

IFAC

**Education
Committee**

**Issued by the
International
Federation of
Accountants**

**July 1999
Study 2**

**An Advisory on
Education and
Training of
Technical
Accounting Staff**



The mission of the International Federation of Accountants (IFAC) is the worldwide development and enhancement of an accountancy profession with harmonized standards, able to provide services of consistently high quality in the public interest. The Education Committee of IFAC was formed to develop and/or distribute pronouncements on both the prequalification education and training programs of accountants and on continuing professional education for members of the accountancy profession. This Study is one of these pronouncements.

The Education Committee welcomes any comments you may have on this Study both in terms of feedback and in terms of its future activities.

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ISBN 1-887464-40-9

**AN ADVISORY ON
EDUCATION AND TRAINING OF TECHNICAL ACCOUNTING STAFF**

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Preface

The IFAC Guideline on the Education and Training of accounting technicians was first published in October 1987 (IEG7). The guideline acknowledged the important role of accounting technicians within the accountancy profession. It set out an educational program for technicians and guidance on establishing institutional structures to support their training and development.

In April 1998 IFAC's Education Committee set up a Sub-Committee to revise IEG7. The Sub-Committee's research and its consultations with countries and organizations with an interest in accounting technician training established that a substantial update of the 1987 guideline was required. It was generally agreed that the accounting technician's role had developed significantly and needed redefining. In particular, recent major advances in information technology were considered to have had a significant impact on the accounting technician's changing role and needed to be taken into account in training and education programs.

Furthermore, it was agreed to increase the utility of this study, in countries with no familiarity with accounting technicians by replacing the term "accounting technicians" with the term "technical accounting staff," which would include all those technical staff a professional accountant has responsibility to train.

As a result of revisions made, the Guideline is now issued in the form of a Study to allow organizations maximum flexibility when considering the education and training of technical accounting staff.

Warren Allen
Chairman, Education Committee

International Federation of Accountants

Education Committee 1998-2000

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INTRODUCTION

1. The term “technical accounting staff” refers to staff engaged in technical accounting work who are directed by, and support professional accountants and includes staff customarily known as “accounting technicians”. The term “technical accounting staff” does not include trainees who are in the process of qualifying as professional accountants.
2. This study should enable bodies to draw up their own operational programs for the education and training of technical accounting staff. However, staff engaged in this work will not necessarily be formally registered in such a program. It is hoped, therefore, that the contents of the study will also provide evidence of good practice for employers of technical accounting staff when designing staff development programs.
3. The purpose of this study is to:
 - describe the various roles undertaken by technical accounting staff;
 - provide guidance to bodies wishing to organize education and training schemes for technical accounting staff; and
 - provide evidence of best practice for the development of technical accounting staff.
4. The provision of competent technical accounting staff is relevant to developed and developing countries, although the particular needs of countries will be different depending on the size of the population, the developmental stage of the accountancy profession, and other local circumstances. This study is therefore intended to provide a structure for the training and education of technical accounting staff which is applicable to all, but which is flexible and can be adapted to meet different training requirements. Although detailed training schemes are included in the Appendices, they are not intended to be prescriptive.

THE DEMAND FOR TECHNICAL ACCOUNTING STAFF

5. In recent years there has been a considerable increase in the demand by employers throughout the world for appropriately qualified technical accounting staff. Two main factors appear to be at work, one pointing to an increased demand for technical accounting staff in specialized areas and the other to a requirement for “generalist” technical accounting staff.
6. The developing role of technical accounting staff is itself a function of the increased need for accountancy services in all employment sectors arising from such factors as:
 - the increased complexity and competitiveness of business activities (e.g., advanced technology, globalization of markets, more complex forms of business organization);
 - the need for public accountability and the growth of accounting regulation;
 - the increased demand for personal accounting services such as tax advice; and
 - the increased breadth of accounting services provided by professional accountants.
7. Developments in Information Technology (IT) have been crucial in amplifying these trends. Professional accountants have been freed from some of the more routine aspects of accounting but at the same time the new technology has led to the development of more sophisticated services and

demands for more and better management information. This has in turn created a demand for technical accounting staff able to use the technology to deliver an improved accounting service.

