client/server, etc. Single user vs. multi-user Process management Memory and file systems management
Communications systems	Terminal monitors, network directories, etc. Communication protocols
Security software	Authentication and access control software Anti-virus software Firewall Intrusion detection Security assessment tools
Utility software	Text editor, directory manager, file back-up/recovery, file compression, etc.

Candidates can explain, describe or discuss software	
Main topic coverage	**Subject matter**
	Performance monitoring software, scheduling software, etc.
Programming languages/ compilers	Program control structures Open source, testing during application development, application development techniques such as RAPID Program specification, verification and validation Machine code/assembly languages Procedural vs. non-procedural languages Language evaluation and selection approaches Object-oriented languages, multimedia authoring systems, etc.
Programming aids, interactive programming software	Application development environment CASE tools and programming environment UML (Unified Modeling Language) Methods of program design and development Testing and documentation
Library management systems	Version control, migration, etc.
Data management systems	Tape/disk management systems Hardcopy/microfiche/optical imaging On-line, archival Report generators and data retrieval software Data base management systems
General application software	Distinction from systems software Competitive advantage Piecemeal vs. organization-wide development/ integration

Candidates can explain, describe or discuss software	
Main topic coverage	**Subject matter**
	Package vs. custom software Distributed vs. centralized processing End-user computing Internet/intranet/extranet applications
E-business enabling software	Supply Chain Management (SCM) Customer Relationship Management (CRM) Sales Force Automation (SFA) Human resources management Asset management Enterprise Resource Planning (ERP) Manufacturing (CAD/CAM, CIM) Distribution, logistics Enterprise Application Integration (EAI): • Electronic commerce systems • Brochure, catalog, exchange • Order entry (shopping cart), payment processing, fulfillment Knowledge management systems: • Knowledge creation, capture, sharing, maintenance Financial Reporting, XBRL
Common standards	Seven-layer OSI Reference Model: • Physical, Data Link, Network, Transport, Session, Presentation, Application Common Object Request Broker Architecture (CORBA)

Candidates can explain, describe or discuss protocols, standards and enabling technologies	
Main topic coverage	**Subject matter**
	Electronic data interchange (EDI) Transmission control protocol/Internet protocol (TCP/IP) Wireless application protocol (WAP)
Internet protocols	Packet switching Uniform Resource Locator (URL) Domain Name Server (DNS) File Transfer Protocol (FTP) Hypertext Transfer Protocol (HTTP) Hypertext Markup Language (HTML) Extensible Markup Language (XML) Extensible Business Reporting Language (XBRL) Internet Relay Chat Protocol (IRC)
Standard-setting organizations	Institute of Electrical and Electronic Engineers (IEEE) International Organization for Standardization (ISO) Open Systems Interconnections (OSI) American National Standards Institute (ANSI) World Wide Web Consortium (W3C) Project Management Institute (PMI) Software Engineering Institute (SEI) International Federation of Accountants (IFAC) XBRL International

Candidates can explain, describe or discuss data organization and access methods	
Main topic coverage	**Subject matter**
Data structures and file organization	Data coding: characters, records, files, multi-media Precision of data Data relationships: one-to-one, one-to-many, many-to-many Conceptual data modeling Normalization of data Logical vs. physical Entity-relationship diagramming Referential integrity Table structure vs. user interface Distributed structures
Access methods	Sequential access Direct (random) access Indexed sequential access
Types of data files	Master/transactions/tables Array, list, stack, queue, tree, index Database: Relational, Network, Hierarchical, Object-oriented Benefits of using a database
Data base management systems features, functions, architectures	Data storage, access, and sharing Roll back/journaling Performance tuning and metrics Stored procedures
Data base administration	Defining/documenting data base requirements File layout/schema/data dictionary

Candidates can explain, describe or discuss data organization and access methods	
Main topic coverage	**Subject matter**
	Model data bases, distributed systems
Document management	Capture, index, store, retrieve, display/print Optical imaging systems

Candidates can explain, describe or discuss IT professionals	
Main topic coverage	**Subject matter**
Job functions	Chief Information Officer (CIO) and similar Chief Information Security Office (CISO) and similar Business Analyst Systems Analyst Programmer Operations Manager Database Administrator/Data Administrator Knowledge Base Administrator/Knowledge Administrator/Knowledge Engineer Security Officer Network Controller Librarian Webmaster, Web Designer Quality Assuror
Recruiting/developing IT human resources	Training and development Sourcing Career paths
Organization	Organization structure IT governance

Topic 3: IT as a Business Process Enabler

Candidates can explain, describe or discuss stakeholders and their requirements	
Main topic coverage	**Subject matter**
Monitoring service level performance against service level agreements	Quality of service Availability Response time Security and controls Processing integrity Privacy Remedies Amending service level agreements

Candidates can explain, describe or discuss the entity's business models	
Main topic coverage	**Subject matter**
Business models	Revenue Distribution Supply Market Organization Legal and regulatory issues
Effectiveness of the entity's individual business processes	Revenue/receivables/receipts Purchases/payables/payments Inventories/cost of sales Fixed assets Production planning, scheduling and control Distribution management, logistics

Candidates can explain, describe or discuss the entity's business models	
	Human resources and payroll Delivery of services Logistics Treasury Administration
Framework of controls	Relation between user controls, application controls and IT general controls

Candidates can explain, describe or discuss risks and opportunities	
Main topic coverage	**Subject matter**
Barriers and enablers	Technology Alignment of business processes and IT with business strategy Business Process Re-engineering (BPR) Organizational structure and culture Leadership Human resources Capital Legal and Regulatory

Candidates can explain, describe or discuss the impact of IT on the entity's business models, processes and solutions	
Main topic coverage	**Subject matter**
Applications of internet-commerce	Internet-commerce issues and trends Business to Business (B2B) • Exchange, Portal, Public/private exchange, EDI

Candidates can explain, describe or discuss the impact of IT on the entity's business models, processes and solutions	
	• Credit authorization, Wire lines (ACH, EFT) Business to Consumer (B2C) Consumer to Consumer (C2C) Business to Employee (B2E) Distance learning; distributed learning Electronic government
Enterprise systems	Supply Chain Management (SCM) Customer Relationship Management (CRM) Sales Force Automation (SFA) Human resources management Asset management Enterprise Resource Planning (ERP) Manufacturing (CAD/CAM, CIM) Distribution, logistics Enterprise Application Integration (EAI): • Electronic commerce systems • Brochure, catalog, exchange • Order entry (shopping cart), payment processing, fulfillment Knowledge management systems: • Knowledge creation, capture, sharing, maintenance Financial Reporting XBRL

Topic 4: Systems Acquisition and Development Process

Candidates can explain, describe or discuss systems acquisition and development life-cycle phases and tasks	
Main topic coverage	**Subject matter**
Approaches	Waterfall, spiral, interactive, prototyping Effect of new development techniques and management theories on formal systems development life-cycle
Acquisition/development phases	Investigation and feasibility study Requirements analysis and initial design Detailed design specification/documentation Systems installation/implementation Maintenance
Standards, methods and controls	Documentation requirements Main risks and reasons for failure of systems projects: e.g., economic, technical, operational, behavioral

Candidates can explain, describe or discuss investigation and feasibility studies	
Main topic coverage	**Subject matter**
Investigation	Analysis of existing systems; business process integration; business process re-engineering Scope of proposed systems and information needs, technology options Nature and size of business
Feasibility study	Cost/benefit analysis Statement of application requirements Feasibility analysis

Candidates can explain, describe or discuss requirements analysis and initial design	
Main topic coverage	**Subject matter**
User requirements elicitation	Processing modes User interface: screen, report, form layouts Data bases/files/records Integration with existing applications and systems Volume, scalability, extensibility requirements
Systems analysis/design tools and techniques	Structured analysis and design methodologies Questionnaires, interviews, document analysis, observation Data flow diagrams; entity-relationship modeling, etc. Decision tables and decision trees Computer Aided Software Engineering (CASE) tools Unified Modeling Language (UML) Object methods
Process design, data organization, software requirements	Application architecture Technical architecture Infrastructure requirements: facilities, hardware, network
Control requirements	Availability, security/privacy, integrity, maintainability

Candidates can explain, describe or discuss systems design, selection, acquisition and development	
Main topic coverage	**Subject matter**
Infrastructure and software services	Selection of hardware, facilities, networks Selection of software packages

Candidates can explain, describe or discuss systems design, selection, acquisition and development	
Main topic coverage	**Subject matter**
	Selection of vendor/supplier/service providers Service level agreements Escrow agreements Contracting/leasing/licensing considerations
Software development	Application development environment (programming languages/compilers, etc.) Programming aids: Structured, event driven, object-oriented approaches
Systems design	User interface: screen and report design Data base/file design; systems and data base integration Audit trail; transaction flows Interfaces Systems and network transaction load requirements Computerized and user controls Acceptance testing approach
Documentation	Statement of technical requirements User and operations manuals

Candidates can explain, describe or discuss systems implementation	
Main topic coverage	**Subject matter**
Systems implementation plan	Change management requirements User training User acceptance Systems roll-out Data conversion

