

intellectual levels

Gareth Owen explains how the design of the new ACCA Qualification can help students learn more effectively.

testing, testing, one, two, three

■ **For the new ACCA Qualification, all Study Guides refer to three intellectual levels. These represent the three bands of intellectual or cognitive ability required to study a particular subject or topic area.**

It is recommended best practice in accounting education to give students as much guidance as possible on how much study is required in order to achieve syllabus aims and objectives. Students therefore need to be aware of the depth at which they will be assessed in any given area. This article explains how the system of intellectual levels should be used in relation to the ACCA syllabus, and looks in detail at the *Study Guides*.

WHAT ARE INTELLECTUAL LEVELS?

In the 1950s, educational psychologist Benjamin Bloom identified six main cognitive domains relating to study:

- knowledge
- comprehension
- application
- analysis
- synthesis
- evaluation.

According to Bloom, the level of cognitive difficulty increases from the recall of knowledge to the evaluation of complex ideas and situations resulting in appropriate decisions or recommendations.

Best practice suggests that professional accounting syllabuses should use three (rather than six) broad bands of cognitive difficulty to help students and their teachers gauge how much preparation is needed, and the level of difficulty they may encounter, in meeting various educational capabilities.

ACCA had adopted three ascending levels of cognitive difficulty, where 1 represents knowledge and comprehension, 2 is application and analysis, and 3 is synthesis and evaluation. These cognitive bands consolidate Bloom's six-level taxonomy.

WHAT KINDS OF CAPABILITIES ARE RELATED TO THESE LEVELS?

Level 1

Knowledge and comprehension require demonstration of the following capabilities:

- retention and recall of knowledge
- understanding of major accounting and business ideas, techniques, and theories
- use of knowledge and techniques in new but familiar situations
- recognition of fundamental cause and effect in accounting.

Level 2

Application and analysis require demonstration of the following capabilities:

- analysis of unfamiliar situations to prepare reports and solve problems using relevant concepts and theories

- recognition of subtle or hidden information patterns and trends within financial and other information, and the ability to interpret these
- the ability to infer from given information and draw conclusions.

Level 3

Synthesis and evaluation require demonstration of the following capabilities:

- creation of new ideas from, or new insights into, existing knowledge
- generalisation, comparison, and discrimination using complex and unstructured information
- assessment and evaluation of complex information
- use of reasoned argument to infer and make judgements
- presentation and justification of valid recommendations.

Do the modules of the syllabus correspond to the intellectual levels?

The new ACCA Qualification syllabus is divided into two main levels, each containing two modules: the Fundamentals level contains the Knowledge and Skills modules, and the Professional level contains the Essentials and Options modules. While both modules in the Professional level are broadly assessed at the same cognitive level, the Skills module papers are set at a higher

intellectual level than the Knowledge module papers. This is also reflected in the time allowed for the respective exams within these modules.

While there are three broad levels within the syllabus, these do not always match the cognitive levels described above. Therefore, it is not the case that every capability in the Knowledge module is assessed at Level 1, and that all Professional level capabilities are assessed at Level 3.

How does learning develop throughout the qualification?

As students progress through the qualification, they both broaden and deepen their capabilities at all stages.

The Knowledge module is predominantly about the breadth and comprehension of knowledge, although there may also be some application or simple analysis. Students would therefore expect to see most capabilities set at Level 1, although in some subject areas there may be a few Level 2 requirements, particularly if the area is not developed further in subsequent papers.

In the Skills module, students should expect to see mostly Level 2 capabilities being assessed, but also to find a number of Level 1 capabilities which will be built on. In some exceptional cases, some Level 3 capabilities will be identified, particularly in areas which are not being taken further at the Professional level.

This shows that even within the higher

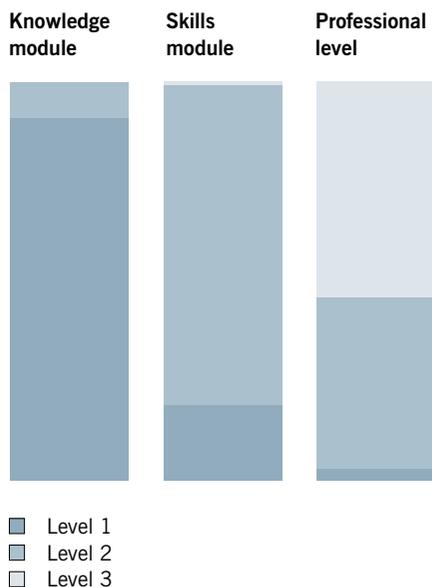
level modules there is still a need to acquire and comprehend new knowledge before more difficult capabilities relating to this new knowledge can be assessed.