8. As accounting functions become more specific there is an increased demand for well-trained support staff in all branches of accounting. Technical accounting staff needs to develop skills in these specialist areas.
9. The parallel requirement for well-trained “generalist” technical accounting staff is also related to the growing demand for accountancy services and in particular the key role of effective accounting practices in economic development. There tends to be a demand for generalist technical accounting staff in the following situations:
 - where the accounting profession is so structured that there are a relatively small number of accountants with full professional qualifications; and
 - in the case of small enterprises, where the direct employment of a professional accountant would not be appropriate or affordable.

THE ROLE OF TECHNICAL ACCOUNTING STAFF

10. Technical accounting staff are often described as “the skilled support staff for professional accountants,” although there are some situations where technical accounting staff work without direct supervision by a professional accountant. No simple description can be sufficiently comprehensive to reflect the wide diversity of roles undertaken by technical accounting staff. For the purpose of this study, it is important to acknowledge the complexity of this situation by examining:
 - the relationship between technical accounting staff and professional accountants; and
 - the wide range of job roles undertaken by technical accounting staff.

Relationship with Professional Accountants

11. The basic distinction between professional and technical accounting staff roles is between strategy and policy making on the one hand and implementation and support on the other. In practice, however, the situation is more complex.
12. It is possible to define the role of technical accounting staff in negative terms by saying that the skills required are higher than are needed for routine clerical work but lower than would be expected of a professional accountant. In IFAC pronouncements the term “professional accountant” is usually taken to refer to individuals who are members of an IFAC member body. A closer examination of the two roles is necessary in order to identify the specific contribution of technical accounting staff to the accountancy profession.
13. The International Standard Classification of Occupations (ILO 1968) may provide a starting point. The professional accountant’s role is defined as follows:

“to plan and direct accountancy services, advise on accountancy problems and plan and conduct financial audits of private persons, enterprises, institutions and government agencies.”
14. Although a number of objections may be raised against this definition, words such as “plan,” “direct” and “advise” point to the essential strategic, policy making, managerial and advisory nature of the

professional accountant's role.

15. By contrast, technical accounting staff have an operational rather than a strategic or policymaking role. They will be responsible for the efficient operation of existing systems and the implementation of agreed policies. However, given their practical knowledge, technical accounting staff are well placed to contribute to the improvement of systems. Technical accounting staff are not normally required to advise clients or senior managers within an organization although, given the importance of effective communication at all managerial levels, such staff should be able to interpret relevant accounting information and offer guidance within limits to more junior managers. There is clearly a significant overlap between the role of experienced technical accounting staff and the duties normally undertaken by a partially qualified professional accountant.
16. The distinction between "generalist" and "specialist" technical accounting staff referred to in paragraphs 5-9 is also relevant in defining the relationship with professional accountants. Whereas the "specialist" may be said to support the professional accountant, the roles are different in the case of the "generalist." "Generalist" technical accounting staff may be undertaking a wide range of accountancy services, often in some isolation. They will need appropriate training to carry out these responsibilities and also guidance, advice and *support* from professionals who should accept overall responsibility for the work performed.

An Analysis of the Range of Job Roles

17. Technical accounting staff work in organizations of all types and sizes and in all sectors of the economy. There is also a wide range of work undertaken. The work of some such staff with job titles such as "Accounts Clerk," "Bookkeeper" or "Cashier" can be fairly routine and can involve a significant amount of clerical tasks. In more senior contexts technical accounting staff will hold posts such as "Audit Assistant," "Credit Controller" or "Budget Officer." "Generalist" technical accounting staff, carrying out a wide range of tasks guided (perhaps externally) by a professional accountant, may be referred to as "Accounts Supervisor" or simply "Accountant".
18. An analytical framework is helpful to show the relationship between the key variables. The actual roles depend on four interdependent factors:
 - Economic sector
 - Level of competence
 - Field of competence
 - Range of competence