Candidates can explain, describe or discuss systems implementation	
Main topic coverage	**Subject matter**
	Risk management Operation and recovery procedures Documentation
Install/deploy systems	Install/deploy components: infrastructure, software User/operator procedures and controls Recruit/train personnel
Acceptance testing	Acceptance testing approach: • Identify resources required • Develop high level testing scenarios • Relate to functional and technical/architectural requirements Tools and support: • Automated test tools • Test environment • Support Test scripts and related data Quality assurance/pre-implementation review
Systems conversion/changeover	Data transformation requirements Automated/manual Operational considerations (pilot, parallel running and going live) Timing consideration Tests Risk management Resources required: • Data transformation tools

Candidates can explain, describe or discuss systems implementation	
Main topic coverage	**Subject matter**
	• Conversion environment • Support Tests to ensure data is complete, accurate and authorized
Post-implementation review	Meets business requirements Impact on users, management and staff Project schedule and resources (financial and people) consumed Benefits realized Opportunities for improvement

Candidates can explain, describe or discuss systems maintenance and program changes	
Main topic coverage	**Subject matter**
Maintenance standards	Infrastructure Software Personnel competences Information architecture Business processes Version management Implementation controls Authorization controls Documentation standards and controls Migration planning
Change controls	Custody; change authorization Emergency change controls Testing and quality assurance

Candidates can explain, describe or discuss project management, project planning, project control methods and standards	
Main topic coverage	**Subject matter**
Initiate the project	Project sponsorship and funding Stakeholders Terms of reference Apply project management tools and techniques
Plan the project	Scope, objectives and deliverables Strategy to achieve objectives and deliverables Project schedule, including sequence of tasks and milestones Resources and budgets Quality standards that will be used to evaluate the project Communication needs of all project stakeholders Goods and/or services that will be required to complete the project
Risk management approach on the project	Project management risk Business risk
Execute the project plan	Ensure: • Goods and services are selected and contracted, as required • Quality standards are understood • Staff are properly trained and managed • Defined communication strategy
Control the project	Control and coordinate changes across the project Manage the project budget Ensure results meet quality standards and identify

Candidates can explain, describe or discuss project management, project planning, project control methods and standards	
Main topic coverage	**Subject matter**
	methods to rectify any problems noted Report project performance and revised schedule, as necessary Ensure effective risk management Monitor risk mitigation Identify new risks and change plan accordingly Issue identification, escalation and resolution process
Complete the project	Stakeholder communication and sign-off Open items Post-implementation review

Topic 5: Management of Information Technology

Candidates can explain, describe or discuss IT organization	
Main topic coverage	**Subject matter**
IT policies, procedures and methodologies	Process to create and amend IT organization Process to maintain documentation Alignment with entity's strategic plan IT organization to address infrastructure, software, people, procedures and data
IT human resource policies	Skills assessment Performance evaluation Job descriptions Training and certifications Recruitment and retention

Candidates can explain, describe or discuss the management of IT operations and their effectiveness and efficiency	
Main topic coverage	**Subject matter**
Resources management processes used to maintain organizational efficiencies	Resource procurement Ongoing support procedures Maintenance of updates and upgrades
Relationship of infrastructure to applications and user requirements	Developing operational priorities Compatibility of components Planning IT capacity Impact of IT on procedures Data/information architecture IT infrastructure (hardware, facilities, networks) software (systems, applications, utilities)
Monitoring service	Performance measurement (productivity, service

Candidates can explain, describe or discuss the management of IT operations and their effectiveness and efficiency	
provider activities	quality) Service level agreement monitoring Collaborative computing Distributed systems EDI and electronic commerce Outsourced services (ISPs, ASPs, etc.)

Candidates can explain, describe or discuss asset management	
Main topic coverage	**Subject matter**
Asset life cycle	Acquisition Change Retirement
Asset management and control	IT inventory Contracts and licenses and intellectual property issues Data ownership, reliability and privacy issues Cross-border transportation and storage of data Service provider documentation Privacy User documentation, on-going training and end-user support

Candidates can explain, describe or discuss change control and problem management	
Main topic coverage	**Subject matter**
Segregation of environments	Three environments: • Development • Test • Production Transport mechanisms Acceptation processes Authorization procedures Monitoring and logging
Change control techniques	Impact analysis Authorization Internal control Testing/Feedback Documentation Human resources, including training Approval Migration plans Release management
Problem management	Integration with change control management Help/Service desk support systems Problem resolution/escalation procedures Routing and assignment of problems Problem analysis and trend analysis
Management of end-user computing	Technology diffusion Information centre, help desk

Candidates can explain, describe or discuss change control and problem management	
	End-user systems security Support for end-user applications

Candidates can explain, describe or discuss security management	
Main topic coverage	**Subject matter**
Facilities	Data centers, outsourced facilities Storage, media libraries, back-up vaults Uninterruptible power source (UPS) Disaster recovery sites
Physical security	Threats Impact analysis Contingency planning Physical access Continuity
Logical security	User identification/passwords Authentication/authorization Logical access path Security packages Password management/password change procedures Firewalls
Performance metrics	Defined Monitored Measured and compared to standards and reported

Candidates can explain, describe or discuss performance monitoring and financial control over IT resources	
Main topic coverage	**Subject matter**
IT cost controls	Capital budget Time/expense tracking Accounting for systems costs Costs identifiable and measurable Costing procedures defined and implemented Billing and chargeback procedures to user departments
IT control objectives	Effectiveness, efficiency, economy of operations Reliability of financial reporting Effectiveness of controls (design, operation) IT asset safeguarding Compliance with applicable laws and regulations Systems reliability: • Availability and continuity (back-up, recovery) • Access controls (physical, logical) • Privacy, confidentiality • Processing integrity (completeness, accuracy, timeliness, authorization) Data integrity

Candidates can explain, describe or discuss software for professional use	
Main topic coverage	**Subject matter**
Office software	Presentation software Internet tools: e-mail, web browser Word processor

Candidates can explain, describe or discuss software for professional use	
	Spreadsheets Data base management systems
Computer-assisted audit techniques (CAATs)	Accounting packages and CAATs Professional research tools Analytical tools Pattern matching/recognition

Topic 6: Communication and IT

Candidates can explain, describe or discuss the benefits and risks of IT in relation to communication	
Main topic coverage	**Subject matter**
General means of communication supported by IT	Web communication E-mail SMS/MMS Digital signatures Electronic files
Risks in communication supported by IT	Privacy—appropriate use of information and relevant data protection legislation Secrecy Copying data from one client and using it for the benefit of another Use of USB sticks Forwarding data that is not checked for reliability
Benefits of IT to communication	Web searching Use of certificates with digital signatures Internet tools: e-mail, web browser, FTP

Candidates can explain, describe or discuss networks, and electronic data transfer	
Main topic coverage	**Subject matter**
Network components, configurations and designs	Local area networks/wide area networks Wireless/mobile systems Distributed processing networks Data transmission options, public and private carrier services, etc. Data communication and transmission devices/software

Appendix 2

IT Control Knowledge Topics

Appendix 2, based on the topics set out in paragraph 19 in this IEPS, sets out in more detail subject matter for the IT control knowledge subject area. This is intended to be of assistance to IFAC member bodies in developing the information technology component of accounting education programs. This appendix is not intended to be prescriptive.

Candidates can explain, describe or discuss the internal IT control environment	
Main topic coverage	**Subject matter**
IT risk management approach	Beliefs and attitudes IT risk strategy Policy statements, oral and written communications and decision making reflecting the approach Error, fraud, vandalism/abuse, business interruption, competitive disadvantage, excessive cost, deficient revenues, statutory sanctions, social costs Regulatory environment
IT risk tolerance	Acceptability of IT risk level Relation IT risk/entity risk/corporate risk/social risk Qualitative/quantitative risk approach strategies
IT oversight	IT governance Level of IT oversight in the organization Knowledge of IT in the oversight board Pro-active IT risk detection systems
Integrity, ethical values, and competence of the IT personnel	Corporate IT social responsibility systems and reports Corporate IT data integrity policy statements Organization structure of IT functions IT corporate governance processes and reports

Candidates can explain, describe or discuss the internal IT control environment	
Authority and responsibility, organization and development	Segregation of IT functions Authority structure Responsibility IT control structure: • Board, top management • IT management and IT personnel • User departments, individuals • Auditors

Candidates can explain, describe or discuss setting IT objectives	
Main topic coverage	**Subject matter**
IT strategic objectives	Mission/Vision/Purpose Relation entity strategy objectives/IT strategy objectives IT goals/measurements
IT objectives	IT operations objectives: effectiveness and efficiency of the IT operations IT reporting objectives: accurate and complete management information for IT purpose IT compliance objectives: conduct IT activities in accordance with relevant laws and regulations
Overlap of IT objectives	Integrated framework of entities objectives
Selection of IT objectives	Relation with IT risk management approach Relation with IT risk appetite IT risk tolerance, acceptability of different levels
IT risk factors	External factors: • Economic

Candidates can explain, describe or discuss identifying IT risk events	
Main topic coverage	**Subject matter**
	• Natural environment • Political • Social • Technological Internal factors: • Infrastructure • Personnel • Process • Technology
IT event identification techniques	IT event inventories IT internal analysis Escalation or threshold triggers Facilitated workshops and interviews Process flow analysis Leading event indicators Loss event data methodologies

Candidates can explain, describe or discuss conducting IT risk assessments	
Main topic coverage	**Subject matter**
IT risk categories	Inherent IT risk Residual IT risk Likelihood and impact Data sources Economic, technical, operational, behavioral Main reasons for failure of computer projects