At the Professional level, students should still expect to find a few Level 1 capabilities, as new knowledge is introduced, and before this knowledge can be applied, analysed, synthesised, and evaluated. It should be noted that where the lower level verbs or requirements are included within higher level papers, the marks attracted by such requirements will be proportionately fewer, to reflect the relative overall balance of difficulty of papers at these levels.

Figure 1 shows, in broad terms, the proportion of capabilities assessed at each

intellectual level within each discrete module or modules.

FIGURE 1: APPROXIMATE DISTRIBUTION OF LEVEL 1, 2 AND 3 CAPABILITIES IN THE NEW ACCA QUALIFICATION SYLLABUS



Which verbs are associated with which levels?

Bloom and other academics have suggested the types of verbs associated with each cognitive level, and these are listed in **Table 1** below. Some of the verbs Bloom lists are not relevant to a professional accountancy qualification, so only relevant verbs are included.

Please note that certain verbs (such as describe, explain, calculate) and other verbs found within the *Study Guides*, may be designated at different levels. This recognises that these verbs need to reflect the varying intellectual demands these requirements may make on students in different situations. For example, under one subject area, a sub-objective might be ‘*Explain* the structure of a T account⁽²⁾’. Another could be: ‘*Explain* how a warrant works as a derivative financial

instrument⁽²⁾’. Not all the verbs listed in **Table 1** will necessarily be used by examiners in their question requirements, nor is this an exhaustive list. The verbs given are merely indicative of the capabilities examiners want students to acquire from the *Study Guide*, in order to meet a range of exam requirements.

The *Study Guide* will often contain more verbs than an examiner would ever use in an exam. This, however, does not mean that students shouldn’t develop these capabilities. An example is given below.

In Paper F1, *Accountant in Business* learning outcome A1(b) asks students to describe various organisational structures as follows: ‘Describe the different ways in which organisations may be structured: entrepreneurial, functional, matrix, divisional, departmental, by geographical area, and by product.’

However, an objective test question might be written as follows: ‘Which of the following forms of organisational structure always requires staff to report to both functional and product managers?’

- a Divisional
- b Departmental
- c Matrix (correct answer)
- d Entrepreneurial’

To answer the question correctly, the student must understand the nature, scope, and definition of each type of organisational structure. This would have been taught and learned through reading, and possibly writing, an explanation of each. Therefore, although this capability would not need explicit demonstration in the examination, the examiner will assume the successful student has this capability.

Should I refer to the *Study Guide* and to the intellectual levels when using examinable documents?

It is important that students should refer closely to both the *Study Guide* and the designated intellectual level of each capability when looking at examinable documents. This helps in two ways:

- If a document such as an accounting standard or a statute is listed, then students can refer to the area in the *Study Guide* relating to the content of that document, to identify the specific areas to be covered.
- By noting the intellectual levels and the verbs used, better guidance is given about the breadth and depth of knowledge required for each aspect.

Should I be worried about the inclusion of intellectual levels?

No one should worry about the inclusion of references to intellectual levels within the *Study Guides*. This new feature is intended to help students and tuition providers tailor their learning and determine the depth required to study various aspects of the syllabus.

The inclusion of intellectual levels is not intended to be prescriptive, and examiners have the freedom to assess the syllabus as they decide. However, they will need to refer to the *Study Guide* when setting their exams.

It is hoped that the inclusion of intellectual levels within the *Study Guides* will help examiners and students match each other’s expectations more closely when setting and taking ACCA examinations. ■

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TABLE 1: TYPICAL VERBS ASSOCIATED WITH INTELLECTUAL LEVELS

Level 1	List, define, describe, explain, select, calculate, identify, compare
Level 2	Apply, compare, analyse, compute, derive, reconcile, prepare, interpret, value, contrast, relate, classify, solve, implement
Level 3	Formulate, modify, rearrange, create, compose, design, develop, highlight, summarise, assess, evaluate, justify, decide, infer, advise, recommend, discuss, report