Economic Sector

19. There is broad similarity between most tasks undertaken by technical accounting staff working in different industries - payroll accounting, cash accounting and credit control for instance. On the other hand, some industries in the economy may have specific accounting requirements resulting in account support roles in specialized areas. Certain competences, such as preparing personal tax computations, may be specific to staff working in accounting practices. In most countries public sector agencies have highly specific accounting regulations and procedures requiring specialist skills and knowledge from technical accounting staff operating beyond the most junior levels. The significance of this diversity for education and training schemes will be discussed later.

Level of Competence

20. Technical accounting staff roles can range from the routine, largely clerical level, to roles requiring a higher level of competence. At the lower level the tasks carried out will involve the recording and processing of data. The higher levels will involve analyzing, reporting and, perhaps, interpreting. At these advanced levels the role may be more varied. For example, a technician may be the supervisor of a section within a large accounting function responsible for drafting financial statements for professional accountants, producing information for budget holders, or contributing to the improvement of accounting systems. These competences might be expressed in the form of a hierarchy:

			Interpreting
			Drafting
			Supervising
			Improving
Recording Processing	Analyzing Reporting		
LEVEL 1	LEVEL 2		LEVEL 3

In practice, technical accounting staff will be required to display a combination of these competences.

Field of Competence

21. The competences defined above may be employed in a range of accounting fields. In general terms these might be defined as financial accounting, management accounting, financial management, audit and taxation. Given that technical accounting staff (particularly in larger organizations) often work in specialist sections, these broad groups could be analyzed in more detail. For instance “financial accounting” might be subdivided into: cash, accounts payable, accounts receivable, payroll, asset accounting, general ledger, and financial statements. It is perhaps inappropriate to give a universal classification in this study as practice and terminology varies between countries. However, the general principle is clear.

Range of Competence

22. This study has already introduced the distinction between technical accounting staff working as “specialists” and those working as “generalists”. These are of course “ideal types” and in practice the situation will be less clear cut. Range of competence may be illustrated by envisaging a matrix in which the competences stated above are mapped against the various fields of accounting however these are expressed. The number of cells in the matrix would indicate the range of competence where competence needs to be demonstrated.
23. Such an analysis should help in defining more precisely the various roles of technical accounting staff. The following cases are given as examples of roles:
- a junior who has undertaken a number of different jobs in the management accounting field mainly at level 1 (as described in paragraph 20) and who is training to progress to level 2;
 - a senior in a small firm responsible for all financial and management accounting functions at levels 2 and 3 under the guidance of an external accountant; and
 - an audit assistant currently working at levels 1 and 2 who may be expected to undertake some

level 3 responsibilities in the future (supervision of audit clerks for example).

24. It should be noted that the importance of flexibility and progression is implicit in these cases.

OBJECTIVES OF EDUCATION AND TRAINING

25. Competent technical accounting staff help professional accountants to be more effective. They are the foundation of any accounting system. The design of sound education and training schemes with the objective of developing competent, flexible, responsible, progressive and well-motivated technical accounting staff is therefore of crucial importance.
26. Given the extent of change in the business environment, IT, and accounting practice, it is vital that the education and training of technical accounting staff should extend beyond developing the skills required to carry out a narrowly defined given task in a competent manner. Flexibility and the development of transferable skills are essential. Accounting tasks need to be understood in their wider business context if they are to be performed effectively.
27. The existence of a well designed education and training scheme will encourage motivation, professionalism and commitment from accounting staff, qualities which carry obvious benefits for employers. An education and training scheme for technical accounting staff offers opportunities for access, progression and continued learning in a career. In many cases, an individual may wish to pursue professional status after completion of a technician level training program.
28. In addition to basic accounting and IT skills, competent technical accounting staff will need to be effective communicators, orally and in writing. The ability to develop effective working relationships with other members of the organization is also important. There is a trend in organizations away from hierarchies towards flatter structures with more emphasis on teamwork. Technical accounting staff have a considerable contribution to make in accounting teams by virtue of their detailed, practical knowledge of the operation of accounting systems.
29. The continuing development of technical accounting staff is essential in the changing accounting environment. Professional organizations responsible for the regulation of technical accounting staff should encourage qualified persons to meet this commitment by having strong Continuing Professional Development policies backed by a structured program of relevant training activities.
30. In many countries the shortage of competent accounting staff is a significant impediment to economic development. A very high priority should be given to the development of effective education and training schemes in these circumstances.