Candidates can explain, describe or discuss conducting IT risk assessments	
	Error, fraud, vandalism/abuse, business interruption, competitive disadvantage, excessive cost, deficient revenues, statutory sanctions, social costs
Assessment techniques	Benchmarking Probabilistic models Non-probabilistic models Relations between events

Candidates can explain, describe or discuss establishing an IT risk response	
Main topic coverage	**Subject matter**
Response categories	Avoidance Reduction Sharing Acceptance
Possible responses	Effect on IT risk likelihood and Impact Assessing cost versus benefit Opportunities in IT response options

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
IT control frameworks	COBIT, SysTrust, WebTrust (Trust Services Principles and Criteria), OECD, ISO27001, etc
IT control objectives	Effectiveness, efficiency, economy of operations: • Cost effectiveness of control procedures Reliability of financial reporting:

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
	• Relevance • Reliability • Comparability/consistency Effectiveness of controls (designing, implementing and operating): • At a point in time • During a period of time IT asset safeguarding: • Evaluation of facilities management • IT asset safeguarding Compliance with applicable laws and regulations: • Prevention/detection of fraud, error and illegal acts • Privacy • Confidentiality • Copyright issues Systems reliability: • Availability and continuity (back-up, recovery) • Access controls (physical, logical) • Processing integrity (completeness, accuracy, timeliness, authorization) • Maintainability Data integrity: • Comparability • Authorization • Auditability • Input/output • Reception/distribution controls

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
Types of control activities	IT top-level reviews Direct IT functional or IT activity management Information processing Manual controls IT performance indicators Segregation of IT duties and functions
Controls over information systems	Control design: • Objectives, framework, environment, activities, monitoring • Legal, ethical, professional standards/requirements • Preventive/detective/corrective strategies • Effect of control environment (personnel management methods) • Preventive application controls • Detective application controls • Contingency plans, insurance Control procedures: • Authorization • Separation of incompatible functions (organizational design, user identification, data classification, user/function/data authorization matrix, user authentication) • Adequate documents and records • Asset safeguards • Limitation of access to assets • Independent checks on performance • Verification of accounting records

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
	• Comparison of accounting records with assets • Computer-dependent controls (edit, validation, etc.) • User controls (control balancing, manual follow-up, etc.) • Audit trails • Error identification/investigation/correction/tracking Control over data integrity, privacy and security: • Understanding of data protection legislation • Consideration of personnel issues and confidentiality • Classification of information • Access management controls • Physical design and access controls • Logical access controls (user authorization matrix) • Network security (encryption, firewalls) • Program security techniques • Data security techniques • Monitoring and surveillance techniques Availability/continuity of processing, disaster recovery planning and control: • Threat and risk management • Software and data back-up techniques (problems of on-line systems, etc.) • Alternate processing facility arrangements • Disaster recovery procedural plan, documentation • Integration with business continuity plans

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
	• Periodic tests of recovery procedures • Insurance/Escrow IS processing/operations: • Planning and scheduling; service levels; risks Standards: • Infrastructure (hardware, facilities, networks) • Software • Human resources (skill sets and staffing levels) • Business processes • Performance monitoring • Costs/benefits (quantitative and qualitative impact on management, jobs and office procedures) • Business drivers that impact IT (e.g., scalability, right-sizing flexibility of changes in technology or business, speed to market, cross-platform capability) • Control over productivity and service quality • Software/data library management • Input/output distribution and control • Security and back up and recovery
Systems acquisition/ development process	Investigation and feasibility study: • Steering Committee • Cost/benefit analysis • Risk assessment Requirements analysis and initial design: • Control requirements Detailed design specification/documentation:

Candidates can explain, describe or discuss conducting IT control activities	
Main topic coverage	**Subject matter**
	• Controls Implementation: • System installation/implementation • Acceptance testing • Conversion/changeover • Quality assurance • Post-implementation review Systems maintenance and change: • Maintenance of hardware and software • Change authorization, logging and testing • Systems documentation and operations manuals • Personnel training and development Project management/planning/control methods and standards: • Project phases, tasks and controls • Project characteristics and risks • Project staffing • Project scheduling • Expense budget • Documentation requirements

Candidates can explain, describe or discuss information and communication in relation to IT	
Main topic coverage	**Subject matter**
Information	IT strategic and integrated systems Integration with IT operations

Candidates can explain, describe or discuss information and communication in relation to IT	
Main topic coverage	**Subject matter**
	Depth and timeliness of IT information IT information quality People, procedures, data, software, infrastructure Key processes: • Identification and recording of all valid transactions • Proper/timely classification of transactions • Appropriate measurement/valuation • Appropriate timing/cut-off • Appropriate presentation
Communication	Business practices, codes of conduct, policy manuals, memos, etc. Documentation of systems, operations, user responsibilities, Reporting relationships Training, supervision

Candidates can explain, describe or discuss monitoring in relation to IT	
Main topic coverage	**Subject matter**
Ongoing monitoring activities	Management Regulators
Separate evaluation	Systems analysis and documentation (e.g., flowcharting packages, review of program logic, etc.) Systems/program testing (e.g., test data, integrated test facility, parallel simulation, etc.) Data integrity testing (e.g., generalized audit software,

Candidates can explain, describe or discuss monitoring in relation to IT	
	utilities, custom programs, sampling routines, etc.) Problem solving aids (e.g., spreadsheet, database, on-line data bases, etc.) Administrative aids (e.g., word processing, audit program generations, work paper generators, etc.)

Appendix 3

IT Control Competences

Appendix 3, based on the topics set out in paragraph 21 in this IEPS, sets out in more detail competency elements (or tasks) for the IT control subject area that may be used to demonstrate competence. This is intended to be of assistance to IFAC member bodies in developing the information technology component of accounting education programs. This appendix is not intended to be prescriptive.

Candidates can apply, demonstrate or evaluate	**Competency elements**
Suitable control criteria to analyze and evaluate controls	Identify relevant: • IT control framework to apply to the analysis and evaluation of internal control Acceptance testing • IT control objectives to apply to the analysis and evaluation of internal control • Layers of control to be included in the analysis and evaluation Identify areas of responsibility for identified control objectives
The IT internal control environment	Understand external regulatory controls Analyze and evaluate effectiveness of: • Board of directors or audit committee participation • Management philosophy and operating style • Organizational structures • Assignment of authority and responsibility • Management control methods • Human resource policies and practices • Financial policies and practices
The selected IT objectives	Analyze and evaluate: • IT strategic objectives • IT objectives

Candidates can apply, demonstrate or evaluate	Competency elements
	• Overlap of IT objectives • Selection of IT objectives
The identified IT events	Analyze and evaluate: • IT driving events factors • IT event identification techniques
IT risk assessment	Analyze and evaluate process for: • Identifying the entity's exposures to risks • Estimating probability of loss • Estimating monetary and non-monetary consequences • Developing cost-effective preventive/detective/corrective strategies to address risks
The selected IT risk responses	Analyze and evaluate effectiveness of: • Response categories • Possible responses
The IT control activities	Analyze and evaluate IT control frameworks Analyze and evaluate effectiveness of: • Design and operation of entity's information processing and communication activities in support of organizational objectives • Controls over data integrity, privacy and security • Controls over completeness, accuracy, timeliness and authorization of systems processing • Controls over systems availability, continuity of business processing and disaster recovery planning • Systems acquisition/development methodology, including make/buy criteria

Candidates can apply, demonstrate or evaluate	Competency elements
	• Standards for systems development project management and control Analyze and evaluate compliance with: • Standards for systems investigation and feasibility study • Standards for determination of user requirements and initial systems design • Standards for systems design, selection, acquisition/development • Standards for systems implementation, including systems testing, training, data conversion and quality assurance • Standards for systems maintenance and change management
Information and communication in relation to IT	Analyze and evaluate: • Information processes • Communication processes
The monitoring process and actions taken in relation to IT	Analyze and evaluate: • Internal monitoring processes, including their effectiveness in leading to changes in controls or control environment • Performance review process • Process for addressing non-compliance or deterioration in compliance identified by monitoring activities of management, users, internal auditors, external auditors Apply appropriate computer-assisted audit techniques to analyze and evaluate monitoring processes and activities
Appropriate IT systems and tools to business/accounting	Apply: • Operating systems

Candidates can apply, demonstrate or evaluate	**Competency elements**
problems	• Word processing software in a relevant accounting/business context • Spreadsheet software in a relevant accounting/business context • Database software in a relevant accounting/business context • Internet tools (E-mail, Web Browser, FTP, Other) software in a relevant accounting/business context • Professional research tools in a relevant accounting/business context • Business presentation software in a relevant accounting/business context • Anti-virus and other security software in a relevant accounting/business context • Utility software and other relevant software in a relevant accounting/business context
Understanding of business and accounting systems	Demonstrate understanding of: • Accounting packages • E-business systems (ERP, CRM, and other business automation systems) • Networks (LAN) • Electronic commerce features (B2C and B2B models, encryption tools, digital signatures/certificates, key management)
The application of controls to personal systems	Ensure: • Processing integrity of IT resources • Security and safeguarding of IT resources • Availability/continuity provisions (back-up and recovery) for IT resources

Appendix 4

Manager of Information Systems Role Competences

This appendix lists competency elements (or tasks) that could be used to demonstrate each competence relating to the manager of information systems role at pre-qualification level. They are provided for illustrative purposes only and are not prescriptive. IFAC member bodies may find some or all of the competency elements set out in below helpful in developing CPD requirements for professional accountants.

