

Paper for IAEA conference 2008

Title: **What does it mean to be an assessment professional? What do we need to know about assessment if we are to work for national and international assessment agencies?**

Authors: **Andrew Watts & Jill Grimshaw**

Biodata

Andrew Watts began his career as a teacher of English in secondary schools in the UK. After eleven years he moved to Singapore where he taught in a Junior College for over four years. He then worked for five years as a 'Specialist Inspector' for English in the Ministry of Education in Singapore, focusing on curriculum development and in-service teacher development. In 1990 he returned to England and has been working with Cambridge Assessment since the summer of 1992. For most of that time he looked after teams that were developing national tests in English, Maths and Science for 14-year-olds in England, Northern Ireland and Wales. He is now Director of the Cambridge Assessment Network, whose purpose is to promote professional development for assessment professionals internationally.

Jill Grimshaw was a modern languages teacher in a comprehensive school in Essex, who moved into teaching English as a foreign language in several countries. After completing an MA in Applied Linguistics at Lancaster University, she joined what is now known as Cambridge Assessment in 1989, as a subject officer in the ESOL department, where she was part of many innovations, including the design and revision of large examinations as well as the training of item writers. While working for ESOL, she took an MBA with the Open University. The scope of her work spread to include several aspects of teacher support, leading seminars, training seminar presenters based worldwide and providing online resources. She is now Programme Manager for the Cambridge Assessment Network, where her particular interests are in CPD materials development and online learning.

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Abstract

The nature and quality of educational assessment has a high profile in today's society. Assessment professionals have a responsibility to contribute to public understanding of assessment, giving meaning to measurement. We have recently set up the Cambridge Assessment Network, whose role is to offer a programme of professional development, aimed at exploring, defining and challenging current thinking about assessment.

This paper describes an aspect of the work of the Network. That is, to define what we have called a 'Body of Professional Knowledge'; a coherent curriculum of the theory and practice relating to educational assessment in which a professional in the field should be competent. With this knowledge, assessment professionals will not only be able to function competently in their jobs, but will also be in a position to develop a better understanding of educational measurement in society.

The concept of a body of professional knowledge (BPK) has been used to describe levels of competence, which enable assessment professionals to evaluate their proficiency and identify how to develop their expertise further. We have operationalised this concept in the range of professional development courses and seminars that the Cambridge Assessment Network offers. In our paper, we describe the BPK and exemplify features of it.

Scope of the paper

The term 'assessment professional' in this paper refers to those whose professional life is mainly focused on the development and delivery of assessments for educational purposes. Particularly, we want to specify those who create assessments for others to use, and who manage their implementation, mainly in summative assessment exercises that are significant for those being assessed. The assessment professionals that we are referring to are, therefore, probably working within or for agencies which develop public examinations or tests or vocational qualifications. These professionals could also be working in private assessment agencies or university departments specialising in educational measurement. They may also be working for government agencies that have been given a specific remit for public assessments.

We want to distinguish between those who create tests and examinations for use in public assessment systems and those who create and carry out assessments in the process of their teaching, mainly for formative purposes. Teachers and tutors are certainly in one sense 'assessment professionals', but we see their use of assessment as being a part of their teaching. We would like to reserve the term 'assessment professional' for those whose prime activity is assessment.

Measurement and assessment

In defining the scope of a programme for professional induction and development we must incorporate two different approaches to assessment which are, the measurement tradition, as in the US, and the examination tradition more commonly found in Europe. For the US, applicants for posts in 'educational measurement' will normally be required to have completed a 2-year degree at Masters level. The content of such a course will show us what professionals working in the measurement tradition need to know. For example, the **University of Iowa** Masters course in Educational Measurement and Statistics¹ offers the following core courses:

¹ Educational Measurement and Statistics, The University of Iowa College of Education.
www.education.uiowa.edu/measstat/programs/gradprogram

- *Educational Psychology*
- *Educational Research Methodology*
- *Intermediate Statistical Methods*
- *Correlation and Regression*
- *Design of Experiments*
- *Construction and Use of Evaluation Instruments*
- *Educational Measurement and Evaluation*

Such courses place educational assessment firmly in the field of the measurement of human behaviour.

A European example along similar lines is the following from the Department of Educational Measurement at **Umeå University**, Sweden. Their Masters programme in Measurement in the Behavioural Sciences is divided into two main parts, the first consisting of courses and the second of a thesis. Some of the courses are compulsory, i.e.:

- *Measurement in the Behavioural Sciences: A Historical Perspective*
- *Methodology and Statistics*
- *Classical and Modern Test theory*
- *Test Construction*

The above compulsory courses are considered to be the foundation for the study programme. For the rest it is possible to choose courses especially aimed at the individual need for each thesis, for example: *Classical Test Theory II, Modern Test Theory II, Validity Theory, Non-parametric methods, Academic Writing, Repeated Measurement, Applied Regression Models, Structural Equation Models, Quantitative-Qualitative Measurement.*²

This tradition, therefore, emphasises for practitioners a knowledge of psychological development, the psychology of learning, measurement of underlying constructs, the psychometric properties of tests, research techniques and statistical models. These are concepts with which an assessment professional must be well acquainted. However, this is not just a matter of gaining a body of academic knowledge. Steven Downing³ states:

‘the art and science of test development is usually learned in testing agencies, primarily as “on the job training” ... graduate students often complete doctoral educational measurement programmes with little or no insight into or experience with the actual hands-on sound practices associated with developing tests.’

