# Overview of Examination Development and Administration

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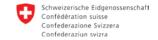




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# Purpose of this session



Examinations are the key assessment tool for most professional accountancy education programs, both at the university level and for PAO certification.

#### The purpose of this session is to:

- »provide a brief overview of the key development and administration processes for examinations, and
- »briefly illustrate how exams contribute to compliance with IES 6.

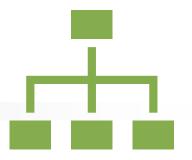




#### Based on this session, you should be able to:

- »Outline the key development and administration processes for accounting education program examinations
- » Explain the special considerations for developing and administering Integrative Capstone Examinations
- »Illustrate how the examinations development process and outputs supports compliance with the requirements of IES 6

#### Structure of this session



- I. Examination Development Process
- II. Administration of Examinations
- III. Special considerations for Integrative Capstone Exams
- IV. Supporting compliance with IES 6



# II. Examination development process

#### Development processes differ based on the context for the exam:

»At the university level, exams are typically developed and administered by the professor for their own cohorts of students.



» For PAO certification, examinations are normally developed by an exams group (which is different from the organization's education development team).

#### Development processes differ based on the context for the exam:

- »The PAO staff examinations team usually consists of:
  - » Management
  - » Examinations Developers
  - » Examinations Editors
  - » Administrative staff
  - » Exam Invigilators
  - » Exam evaluators (markers)



#### Goals of examinations include:

- » Assessing competencies
- » Ensuring minimum standards are met
- » Providing verifiable evidence of assessment



#### Required minimum standards come from:

- » IEASB's IESs (particularly IES 6)
- » the PAO's Competency Framework
- » Local laws and regulations





#### 1. Determine what should be examined:

- » competencies to be covered are based on the Competency Framework
- » material within each course is classified as examinable or non-examinable and tied to required levels of proficiency

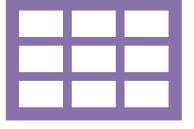
#### 2. Determine how content should be examined:

- » weightings are assigned to topic areas based on importance or essentiality (e.g., as informed by Practice Analysis results)
- » appropriate assessment types are specified (multiple-choice, short-answer/directed response, case analysis, etc.)
- » length of exam is determined



#### 3. Prepare Test Specification ("Blueprint") to specify:

- » Learning Objectives and competencies that are examinable
- » required levels of proficiency (e.g., no more than 20% of exam can be based on Foundation material)
- » types of questions to be used (MCQ, short-answer, case analysis)
- » minimum and maximum % of content coverage from each Module/Lesson
- » for integrative capstones, where examinable prerequisite content comes from



#### 4. Select and contract Exam Author (Examiner):

- » Requires extensive subject matter expertise
- » Normally an academic (e.g., PhD university professor)
- »Beneficial if examiner is also a professional accountant



# 5. Examiner works with Exam Developer (staff member) to create:

- »exam(s) (based on Blueprint)
- »suggested solutions and sample answers (for any required memos or reports in response to case simulations)

Exams may be developed in sets (preferred) or one at a time.



# 6. Examiner prepares a Table of Specifications to summarize:

- » coverage of Learning Objectives and competencies
- » sources for each solution (mapped to the course content)
- » % of exam coming from each Module/Lesson
- » question difficulty and time estimates
- » compliance with the Blueprint



#### 7. Complete extensive review process:

- » internal review by an Exam Developer (staff member) overseen by management
- » external committee review (by contracted group of subject matter experts)
- » editorial review (grammar, wording)
- » cultural bias review (to ensure wording is neutral and not confusing)



#### 8. Exam is approved and prepared for delivery:

- » final formatting and checks
- » final signoffs (internal management and external review committee)
- » secure photocopying or secure electronic transmission, if exam is computer-based
- » distributed to Exam Invigilators for exams administration process





# II. Administration of Examinations

#### Administration of Examinations



#### For professional exams:

- » The PAO maintains control over exam papers until delivery to Exam Invigilators/exam site
- » Invigilators administer the exams based on an centrally-coordinated schedule (generally several exam sessions per year)
- » Invigilators may be accounting body staff or trusted professional member volunteers
- » Strict standards and processes for invigilation to maintain control of exam questions and blank and completed papers

#### Administration of Examinations



#### In the exam centre, security is essential:

- » Strict policies adhered to regarding allowable exam room materials (e.g., calculators, time-keepers, dictionaries, etc.)
- » Exam writers are carefully spaced
- » Identities are verified
- » All materials are controlled (including blank working papers)
- » Serial numbers may be used on exams

#### Administration of Examinations

#### On completion of the exam:

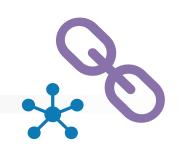
- » Invigilators return exams to PAO office
- » Exams then redistributed for marking
- »Lead marker is often the Examiner (may have assistants)
- »Marking is anonymous no names on exam papers (only student numbers)
- »Marking processes designed to ensure consistency and validity (e.g., sample stats used)





# III. Special considerations for Integrative Capstone Exams

# Integrative Capstone Examinations



# For Professional-level, integrative capstone exams, the process is more complex:

- » exam questions ("items") are developed by a team of academics and professionals from different fields of practice (not an individual exam author)
- » questions are based on competencies to be assessed
- » weighting of competencies are based on Practice Analysis
- » Blueprint includes competency weightings

# Integrative Capstone Examinations



#### The marking process is also more complex:

- » exams are marked by large group of markers in central location
- » teams of markers evaluate one question each
- » competency grids are used to assess performance
- » pre-marking is done and statistics are used to ensure consistency (that all markers are making consistent pass-fail decisions)



# Supporting compliance with IES 6

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#### **Objective and Scope:**

- » IES 6 prescribes the requirements for the assessment of professional competence of aspiring professional accountants that need to be achieved by the end of IPD
- » Ties to related requirements in IESs 2 to 4, which all require assessment.
- » Assessment activities need to be based on verifiable evidence (para 10).



# Supporting compliance with IES 6



- » Examples of assessment activities may include, but are not limited to (para A6):
  - » written and/or oral examinations
  - » objective testing
  - » computer-assisted testing
  - » workplace assessment of competence by employers
  - » review of a portfolio of evidence on completion of workplace activities

# Key Characteristics of Quality Assessment



Assessment activities should be designed to have high levels of (para 9):

- » Reliability
- » Validity
- » Equity
- » Transparency
- » Sufficiency











# **Exams: Summary of Key Aspects**





### To meet IES 6 criteria:

- » Choice of competent and experienced developers and reviewers ensure reliability and validity.
- » Strict security processes support reliability.
- » For sufficiency and validity, exams must cover the range of technical competence, as well as professional skills, values, ethics, and attitudes.
- » For reliability, validity and sufficiency, exams occur throughout the program, with capstone exams covering the majority of competencies at the end of the certification program.

# **Exams: Summary of Key Aspects**







#### To meet IES 6 criteria:

- » For reliability, psychometric evaluation is performed:
  - » Analysis of results statistics used to assess any outliers (e.g., questions that didn't differentiate strong and weak candidates or effectively contribute to the "pass/fail" decision)
- »To reflect high-stakes nature, special processes are used for integrative capstone exams – fully competency-based, questions developed, and marked by teams.

# **Exams: Summary of Key Aspects**



#### To meet IES 6 criteria:

- »For equity: national consistency is imposed same exam in all regions.
- »To support equity: bias reviews are performed to ensure certain candidates are not advantaged.
- » For transparency: requirements, Blueprints, timing etc. are disclosed.
- » For transparency: sample exams are provided.



Questions?