Competence	Competency elements
Managing an entity's IT strategy	Understand enterprise strategy and business issues and related IT risks and opportunities Develop an IT strategic plan to support the entity's business plan Align/integrate IT strategic plan with entity's business/program objectives and success factors Translate strategic business/program objectives into operating principles for IT planning Facilitate business process enablement through the use of IT
Managing an IT organization	Define job functions and responsibilities of the IT department Define organization chart/reporting relationships of the IT department Define and implement processes for recruiting, staffing, personnel development and performance evaluation
Managing IT operations' effectiveness and efficiency	Measure, analyze and evaluate the consistency and compatibility of systems components Analyze, evaluate and plan IT capacity Analyze and evaluate impact of IT on management, jobs and office procedures Define/maintain data/information architecture Acquire/develop/maintain responsive IT infrastructure (hardware, facilities, communication networks) Acquire/develop/maintain software (systems,

Competence	Competency elements
	applications, utilities) Plan and schedule systems operations priorities and allocate resources Measure, analyze and evaluate: • IS effectiveness and productivity enhancement • IT function performance, productivity and service quality, quality assurance processes, continuous improvement Monitor outsourced services (ISPs, ASPs, etc.) and inter-organizational computing such as EDI and e-commerce services
Maintaining financial control over IT	Develop capital budget Account for systems costs Implement systems for tracking costs Monitor expenses
Managing IT controls	Implement physical and logical safeguards for hardware, facilities, software and information Implement systems and data security (i.e., physical, logical/electronic access controls) Implement systems availability and business continuity controls (back-up/recovery, disaster planning) Implement systems processing integrity (i.e., completeness, accuracy, timeliness and authorization) controls Implement data integrity, privacy and confidentiality controls
Managing systems acquisition, development and implementation	Identify and evaluate appropriate development/ acquisition alternatives such as in-house/outsourcing Implement and monitor systems acquisition/ development and implementation standards Determine and provide systems project staffing requirements and budgets

Competence	Competency elements
	Implement project management processes to manage and monitor systems projects Use appropriate methodologies to identify, analyze, evaluate and select appropriate supplier(s) and system(s) Manage expectations by communicating systems acquisition/development plans and status to users, top management/steering committee
Managing systems change and problem management	Manage technology diffusion Implement and manage: • Information centre, help desk • Standards and controls applicable to IS maintenance activities • Version management • Process for migrating systems from legacy to state of the art • Emergency change controls • Testing and quality assurance for all systems changes Manage custody of systems, change authorization

Appendix 5

Evaluator of Information Systems Role Competences

This appendix lists competency elements (or tasks) that could be used to demonstrate each competence relating to the evaluator of information systems role at pre-qualification level. They are provided for illustrative purposes only and are not prescriptive. IFAC member bodies may find some or all of the competency elements set out in below helpful in developing CPD requirements for professional accountants.

Competences	Competency elements
Planning systems evaluation	Identify IT assurance service requirements and/or opportunities Analyze/evaluate and advise on entity's IT assurance needs based on legal, ethical, professional standards and other requirements and best practices Identify nature of particular IT assurance engagement or project and standards and other requirements governing the engagement Analyze and decide whether to accept the IT assurance engagement or project Define the scope of the IT assurance engagement or project Identify, analyze and evaluate risk factors and business issues affecting the IT assurance engagement or project and their implications Define level/frequency of systems errors, flaws and failures that are deemed significant/material Design effective and efficient verification procedures to meet evaluation objectives while complying with professional standards Assign and schedule staff with appropriate IT skills, including IT specialist personnel, to perform the IT assurance engagement or project Conclude on evaluation strategy Develop an evaluation plan
Evaluating systems	Collaborate with colleagues, client and others,

Competences	Competency elements
	including IT specialist personnel Perform planned procedures, exercising required controls over their execution Evaluate general IT controls, application controls Evaluate relationship between user controls/application controls and IT general controls Adjust planned procedures for changes in circumstances Document procedures and findings Analyze and evaluate evidence/results of procedures Perform supervision, review and quality assurance procedures
Communicating results of evaluations and following-up	Prepare appropriate types of communication, including verbal communication, “seal” or printed report Present communication verbally, electronically or in printed format to client or other intended recipients Update communication as frequently as required (e.g., refresh the “seal” or report posted on a website) Follow up as required

Appendix 6

Designer of Information Systems Role Competences

This appendix lists competency elements (or tasks) that could be used to demonstrate each competence relating to the designer of information systems role at pre-qualification level. They are provided for illustrative purposes only and are not prescriptive. IFAC member bodies may find some or all of the competency elements set out in below helpful in developing CPD requirements for professional accountants.

Competences	Competency elements
Analyzing and evaluating the role of information in an entity's business processes and organization	Facilitate the development of the entity's strategic vision for IT Identify stakeholders and their requirements Assess the business impact of entity's strategic vision for IT on the entity, its customers, suppliers and employees Facilitate communication between users, technologists and management Analyze, evaluate and design information architecture (i.e., role of data bases and data base management systems including knowledge management systems, data warehouses) Analyze, evaluate and design entity's business processes Analyze framework of controls Analyze relations between user controls/application controls/general IT controls Analyze, evaluate and design entity's systems development life cycle (SDLC) phases, tasks Analyze and evaluate systems risks and opportunities Analyze, evaluate and design controls
Applying project management methods	Analyze and evaluate project characteristics and risks Organize project into phases and tasks corresponding to relevant stages of the systems development life cycle Identify appropriate staff and other resources and

Competences	Competency elements
	assign to project phases and tasks Assign time, expense and other resource budgets to project phases and tasks Apply appropriate standards and controls to the project phases and tasks Identify required project documentation and assign responsibility for its preparation Monitor project activities for compliance with budgets, standards, controls and documentation requirements and take corrective action when required
Applying systems investigation and project initiation methods	Perform systems investigation Identify business process integration/re-engineering opportunities Research relevant technology options Prepare feasibility study and evaluate project risks
Applying user requirements determination and initial design methods	Apply information requirements elicitation methods Document information requirements (including control requirements) Facilitate communication of information requirements between team members, users, management Analyze requirements and perform initial design (including controls)
Applying detailed systems design and acquisition/ development methods	Prepare and document detailed design specifications Evaluate and acquire infrastructure Evaluate and acquire/develop required systems, application and utility software Select suppliers and service providers Prepare hardware contracts, facilities leases, software licenses, network service level agreements in consultation with legal advisors Prepare documentation and operations manuals

Competences	Competency elements
Applying systems implementation methods	Prepare implementation plan Supervise installation/deployment of systems components Develop user/operator procedures and controls and recruit, train personnel Test (verify and validate) systems against specifications and requirements Convert systems, balance pre-post data, and start-up Perform post-implementation review
Applying systems maintenance and change management methods	Maintain: • IT infrastructure • Software; control versions • Personnel competences through hiring, training • IT standards and controls • Information architecture • Business processes Test all systems changes

Appendix 7

Audit Professional IT Competences

This appendix lists competency elements (or tasks) for audit professionals. They are provided for illustrative purposes only and are not prescriptive. IFAC member bodies may find some or all of the competency elements set out in below helpful in developing educational requirements for audit professionals including CPD.

Competences	Competency elements
Evaluating an entity's overall IT control environment	Identify, analyze and evaluate the effects of IT on an entity's business, considering relevant current issues and (technological) developments Understand the complexity of the IT environments Assign and schedule staff with appropriate IT skills, including IT specialist personnel, to analyze IT controls at entity level Analyze risks and controls at entity level to: • Align IT with entity's business strategy • Manage the IT organization • Manage IT operations • Manage IT controls • Manage systems acquisition, development and implementation • Manage systems change and problem management Conclude on preliminary audit strategy
Planning financial accounting and reporting systems evaluation	Identify business processes, significant flows of transactions, significant risks and relevant user controls/application controls Identify the supporting IT infrastructure and general IT controls Design test procedures on user controls/application controls/IT general controls Assign and schedule staff with appropriate IT skills, including IT specialist personnel, to test general IT controls and application controls

Competences	Competency elements
Evaluating financial accounting and reporting systems	Perform planned procedures, exercising required controls over their execution Evaluate general IT controls and application controls Evaluate relations between user controls/application controls and IT general controls Adjust planned procedures for changes in circumstances Document procedures and their findings Analyze and evaluate evidence/results of procedures Perform supervision, review and quality assurance procedures
Communicating results of evaluations and following-up	Prepare appropriate types of communication, including verbal communication and/or printed report Conclude on final audit strategy Follow up as required

INTERNATIONAL EDUCATION PRACTICE STATEMENT

IEPS 3

PRACTICAL EXPERIENCE REQUIREMENTS—INITIAL PROFESSIONAL DEVELOPMENT FOR PROFESSIONAL ACCOUNTANTS

CONTENTS

Introduction

1. International Education Practice Statements (IEPSs) assist IFAC member bodies to implement generally accepted good practice in educating and developing professional accountants.