COMPETENCE AND ITS ASSESSMENT

31. The concept of competence-based education and training is widely accepted in many countries as relevant for vocational training and development. For technical accounting staff, where practical “hands-on” skills are essential, the emphasis on competence is particularly appropriate. Whilst this study supports a competence-based approach in principle, it is recognized that there may be different views about how this principle may be translated into operational education and training schemes.
32. An IFAC Education Committee Discussion Document – “Competence-Based Approaches to the Professional Preparation of Accountants” (June 1998) – gives a definition of competence in relation to professional accountants. If amended and combined with other available statements, we may define competence in relation to technical accounting staff as:

- The ability to perform the tasks and roles expected of technical accounting staff to a defined standard that reflects the expectations of employers and clients, consistently and over time.
33. The key feature of a competence-based approach to education and training is that it should be concerned with providing the skills, knowledge and understanding that individuals need to perform to the standards required in the workplace. Competence is a broad concept. It includes those skills that people need now and will need in the future. It also covers the ability to transfer skills and knowledge to new situations within an occupation. Individual tasks should be seen in a wider context. The competence of technical accounting staff, understood in this wider sense, may be classified under the following headings:
- technical accounting skills
 - information technology skills
 - numeracy and communication skills
 - personal effectiveness
 - business awareness
34. Competence-based systems of education and training focus on one key output, i.e., competent individuals in the workplace. Traditional systems of education and training usually define a set of required inputs, for example, an educational course of a specified duration with a defined content, supplemented by a period of work experience. In such systems the stated inputs may be connected but are certainly not integrated. Traditionally, the main outputs are measured by examination performance that is often largely a test of knowledge. Competence-based assessment measures what a person can do as well as what a person needs to know for a job to be performed. It attempts to simulate as closely as possible the practical skills involved as well as testing the knowledge and understanding that should underpin those skills.
35. Underpinning knowledge and understanding is a crucial component of competence. In the case of technical accounting staff, requisite knowledge and understanding may be classified under the following headings:
- knowledge of the organization's policies and procedures;
 - understanding of the organization's technical systems (e.g. markets, processes, organization, finance);
 - industry-specific knowledge;
 - technical accounting knowledge;
 - understanding of accounting principles; and
 - knowledge and understanding of relevant aspects of the business and accounting environment (e.g., economic and legal aspects and the regulatory framework of accounting).
36. Many of these knowledge requirements are not "academic" in the traditional sense and any assessment will ideally be carried out in the workplace. So far as the more traditional subjects are concerned, it is important that courses of study contribute to the development of competence in a focussed way.

37. Although the relevance of the concept of competence may appear self-evident, problems will arise when translating the principle into operational education and training schemes. In particular, it is sometimes assumed that competence must be assessed in the workplace and that such an approach results in a downgrading of more formal assessment methods such as examinations. However, this is not the case; “competence” is an objective, not a method of assessment. There are clearly some cases where, if circumstances permit, it would be more appropriate to assess competence in a real work situation - in the assessment of data processing skills, for example. It seems equally appropriate to assess other topics such as knowledge of accounting principles and techniques through more formal methods such as a competence-based examination, particularly as there is a considerable body of expertise in such assessment methods in accounting.
38. In an operational program the balance between examinations and other methods of assessment will depend on local circumstances and policies. The detailed guidelines outlined in the next section and in the appendices give alternative patterns depending on whether or not it is feasible to devolve some of the more “practical” assessment from the center. It should be emphasized that the overriding objective should be the same in both cases: to develop technical accounting staff who are competent in the workplace.