2. International Education Standard (IES) 5, *Practical Experience Requirements* states the practical experience IFAC member bodies should require their members to obtain before qualifying as professional accountants. IFAC member bodies follow this standard in setting detailed practical experience requirements for their trainees.

3. IFAC member bodies are responsible for implementing IESs. The International Accounting Education Standards Board (IAESB) recognizes, however (a) the wide diversity of culture and language, and of educational, legal, and social systems, in the countries of their member bodies, (b) the wide variety of functions accountants perform, and (c) that IFAC member bodies are at different stages in developing their pre-qualification educational programs.

4. This IEPS provides guidance in implementing IES 5. The guidance is not prescriptive and IFAC member bodies may identify and implement other approaches in meeting the requirements of IES 5.

Objectives of a Period of Practical Experience

5. A period of practical experience has two objectives:

   (a) to enable trainees to develop and demonstrate the professional knowledge, professional skills, and professional values, ethics and attitudes required to perform their work competently; and

   (b) to help trainees develop the skills they need to maintain competence.

6. Students gain the professional knowledge, professional skills, and professional values, ethics and attitudes through a combination of formal education and practical experience. This combination may vary by member body.

7. Although the professional knowledge and professional skills required by professional accountants will likely change as their careers develop, the professional values, ethics and attitudes required of professional accountants endure. These are first developed in pre-qualification education programs, and are demonstrated in the workplace during a period of practical experience.

8. A period of practical experience guided by a mentor or a development program enables trainees to integrate knowledge gained from formal education with workplace experience. This enables trainees to develop their professional knowledge and professional skills, and demonstrate their competence.

9. Practical experience benefits others as well as the trainee:

- **IFAC member bodies** gain members with the professional knowledge, professional skills, and professional values, ethics and attitudes required to strengthen the profession and serve the public interest.
- **Employers** gain employees with professional knowledge, professional skills, and professional values, ethics and attitudes that add value to their businesses. Employers that support trainees during their period of practical experience may benefit from (a) greater employee satisfaction and staff retention, and (b) more effective succession planning.
- **Mentors** apply and develop their own knowledge and skills (especially interpersonal skills) which may count towards mentors' own continuing professional development (CPD) requirements. They also contribute to the development of their professional bodies, and to the profession as a whole.

Initial Professional Development

10. Developing professional competence at the pre-qualification stage through practical experience may be thought of as "initial professional development" (IPD). This is the first stage of a learning continuum that continues throughout a professional accountant's career. After qualification, professional development continues through CPD. IPD and CPD share a number of common factors, including:
    - Their focus on developing the professional competence required to perform a work role to the expected standard;
    - The importance of effectively assessing performance;
    - The development by employers of competence frameworks for employees, and employee development programs, at both pre- and post-qualification stages; and
    - The importance of trainees and professional accountants developing habits of reflection and self-review in relation to their learning.

    IFAC member bodies may, therefore, consider developing an integrated system of professional development that encompasses both pre- and post-qualification.

Definitions

11. The following terms used in this IEPS are defined in the *Framework for International Education Standards for Professional Accountants* and the *IAESB Glossary of Terms*:

    Assessment—all forms of tests of professional competence, whether in writing or otherwise, including examinations, carried out at any time throughout the learning process.

Candidate—any individual who is enrolled for assessment as part of a professional accountancy education program.

Capabilities—the professional knowledge; professional skills; and professional values, ethics and attitudes required to demonstrate competence.

Competence—being able to perform a work role to a defined standard, with reference to real working environments.

Continuing Professional Development (CPD)—learning activities for developing and maintaining the capabilities of professional accountants to perform competently within their professional environments.

Education—a systematic process aimed at developing knowledge, skills and other capabilities within individuals. It includes "training."

Formal education—the non-workplace based component of an accounting education program.

Initial Professional Development (IPD)—the development of professional competence at the pre-qualification stage.

Learning—a broad range of processes whereby an individual acquires capabilities.

Mentor—professional accountants who are responsible for guiding and assisting trainees and for assisting in the development of the trainees' competence.

Post-qualification—the period after qualification as an individual member of an IFAC member body.

Practical experience—work experience, undertaken by a trainee or a qualified professional accountant that is relevant to the work of professional accountants. The program of experience enables the individual's development of professional competence (including professional behaviour) in the workplace and provides a means whereby individuals can demonstrate the achievement of professional competence in the workplace.

Pre-qualification—the period before qualification as an individual member of an IFAC member body.

Professional accountant—a person who is a member of an IFAC member body.

Professional knowledge—those topics that make up the subject of accountancy as well as other business disciplines that, together, constitute the essential body of knowledge for professional accountants.

Professional skills—the various types of abilities required to apply professional knowledge, and professional values, ethics and attitudes appropriately and effectively in a professional context.

Professional values, ethics and attitudes—are the professional behavior and characteristics that identify professional accountants as members of a profession. They include the principles of conduct (i.e., ethical principles) generally associated with, and considered essential in, defining the distinctive characteristics of professional behavior.

Qualification—qualification as a professional accountant means, at a given point in time, an individual is considered to have met, and continues to meet, the requirements for recognition as a professional accountant.

Relevant experience—participation in work activities in an environment appropriate to the application of professional knowledge; professional skills; and professional values, ethics and attitudes.

Student—an individual following a course of study, including a trainee. In the context of professional education, a student is an individual undertaking a course or a program of study deemed necessary for the education of professional accountants, whether general or professional in nature.

Trainee—an individual undertaking pre-qualification work experience and training within the work place.

Training—pre- and post-qualification educational activities, within the context of the workplace, aimed at bringing a student or professional accountant to an agreed level of professional competence.

Scope and Structure of this IEPS

Scope of this IEPS

12. The aim of this IEPS is to provide guidance for IFAC member bodies implementing the requirements of IES 5, *Practical Experience Requirements*. This IEPS also provides guidance for employers, mentors and trainees on their roles and responsibilities regarding a period of practical experience.

13. IFAC member bodies are likely to adopt elements of different approaches in meeting the requirements of IES 5:

    (a) Input-based approaches—by establishing a set period of practical experience that is considered appropriate for demonstrating competence when qualifying as a professional accountant.

    (b) Output-based approaches—by requiring professional accountants to demonstrate, by way of outcomes, development of an appropriate level of competence when qualifying as a professional accountant.

(c) Combined approaches—by effectively and efficiently combining elements of the input- and output-based approaches, setting the amount of required experience and measuring the outcomes.[1]

IFAC member bodies should consider the requirements of any relevant regulators when choosing their approach to implementing IES 5.

14. Input-based systems have traditionally been used to measure the development of competence because of the ease of their measurement and verification. These systems have the advantage of facilitating comparison between systems adopted by different IFAC member bodies. Input-based approaches have limitations, however. For example, they do not measure performance outcomes or the level of developed competence.

15. In output-based systems, it can be challenging to set, to measure and to verify competences, but doing this allows trainees to demonstrate the professional knowledge, professional skills, and professional values, ethics and attitudes required of professional accountants.

16. In the context of the combined approach IES 5 requirements for a period of practical experience include a variety of input measures, including the requirement to complete a minimum three-year period[2] of practical experience before qualifying as a professional accountant. IES 5 also acknowledges the overall goal of measuring outcomes, such as trainees demonstrating achieved competences.[3]

Structure of this IEPS

17. Section 1 provides guidance to IFAC member bodies in meeting the requirements of IES 5 regarding the period[4] of practical experience. It suggests how IFAC member bodies may (a) meet the requirement for a minimum three-year period of practical experience for trainees to qualify as professional accountants, and (b) use elements of an output-based approach to assess competence developed by trainees during that period.

18. Section 2 provides guidance to IFAC member bodies in meeting the requirements of IES 5 regarding monitoring[5] and control of trainees during the period of practical experience. It includes specific guidance on (a) the roles and

1 IES 7, *Continuing Professional Development: A Program of Lifelong Learning and Continuing Development of Professional Competence*, paragraphs 30-42, contains a more detailed discussion of approaches to measuring learning, and the advantages and disadvantages of the three approaches set out above.

2 IES 5, *Practical Experience Requirements*, paragraph 11

3 IES 5, *Practical Experience Requirements,* paragraph 12

4 IES 5, *Practical Experience Requirements*, paragraphs 10–17

5 IES 5, *Practical Experience Requirements,* paragraphs 18-26

responsibilities of the mentor, (b) recording and assessing practical experience, and (c) working effectively with employers.

19. Suggested content of (a) practical experience requirements and (b) additional guidance that IFAC member bodies may provide for mentors, employers, and trainees is provided in the appendices to this IEPS.

SECTION 1: PRACTICAL EXPERIENCE REQUIREMENTS

Overview

20. This section of this IEPS provides guidance to IFAC member bodies on meeting the requirement of IES 5 for a period of practical experience that is long enough and intensive enough to permit candidates to demonstrate the professional knowledge, professional skills, and professional values, ethics and attitudes required for (a) performing their work with professional competence, and (b) continuing to grow this throughout their careers.[6]

21. In meeting the requirements of IES 5, IFAC member bodies should consider adopting a combined approach—requiring a minimum three-year period of practical experience and adopting elements of an output-based approach to assess competence developed by trainees during that period.

Period of Practical Experience[7]

22. A period of practical experience (a) gives trainees exposure to workplace activities over time, which contributes to developing and maintaining professional competence, and (b) enables trainees to observe and engage in real-life situations requiring the identification of ethical dilemmas or situations requiring professional judgment. This helps to develop ethical sensitivity and judgment.

23. IES 5 requires a minimum period of three years8 of practical experience. IFAC member bodies may interpret and state this requirement in a number of ways, including:

- setting requirements for trainees to gain experience across a range of specific work-related areas during the minimum three-year period;
- setting requirements for trainees to gain experience in work-related areas directly related to their intended professional specialization(s) during this minimum three-year period;
- setting requirements for trainees to complete a set number of hours or days over a defined period to meet the minimum three-year requirement;
- setting requirements for trainees to complete a set number of hours or a percentage of the overall period of practical experience in specific work-related areas during the minimum three-year period; and

6 IES 5, *Practical Experience Requirements*, paragraph 10

7 Note: all items in this subsection relate to input measures.

8 IES 5, *Practical Experience Requirements,* paragraph 11

- setting requirements for the minimum three-year period to make it more suitable to the background and intended career path of the trainee.

24. IFAC member bodies may consider setting requirements, as illustrated in paragraph 26 below, for recognizing practical experience gained by a trainee under a program established by another institution.[9]

25. IFAC member bodies may also consider setting requirements, as illustrated in paragraph 26 below, for recognizing part-time and/or voluntary work as part of a trainee's period of practical experience.

26. In situations such as those described in paragraphs 24 and 25 above, IFAC member bodies may set requirements that include, for example:

- that trainees demonstrate that their experience meets the requirements for practical experience set by the member body they wish to join; and/or
- that trainees demonstrate the relevance of their practical experience to their current/future role; and/or
- that only part of that practical experience will be recognized by the member body the trainee wishes to join.

27. To ensure that (a) trainees gain practical experience relevant to their current and future work roles, and (b) competence developed through practical experience does not become outdated, IFAC member bodies may specify a maximum period during which trainees gain the required practical experience.

Linking Practical Experience and Formal Education

28. To successfully develop the professional knowledge, professional skills, and professional values, ethics and attitudes, it is important to link a trainee's period of practical experience to their formal education constructively and coherently. For example, it may be necessary for trainees to demonstrate a certain level of technical knowledge of a topic before exercising professional judgment on that topic. This link may be achieved in different ways, such as:

- trainees completing their formal education before undertaking a period of practical experience; or
- trainees undertaking a period of practical experience concurrent with their formal education.

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[9] These may include other IFAC member bodies.

In both cases a mapping exercise should be done that links the formal education and competences/outcomes of the practical experience.

29. If education programs include substantial internships (periods of workplace experience undertaken during the accounting education program), IFAC member bodies may recognize relevant experience as contributing to the overall practical experience requirement.

30. The IAESB recognizes that some systems of accounting education emphasize the formal education component, which may include a significant proportion of practical accounting application. IES 5 allows such a period of relevant graduate professional education to contribute no more than 12 months[10] to the practical experience requirement.

31. IFAC member bodies may wish to consider whether it is helpful to formalise the trainee's obligations relating to practical experience.

Demonstrating Professional Competence[11]

32. IES 5 requires trainees to undertake a period of practical experience[12] that permits them to demonstrate their professional knowledge, professional skills, and professional values, ethics and attitudes.

33. IFAC member bodies will determine (a) the specific competences required of trainees for their environment, and (b) the defined standard for competence in one or more work roles. In setting the defined standard for competence in a particular work role, IFAC member bodies may require trainees to demonstrate a continued ability to perform relevant roles or tasks to a level appropriate for qualifying as a professional accountant.

34. IFAC member bodies may establish a framework[13] for practical experience that includes the areas outlined in IES 5. IFAC member bodies will need to ensure that trainees gain practical experience sufficient to develop and demonstrate competence in each of these areas.

35. One example of a framework for practical experience, based on these areas, is presented in Table 1 overleaf, covering:

- Gaining Responsibility
- Business Awareness
- Application of Professional Values, Ethics and Attitudes

10 IES 5, *Practical Experience Requirements*, paragraph 11

11 Note: all items in this subsection relate to output measures.

12 IES 5, *Practical Experience Requirements,* paragraph 10

13 IES 5, *Practical Experience Requirements,* paragraph 17

- Application of Technical Knowledge
- Professional Skills

The priority and importance of certain topics described in the table will vary depending on the development of an individual's career

36. Trainees undertaking specific work roles will require competences relevant to those roles. IFAC member bodies should take into account the requirement for some trainees to gain practical experience in those specific areas.

Table 1: Illustrative Practical Experience Framework

	Gaining Responsibility	**Business Awareness**	**Application of Professional Values, Ethics and Attitudes**	**Application of Technical Knowledge**	**Professional Skills**
AREAS	*Working at progressive levels of responsibility* See IES 5, paragraph 17 (e)	*An understanding of relevant organizations, how business works, and the business environment.* See IES 5, paragraph 17 (a), (c)	*Recognizing issues, using knowledge and experience to assess implications, and making confident decisions and recommendations* See IES 5, paragraph 17 (d)	*The ability to relate the work of a professional accountant to other business functions and activities* See IES 5, paragraph 17 (b)	IES 3, *Professional Skills*, groups the professional skills required by professional accountants under five main headings: • Intellectual skills; • Technical and functional skills; • Personal skills; • Interpersonal and communication skills; and • Organizational and business management skills. During their period of practical experience, trainees at all levels need to develop these professional skills to a level appropriate for the work being performed.

LEVELS	**LEVEL 1**	Gathering Information	Developing knowledge of relevant organizations, industries and markets, the business risks associated with them, and the business environment.	Developing an enquiring mind through asking pertinent questions, raising helpful queries and identifying issues.	Developing knowledge of the accounting and other technical areas relevant to the trainee's work role. Describing the relevant technical standards and rules.	
	LEVEL 2	Analysis and Options	Analyzing relevant organizations' environments, structures and business objectives, and the business environment.	Identifying key issues and understanding the implications of different courses of action.	Relating technical studies to practical work, and understanding how the breadth of technical knowledge impacts on work.	
	LEVEL 3	Applying Knowledge and Skills in a Workplace	Critically assessing performance, making recommendations for improvement, giving advice, and applying relevant reporting requirements.	Exercising ethical sensitivity and judgment and applying professional values, ethics and attitudes in the workplace.	Applying technical knowledge in the workplace.	

37. IFAC member bodies may consider developing simulations and/or similar activities that supplement practical experience. Activities may include:

- Work-based projects
- "In-tray" type activities
- Case studies
- Role-play

Education programs may provide opportunities to explore and practise certain activities, such as fraud detection, using simulation, where the workplace may not provide such experience. These activities are not intended to be a substitute for practical experience.

38. So that trainees will gain the relevant experience required for qualifying as professional accountants, IFAC member bodies may consider encouraging trainees and employers to explore opportunities such as secondment or job rotation.

Updating Practical Experience Requirements

39. IFAC member bodies may regularly review practical experience requirements to ensure that they remain current and relevant. Competences required of trainees during their period of practical experience change over time. IFAC member bodies may therefore (a) consult with others, including employers and regulators, and/or (b) conduct periodic studies, to review the competences required of professional accountants and update their practical experience requirements accordingly.

40. Although minor changes to practical experience requirements can be made as and when necessary, IFAC member bodies will need to conduct a major review of these requirements when updating syllabus requirements. This review needs to take account of changes in the work and competences required of professional accountants. In conducting the review, the member body may consult a number of stakeholders, including:

- Employers (including members of any Recognized Employer scheme as described in paragraph 61, and others)
- Academia
- Mentors
- Professional accountants (i.e., members of the member body)
- Regulators
- Trainees

SECTION 2: MONITORING AND CONTROL

Overview

41. This section provides guidance to IFAC member bodies in meeting the requirements of IES 5 regarding monitoring[14] and control of a period of practical experience.

42. Specific guidance is given in this section on (a) the role and responsibilities of the mentor, (b) recording and assessing practical experience, and (c) working effectively with employers (including establishing Recognized Employer schemes for those IFAC member bodies that choose to do so).

Role and Responsibilities of Mentors

43. Mentors help trainees in many ways, including helping them develop and demonstrate the professional knowledge, professional skills, and professional values, ethics and attitudes required of professional accountants. The term, "mentor" is intended to convey the concept of experienced professional accountants regularly passing on their experience, guiding trainees, and assisting trainees in merging formal learning with practical experience.

44. Mentors' responsibilities will vary with the specific environment in which the mentors and trainees operate. All mentors should aim to:

- understand trainees' work, and their need to gain relevant practical experience to qualify as a professional accountant;
- regularly review trainees' experience;
- support trainees' access to varied practical experience;
- communicate regularly and effectively with trainees, and with trainees' line managers where appropriate;
- provide trainees with appropriate supervision, mentoring, counseling, and evaluation;
- provide feedback to trainees on their practical experience, and assess their achievement of competences; and
- report to IFAC member bodies on their assessment of trainees' (a) application of ethical judgment, (b) behavior, and (c) development of the professional knowledge and skills required to qualify as a professional accountant.

45. IFAC member bodies should consider limiting the maximum number of trainees reporting to one mentor, taking into account the need for the mentor

[14] IES 5, *Practical Experience Requirements*, paragraphs 18-26

to provide each trainee with appropriate supervision, mentoring, counseling, and evaluation.