EDUCATION AND TRAINING GUIDELINES

39. Guidelines for the design of competence-based education and training schemes for technical accounting staff are set out in the Appendices. The flexible structure proposed is intended as a framework for bodies wishing to develop operational schemes to meet local circumstances.
40. The total role of technical accounting staff, as outlined in the previous section, is analyzed into its component parts. Each of these components is presented in the form of a unit. Appendix 1 lists these units and Appendix 2 is an example of the format of a unit. This framework should enable programs to be developed in detail to meet local needs with the addition of further specifications to clarify the assessment arrangements. Where possible, countries should develop these units into explicit and comprehensive standards of competence. These standards would be drawn up in consultation with employers and used as benchmarks for competent workplace performance. Each unit would include a statement of key competences, the main knowledge and understanding requirements, and details of how the unit would be assessed. The fully developed standards would be used to establish best practice in training programs and would ensure the reliability of assessment.
41. The units are grouped into three levels corresponding to the levels of competence identified in the analysis of the roles of various types of technical accounting staff. One advantage of a unit-based scheme is that trainees can accumulate individual unit credits to suit their personal requirements, including learning pace and workplace preferences. Each completed level could also be given separate certification if necessary.
42. Given the wide variations in education and training infrastructures, the list of units in Appendix 1 is presented in two versions. Version A assumes that a certain amount of assessment can be devolved (to either the workplace or local training institution). Version B relies on a more centralized examination system. In both versions, assessment should be clearly related to the standards of competence.
43. Devolved assessment (see Appendix 1, Version A) may take a number of forms; in principle, assessment in the workplace is the most valid method for testing practical skills. However this is not possible in all cases and therefore simulations of workplace activities (in a college or similar

- environment) and practical assignments are acceptable methods of devolved assessment. There may be concerns about the reliability of workplace assessment in circumstances where there is not a strong history of effective in-company training in accounting skills. In such cases the establishment of a competence-based scheme may be the catalyst leading to an improvement in training facilities in workplaces and training institutions. In any system of devolved assessment it is recommended that a portfolio be used to record evidence collected from the workplace.
44. The relative roles of professional associations and colleges (including distance learning providers) in the provision of courses and the formal assessment of competence will again depend on local circumstances. It is recommended that alternative routes leading to the assessment of competence should be available to meet the wide variation in educational background, education and training opportunities and personal circumstances of trainees.
 45. Examinations in both versions A and B of Appendix 1 should preferably be competence-based. In other words the form and content of the assessment should be closely related to the defined competences and underpinning knowledge requirements as set out in the unit. The objective should be to simulate practical tasks rather than simply test academic knowledge.
 46. The variations between the role of technical accounting staff in different industries have already been noted. These industry-specific variables may be more significant for technical accounting staff than for the professional accountant because technical accounting staff are more closely involved in the day-to-day operation of the organization. For the most part it is better to leave the treatment of such special factors to training in the workplace. In the interests of job mobility and the development of transferable skills there is considerable merit in designing qualifications that have general validity.
 47. The Business Environment units in the proposed structure are intended to assess a candidate's knowledge and understanding of relevant aspects of law, applied economics and business organization. The assessment of professionalism and understanding of business ethics in technical accounting staff is important and could be included in the unit "Organizational Environment" (see IEG10 "Professional Ethics for Accountants"). All of the Business Environment units will need to be designed to reflect local circumstances.
 48. It may be useful to summarize some of the factors that need to be considered when translating this study into an operational education and training scheme:
 - institutional arrangements for the regulation of the accountancy profession;
 - any separate institutional arrangements for regulating the education and training of technical accounting staff;
 - level of economic development;
 - general level of numeracy and communication skills of accounting technician trainees;
 - vocational education facilities;
 - facilities for training technical accounting staff in the workplace; and
 - quality assurance arrangements.
 49. The IFAC Discussion Paper *Competence-Based Approaches to the Professional Preparation of Accountants* includes useful guidance on the importance of validity, reliability and consistency in assessment, which are also relevant in this context.