Establishing a Mentoring Process

46. IFAC member bodies may consider establishing a formal mentoring process, supported by appropriate documentation (e.g., roles and responsibilities). That documentation will likely identify key elements such as:

- Identifying potential mentors
- Appointing, approving, and training mentors
- Monitoring mentors
- Alternative mentoring arrangements (where necessary)

Identifying Potential Mentors

47. An important part of the mentoring process is a mechanism for encouraging suitably qualified and experienced members of IFAC member bodies to apply to become mentors. This could include:

- IFAC member bodies encouraging suitable professional accountants, including retirees, to volunteer as mentors (IFAC member bodies may publish and advertise the advantages of carrying out this role);
- IFAC member bodies encouraging employers to identify potential mentors within their organization;
- trainees identifying and approaching potential mentors within their organization; and/or
- regulatory authorities or similar bodies appointing mentors.

Appointing, Approving, and Training Mentors

48. IFAC member bodies may establish appointment/approval and training systems to enable them to select and train mentors. In doing so, IFAC member bodies may develop formal criteria for becoming a mentor, similar to those set out for illustrative purposes below:

Mentors have a current understanding of:

- the member body's admissions policy;
- the member body's code of ethics;
- issues facing the profession;
- the professional knowledge and professional skills required of trainees;
- expectations associated with mentoring;

- professional and technical issues relevant to practical experience; and
- any other specific requirements and responsibilities that relate to mentoring.

Mentors are:

- of sufficient professional standing to undertake their responsibilities as a mentor;
- interested in training future members of the profession;
- able to advise, counsel, evaluate, motivate, and provide direction to trainees;
- available for scheduled consultations with trainees;
- able to influence (at least to an extent) the work assignments trainees receive; and
- willing and able to participate in programs of mentor training.

Monitoring Mentors

49. IFAC member bodies may consider establishing a system of periodic monitoring to help ensure that mentors continue to (a) meet the member body's criteria regarding knowledge, skills and professional standing, and (b) provide appropriate supervision, mentoring, counseling and evaluation for their trainee(s). Such a system could include:

- desk-based monitoring of mentors (requiring documentation establishing mentors' knowledge, skills, professional standing, and activities);
- regular training and evaluation sessions;
- obtaining feedback from trainees on their mentors' performance;
- site visits to mentors (perhaps as part of a Recognized Employer site visit); and
- assessing and re-appointing mentors.

Alternative Mentoring Arrangements

50. The IAESB recognizes that suitably qualified mentors may not always be available in a trainee's workplace. Where this is the case, IFAC member bodies should consider establishing alternative mentoring arrangements, which could include:

(a) A team of trained remote mentors who meet the member body's criteria for mentors, and who are available where an employer is unable to provide such expertise. In these circumstances, it is essential that the remote mentor, the IFAC member body (and/or regulatory authority), the

trainee, and the employer make an extra effort to work together. For example, establishing a "Mentor Charter for Trainees" that details the required support and the obligations of all parties can support that effort.

(b) Seeking the support of suitably qualified mentors from individuals providing professional services to the employer, such as accountants and business advisors. Independence rules may prevent the auditor from undertaking this role.

Recording Practical Experience

51. IES 5 requires mentors to periodically review[15] trainees' records of practical experience. IFAC member bodies may therefore require trainees to periodically record their practical experience in paper or web-based logbooks, potentially in "real-time" for timely control, audit, and feedback. By using these records, mentors and/or IFAC member bodies can regularly monitor the relevance, depth, and length of experience.

52. Records of trainees' practical experience support the mentors' ability to provide timely feedback to trainees and/or IFAC member bodies on any shortcomings well before the end of the period of practical experience. The mentor's verification of these records provides:

- The member body with evidence that the period of practical experience has allowed trainees to demonstrate competence;
- The employer with evidence useful for appraising the trainee; and
- The trainee with evidence of experience that may be used when seeking future employment.

53. IFAC member bodies should consider reviewing trainees' records of practical experience periodically, using an appropriate sampling methodology where it is not practicable to review all records.

Assessing Practical Experience

54. As suggested in paragraph 34 above, IFAC member bodies may develop a framework for practical experience appropriate for their environment that directs mentors, employers and trainees to the areas in which trainees are expected to gain practical experience.

55. In that case, the member body may require the mentor to confirm, in writing, that the trainee has demonstrated the required competences. As discussed in paragraph 33 above, IFAC member bodies may require trainees

[15] IES 5, *Practical Experience Requirements*, paragraph 19

to demonstrate a continued ability to perform relevant roles or tasks to a level appropriate for qualifying as a professional accountant.

56. Mentors may assess trainees' competence in several ways, including through:

- direct observation of trainees' work;
- third party reports on trainees' work;
- discussion with trainees of their work and learning (e.g., as part of an appraisal process); and
- formal interview (in conjunction with or in addition to appraisal and/or a performance review interview).

57. Evidence and documentation that mentors may require to support their assessment of trainees' competence could include:

- Practical experience training records
- Learning logs, learner diaries, or similar records
- Portfolios of evidence (e.g., accounts prepared by the trainee, meeting reports, spreadsheet models, etc)

58. As part of the assessment, IFAC member bodies should encourage mentors to provide regular feedback to trainees on their achievement of competences. Feedback from mentors should take place at least annually (preferably more frequently), rather than only at the end of a period of practical experience.

59. IES 5 (paragraph 18) requires the IFAC member body, before admitting a candidate to membership, to ensure the acceptability of the practical experience candidates have gained. To assess trainees' practical experience against its requirements for membership, the member body may require trainees, mentors and/or employers to document experience gained and competences achieved, including through:

- Training records signed by the mentor
- Trainees' learning logs, or similar records
- Trainees' portfolios of evidence
- Records of appraisals, performance reviews, and/or meetings with mentors;
- Reports by the mentor to the member body validating practical experience gained and competences achieved by the trainee

Any deficiencies identified by the mentor and/or the member body will need to be addressed prior to admission to membership. In these situations

constructive feedback provided by the mentor and/or member body will be helpful to the trainee in responding to the deficiencies.

Working with Employers

60. Employers play a vital role in (a) working with IFAC member bodies and trainees to ensure the completion of a period of practical experience that satisfies IFAC member bodies' requirements, (b) identifying and supporting mentors, and (c) helping to match mentors with trainees.

61. In some cases, IFAC member bodies and employers may choose to enter into formal arrangements to provide relevant practical experience and support to trainees. Such arrangements may be called "Recognized Employer" schemes, or by a similar title. Guidance on establishing these is given in paragraphs 64 to 65 below.

62. In other cases, IFAC member bodies and employers may choose not to enter into any such formal arrangements. Guidance for IFAC member bodies on working effectively with employers that are not Recognized Employers is given in paragraphs 72 to 75 below. In each case, the member body should ensure that the employer evidences the suitability of the training environment.

63. To ensure that the objectives of a period of practical experience are met, regular and effective communication between the member body, the mentor, the employer and the trainee is essential. IFAC member bodies will need to ensure that appropriate mechanisms are in place to facilitate regular communication between these parties.

Establishing Recognized Employer Schemes

64. IFAC member bodies may consider establishing a Recognized Employer (or similarly titled) scheme that recognizes employers that provide an environment in which trainees can gain relevant practical experience.

65. Recognized Employer schemes may recognize employers for a fixed period of time, after assessing their ability to provide relevant practical experience. They may also include a mechanism for renewing approvals after re-assessment. A process for revoking Recognized Employer status may also be needed where it becomes clear that an employer is no longer able or willing either to provide relevant practical experience, or to abide by the principles and rules of the scheme.

Assessing and Approving the Practical Experience Environment

66. IFAC member bodies establishing a Recognized Employer scheme may encourage employers to adopt four basic principles for trainees' IPD during a period of practical experience, similar to those illustrated in Table 2 below:

Table 2: Illustrative Recognized Employer Principles for Initial Professional Development

	RECOGNIZED EMPLOYER PRINCIPLES FOR INITIAL PROFESSIONAL DEVELOPMENT
1.	Employers work with mentors and trainees to identify trainees' development needs.
2.	Appropriate practical experience is provided to meet trainees' development needs, including their need to meet the practical experience requirements of the relevant IFAC member body.
3.	Practical experience is monitored by the employer, usually via a mentor appointed by the employer in conjunction with the relevant IFAC member body.
4.	Trainees are regularly appraised, at least once per year (preferably more frequently), and their development needs re-assessed.

67. IFAC member bodies may need to collect and assess evidence from employers to ensure that they are (a) following the principles set out by the member body, and (b) providing a suitable environment for trainees to gain practical experience. Evidence could include:

- Employment contracts
- Job descriptions and role profiles
- Employer training policies
- Specific documents relating to the roles and responsibilities of trainees and mentors
- Staff handbook
- Appraisal/performance review documents
- Time sheets

68. IFAC member bodies may adopt additional requirements for Recognized Employers that prepare trainees for qualification in specialist areas, such as audit. In some jurisdictions, such employers are referred to as "Approved Training Organizations," or a similar name.