CONCLUDING REMARKS

50. Technical accounting staff are the foundation of any accounting system. In many cases it is the shortage of competent staff at this level that is the main constraint in developing an effective accounting service. The design of sound education and training schemes for technical accounting staff is therefore of crucial importance. These schemes should be “competence-based” using the broad interpretation of the concept outlined in paragraphs 34 and 37. There is, however, no single set of recommendations which can be universally applicable. The analysis of work undertaken by technical accounting staff shows a wide diversity of roles and responsibilities and the relative importance of these roles will vary between countries. There are also differences in professional organization, educational infrastructure, and other issues that will need to be considered. It is hoped that the framework and examples outlined in the appendices will help in designing operational schemes to meet local circumstances.

Appendix 1 – page 1

PROPOSED UNIT STRUCTURE: VERSION A

Stage 1 units	Assessment Suggestions
Cash Accounting	Examination and Devolved
Accounting for Credit Transactions	Examination and Devolved
Payroll Accounting	Examination and Devolved
Data Processing*	Devolved***
Communication	Devolved
Business Practice	Devolved
Stage 2 units	
Preparing Financial Accounts	Examination
Cost Accounting	Examination
Preparing Reports and Returns	Devolved
Information Technology*	Devolved
Organizational Environment (organizations, basic law)	Examination
Personal Effectiveness	Devolved
Stage 3 units	
Cost Management**	Examination
Financial Statements (general)**	Examination
Accounting Environment ** (business law, applied economics)	Examination
Business Financial Statements	Examination
Public Sector Financial Statements	Examination
Budgetary Control	Examination
Credit Control	Examination
Managing Accounting Systems*	Devolved
Auditing	Examination or Devolved
Business Taxation	Examination
Personal Taxation	Examination
Project Evaluation	Examination

* IEG11, *Information Technology in the Accounting Curriculum* provides guidance relevant to these units.

** Common core at Stage 3.

*** For the meaning of “devolved” assessment, see paragraph 43.

Appendix 1 – page 2

PROPOSED UNIT STRUCTURE: VERSION B

Stage 1 units	Assessment Suggestions
Cash Accounting	Examination
Accounting for Credit Transactions	Examination
Payroll Accounting	Examination
Data Processing	Workplace*
Communication	Examination
Business Practice	Examination
Stage 2 units	
Preparing Financial Accounts	Examination
Cost Accounting	Examination
Preparing Reports and Returns	Examination
Information Technology	Examination
Organizational Environment (organizations, basic law)	Examination
Personal Effectiveness	Workplace*
Stage 3 units	
Cost Management**	Examination
Financial Statements (general)**	Examination
Accounting Environment ** (business law, applied economics)	Examination
Business Financial Statements	Examination
Public Sector Financial Statements	Examination
Budgetary Control	Examination
Credit Control	Examination
Managing Accounting Systems	Workplace Project*
Auditing	Examination
Business Taxation	Examination
Personal Taxation	Examination
Project Evaluation	Examination

Notes

* If at all possible, these units should be assessed in the workplace, as assessment by formal examination would be inappropriate. If assessment in the workplace is not feasible there should be a strong recommendation that employing organizations incorporate these topics in workplace training programs.

** Common core at Stage 3.

Although practical competence in the workplace is not formally assessed for each unit, it is important that training schemes cover all the units for which devolved assessment is recommended in Version A.