Monitoring Employers Previously Recognized

69. Periodic monitoring of Recognized Employers helps to ensure a continuing, suitable environment in which trainees can gain practical experience. IFAC

member bodies may therefore establish monitoring systems for Recognized Employers that include regular site visits. These could include:

- Meetings with employer representative(s) and reviews of employer documentation and training records
- Meetings with mentors and trainees to determine an employer's continued adherence to the Recognized Employer scheme

Establishing a System of Periodic Reporting

70. Where it is impractical to regularly visit all Recognized Employers, as described in paragraph 69 above, IFAC member bodies may establish alternative systems of periodic reporting that monitor employers' adherence to the Recognized Employer scheme. Such systems could include:

- Periodic, desk-based monitoring of employer documentation and training records; and
- Obtaining feedback from mentors and trainees (by mail, telephone or e-mail).

71. In establishing a system of monitoring Recognized Employers, IFAC member bodies may choose to combine elements of (a) periodic site visits, (b) regular desk-based monitoring, and (c) feedback from mentors and trainees.

Working with Employers that are not Recognized Employers

72. Employers that are not members of a Recognized Employer scheme or similarly titled scheme may still, in many cases, be able to provide the practical experience required by a member body. This is often the case where trainees gain practical experience in the corporate sector. In such situations, the member body, together with mentors and trainees, will need to work with the employer to:

- Plan the trainee's practical experience so that it meets the employer's needs, as well as the practical experience requirements of the member body;
- Ensure that the trainee gains a breadth and depth of practical experience, at increasing levels of complexity and responsibility; and
- Provide evidence that the trainee has gained the competences necessary for qualifying as a professional accountant.

73. To assist trainees before they begin a period of education leading to qualification as a professional accountant, IFAC member bodies should consider publishing easily accessible practical experience requirements and guidance that detail the expected roles and responsibilities of mentors,

employers and trainees. Examples are provided, for illustrative purposes only, in the appendices to this IEPS.

74. Sometimes it is clear that an employer is unable or unwilling to provide the required practical experience. In this case, the member body will need to inform both the employer and the potential trainee, ideally before recognition, that alternative arrangements need to be made to meet the member body's requirements for qualifying as a professional accountant.

75. IFAC member bodies may wish to establish periodic monitoring systems of trainees who work for employers that are not Recognized Employers to ensure that trainees continue to gain the relevant practical experience required to qualify as professional accountants. These could include:

- more frequent/more in-depth monitoring of mentors, to ensure that they continue to provide adequate supervision, mentoring, counseling, evaluation, support and advice to trainees;
- more frequent/more in-depth monitoring of trainees' records, to ensure that trainees are gaining relevant experience likely to satisfy the member body's admissions requirements;
- obtaining feedback from mentors and trainees (in person, or by mail, telephone or e-mail) on the suitability of the practical experience environment; and
- meetings (if possible) with mentors and employer representative(s) to discuss trainees' progress and the practical experience environment.

Appendix 1

Illustrative Guidance for Mentors, Employers and Trainees

IFAC member bodies should consider developing easily accessible practical experience requirements. IFAC member bodies should also consider guidance for employers, mentors and trainees which is clear and appropriate to the environment to which it relates. Suggested content (for illustrative purposes only) for these is provided below.

Suggested Content of Practical Experience Requirements

Mentors
• State how mentors may be authorized to act as mentors; • Outline mentor obligations; • State any ethical principles and conduct (e.g., they must meet the member body's CPD requirements); • Specify who can carry out the mentor role (i.e., experienced members of an IFAC member body); • Specify knowledge and skills requirements for mentors; • State practical experience requirements and requirements for the mentor's periodic review of the trainee's experience; • Specify the relationship and accessibility of the trainee to mentors (e.g., knowledge of trainee's work required); • Specify any training, skills and monitoring requirements for mentors; and • Specify the mentor's role in monitoring and assessing practical experience.
Employers
• State practical experience requirements and requirements for the employer's periodic review of the trainee's experience; • Consider different employer needs (e.g., employers in industry, employers in practice); • Reinforce quality of experience and support needed for trainees; and • Specify criteria for Recognized Employer status, the application process, and the monitoring regime.

Trainees
• State practical experience requirements, including records to be maintained; • Specify how the mentor and trainee should interact; • Specify trainee and member body obligations; • State ethical principles and conduct; • State how monitoring may be conducted; and • State how trainees may gain experience in an environment where the employer is not a Recognized Employer.

Suggested Content of Guidance

Mentors
• State technical requirements for practical experience; • State the mentor role and responsibilities; • Specify qualification requirements for mentors; • Specify knowledge and skills required of mentors; • State how to conduct reviews of experience and the importance of feedback to development of trainees; • Specify how planning can contribute to competence development; • Specify advisory services for problem resolution in mentoring; • State the benefits of mentoring to all parties; • Specify how updating of requirements may occur; and • Specify the training available for mentors.

Employers
• State technical requirements for practical experience – competences, timeframes, recording, and mentor involvement; • State requirements of Recognized Employer status, and how and when employers will be monitored; • State mentor responsibilities and frequency of trainee reviews; • Specify effective review methods; • Specify how employers may support trainees; • Specify how updating of requirements may occur; and • Specify details of consultative processes to update practical experience requirements.

Trainees
• State technical requirements on practical experience – competences required, timeframes and recording of experience; • Specify who can act as a mentor; • Specify how the trainee/mentor relationship should work; • Specify ways of obtaining experience and gaining employer support; • State benefits of practical experience; • State ethical obligations; and • Specify how updating of requirements may occur.

Appendix 2

Additional Illustrative Guidance for Trainees

In some circumstances, trainees themselves may play a substantial role in establishing suitable conditions for obtaining the practical experience required by their member body. Where this is the case, IFAC member bodies should consider publishing additional guidance for trainees to help them:

(a) Obtain employment that will allow them to complete the required period of practical experience;

(b) Obtain guidance from a suitably qualified mentor, enabling trainees to demonstrate the professional knowledge; professional skills; and professional values, ethics and attitudes required of professional accountants; and

(c) Plan and record the period of practical experience to ensure that both the trainee's and the employer's objectives are met.

Suggested content (for illustrative purposes only) of such guidance is provided below:

AREA (a)—Obtaining Relevant Employment	
Suggested Content of Guidance	**Rationale**
The workplace presents exposure to diverse situations and opportunities, and a variety of challenges.	Enables trainees to appreciate the variety of workplace challenges and ways to respond to challenges, while being guided in a supportive environment.
The workplace provides trainees with an ethical environment.	Enables trainees to develop the required professional values, ethics and attitudes required of professional accountants.
Access to suitable mentors to direct and guide experience is available.	The mentor's planning and guidance of experience enables a better range and depth of experience and learning.
Development opportunities are provided for the trainee.	Trainees will be provided with access to learning opportunities as a result of exposure to diverse situations through feedback, and possible further opportunities for appropriate skills/knowledge development.

AREA (a)—Obtaining Relevant Employment	
Suggested Content of Guidance	**Rationale**
Achieves the practical experience requirement of the member body.	Enables them to understand and meet the member body's requirements and ensures they become competent professional accountants.
Provides an understanding of what is required to qualify as a professional accountant.	Provides trainees with a clear understanding of the value of practical experience, and trainees' and mentors' roles and responsibilities, enabling trainees to achieve the necessary requirements in a planned and supported way.
Ideally, work with a Recognized Employer.	Recognized Employers provide a supportive environment in which trainees are developed and become competent professional accountants. Provides a full understanding of, and compliance with, member body requirements.

AREA (b)—Obtaining Guidance from a Suitably Qualified Mentor	
Suggested Content of Guidance	**Rationale**
Mentors are experienced members of an IFAC member body.	Mentors will have the knowledge, understanding and experience to support trainees' development.
Mentors have knowledge and understanding of trainees' work.	Mentors are aware of the trainees' work activities and outputs, and can identify the trainees' strengths and weaknesses/areas for development.
Mentors are able to provide opportunities for trainees to gain relevant experience.	Mentors help establish a planned approach to experience to ensure that trainees increase their level of responsibility and effectively achieve the required experience and competence.
Mentors have an understanding of the member body's requirements.	Mentors are aware of what the member body requires of trainees, and can help incorporate those requirements within the workplace. This provides an efficient way of obtaining experience and demonstrating competence that meets the member body's requirements.
Mentors are able to provide guidance and support to trainees.	Trainees are given feedback and coached to achieve the appropriate level of competence. Trainees' skills are developed and improved.

AREA (c)—Planning and Recording Practical Experience	
Suggested Content of Guidance	**Rationale**
Need to align employer objectives with member body requirements.	As trainees obtain experience and develop, they continue to add value to their employer's business. This also provides a structure to achieve the competence required by the member body.
Clear objectives for attaining competence.	A planned approach ensures the development and demonstration of competences, and meeting the member body's requirements.
Includes exposure to relevant, up-to-date and emerging work practices.	Experience enables trainees to apply in practice what they have studied.
Competences to be achieved.	Experience has clear outcomes and benefits, motivates trainees, and helps to keep them engaged and effective.
Progressive levels of responsibility.	Trainees will be given responsibility as they develop and demonstrate competence. They will gain broader exposure and develop and demonstrate additional skills, including interpersonal and managerial skills.
Consideration of ethical issues.	Trainees will meet the requirements set out in IES 4, Professional Values, Ethics and Attitudes, prescribing the professional values, ethics and attitudes professional accountants should acquire during the education program leading to qualification.
Recording practical experience.	Assists trainees in planning work activities, understanding and reflecting on how they have applied competence gained at work, and providing evidence to the member body of experience gained.