Appendix 1 – page 3

Notes to Appendix 1 (both versions)

- (i) While many of the topics in the appendices to this advisory are similar to those required to be covered in the education and training of a professional accountant, it is intended they will be dealt with in less depth for technical accounting staff.
- (ii) As stated in the text of this study, the structure is not intended as a set of “international standards” but a suggested profile which will need to be modified to meet local circumstances when designing an operational education and training scheme.
- (iii) The assessment suggestions are not intended to be prescriptive. The actual balance between education and training and between methods of assessment will depend on local circumstances. The two versions given are not the only possibilities.
- (iv) It is recommended that candidates should be required to show competence in all the units at Stages 1 and 2 as these cover generic skills applicable to all sectors and environments. At Stage 3 different packages of units could be designed to meet local circumstances. Groups of units could be formed to meet the needs of technical accounting staff engaged in generalist roles, accounting practice, management accounting, the public sector and accounting supervisor roles. However, it might be considered that there should be a common core of units at Stage 3 applicable to all competent technical accounting staff. The suggested common core units are indicated by **.
- (v) The content and titles of the units concerning “Organizational Environment” and “Accounting Environment” would reflect local circumstances. “Business Practice” would include office procedures, the storage and retrieval of information, the use of basic office equipment and health and safety issues. “Personal Effectiveness” would include time management, managing personal relations in the workplace, developing self-confidence, and managing personal learning and development. In this proposal there is no separate unit for numeracy as it is assumed that this is assessed naturally in the units. The same applies for communication beyond Stage 1. The way in which the assessment of basic numeracy and communication competence is incorporated in a scheme will depend on local factors. For example, in a country where proficiency in English as well as the local language or languages is desirable, a separate unit or units in Business English might be necessary.
- (vi) In Version A, the weight of assessment by examination increases through the stages until it is predominant at Stage 3. This reflects the increase in the amount of knowledge and understanding required at the higher levels. Examinations are also an effective means of quality control to ensure uniformity of standards in qualified technical accounting staff.

Appendix 2 – page 1

SAMPLE UNIT FORMAT - UNIT TITLE: COST ACCOUNTING (STAGE 2)

Content

- (i) elements of cost: methods of recording, analyzing and monitoring costs of materials labor and expenses
- (ii) fixed, variable and semi-fixed costs
- (iii) types of costing systems and their relation to the organization's operating systems: job, batch, process, and unit costing systems
- (iv) direct and indirect costs: the allocation, apportionment and absorption of overhead costs
- (v) standard costing; setting standards for materials, labor and overheads
- (vi) variance analysis: materials usage and price, labor rate and efficiency overhead expenditure, efficiency, volume and capacity.
- (vii) interpretation of variances
- (viii) activity based systems of allocating costs: cost drivers, cost pools
- (ix) analysis of the effect of changing activity levels on costs

Key Competences

- (i) follow the organization's procedures
- (ii) code, analyze, and record correctly
- (iii) apply accounting techniques correctly
- (iv) identify and interpret significant variances
- (v) present reports in an appropriate format

Assessment Suggestions

Competences (iii), (iv), (v) and part of (ii) could be assessed in an examination which includes realistic problems, interpretation exercises and simulated reports to management. This might be considered an adequate test of general competence in this unit without the need for further devolved assessment.

Training schemes in the workplace should cover the main costing procedures as outlined above that are specific to the organization. The trainee should appreciate the relationship between the costing system and the organization's technical system (inputs, conversion processes, outputs) and the organizational structure.

Appendix 2 – page 2**Notes to Appendix 2**

- (i) The first section (**Content**) lists the procedures, principles and concepts relating to the unit.
- (ii) The key competences listed in the second section will be the focus of any assessment scheme for the unit, whichever *method* of assessment is used.
- (iii) The third section (**Assessment Suggestions**) gives an indication of the method of assessment that might be appropriate in the case of this unit (examination, devolved assessment or a combination of both). The actual decision will depend on local circumstances. In this particular case it is suggested that competence would be adequately assessed through examination alone. In other units it might be suggested that devolved assessment would be more appropriate if circumstances permit. This section also includes training recommendations that would be relevant whether or not there is an element of devolved *assessment*. It is recommended that relevant experience in the workplace should be systematically recorded and analyzed in a portfolio or logbook.