Clearly the assessment professional will be concerned to become a practitioner in both the art and the science of test development.

AEA-Europe's accreditation scheme

It is the application of knowledge which we wish to address in a body of professional knowledge. So, when we consider the assessment knowledge which a professional will require, what might it look like when written up in operational terms? This is addressed in a document which describes a scheme which AEA-Europe has recently launched for the accreditation of its members as ‘Practitioners’ or ‘Fellows’.⁴ The scheme promotes professional development, seeking to empower members by giving them the means and the support to plan their own careers in assessment. To do this they decide for themselves the areas of learning in which they need to make further progress. At the end of the AEA-Europe

² Department of Educational Measurement, Umeå University, Graduate programme. http://www.umu.se/edmeas/utbildning/forskarutb/index_eng.html

³ Downing, S. and Haladyna, T. Eds. (2006) *Handbook of Test Development*. New Jersey, Lawrence Erlbaum Associates, Inc. p. ix.

⁴ AEA-Europe: Applying for Accreditation in 2008. <http://www.aea-europe.net>

document, an outline of the knowledge required by assessment professionals is suggested under the following headings:

- Specification of the purpose of an assessment
- Item development
- Organising trials / pre-tests
- Interpreting analyses
- Level setting
- Writing reports / dissemination of results
- Conducting evaluation projects

Where the document gives more detailed examples of these topics, we see how the emphasis is on the work to be done by assessment practitioners. For example, the section under *Item development* includes 'Organising and training groups of item writers / teachers'; under *Organising trials / pre-tests* we find 'Preparing administration instructions, pupil data forms etc'; and as an example of work to be done under *Interpreting analyses* we find 'Validation studies'. AEA-Europe's list is constructed for people who work in the field of test development and it includes the areas of knowledge that they will need both to know and to apply.

Examinations in the UK

The UK public examination system is based on the assessment of outcomes of a subject-based curriculum and mainly derives its results from the professional judgements of examiners, rather than from objective test scores. The system has grown from an interpretation of the secondary curriculum and from within the teaching of school subjects. One result of that is the dearth of higher level courses by which those planning to work in assessment could prepare themselves.

In 1997, the University of Bristol combined with Cambridge Assessment (then named the University of Cambridge Local Examinations Syndicate) to deliver a Masters level course in Educational Assessment. This course comprised the following main taught elements:

1. Education, The Curriculum and Assessment
2. Assessment and Examinations in the School Context
3. Test Development
4. Measurement I: Awarding Examination Grades
5. Measurement II: Theories of Measurement
6. Research and Validation
7. Assessment Administration

This course demonstrated a broader view of what needs to be known than those we have seen so far, since it addressed assessment as a part of the education, and indeed of the wider social and political, system. Secondly, the course reviewed the place of assessment within the curriculum, with a particular interest in the impact of assessment on students and their learning. There was also a strong emphasis on the process of assessing and examining. This is a key issue in a system which mainly requires judgemental decisions by examiners, since there is a consequent need to support the validity of its outcomes by showing that sound processes of exam development and delivery have been followed. Hence a whole session in the above course was given to 'Assessment Administration'. This session included sections on 'Roles and function of professional staff', 'Syllabus and assessment development', and 'Public relations'.

Other sources which indicate the kind of knowledge that an assessment professional will need in the UK are the Codes of Practice published by the UK government's assessment regulator, the Qualifications and Curriculum Authority (QCA). (This function has now been taken over by a new organisation, Ofqual). The Codes of Practice lay down in considerable detail the ways that public examinations and assessments should be carried out in England, Wales and Northern Ireland. The main sections of the Code for national examinations for 16 and 18 year-olds are as follows:

- The responsibilities of awarding bodies and awarding body personnel
- The relationship between awarding bodies and centres
- Preparing question papers, tasks and mark schemes
- Standardising marking: external assessment
- Standardising marking and moderation: internal assessment
- Awarding, marking review, maintaining an archive and issuing results
- Candidates with particular requirements
- Malpractice
- Enquiries about results and appeals
- Access to marked examination scripts⁵

There is more emphasis here on the processes which must be followed to conform to national standards in examination delivery. In addition, the relationships between the Awarding Bodies administering the examination system, the candidates and the examination centres from which they come, are emphasised. The knowledge of how to contribute positively to those relationships, and eventually to manage them, is a key part of the competence required by assessment professionals.

Staff induction and training at Cambridge Assessment

It will be rare in the UK for people to join assessment agencies and examination boards with prior knowledge of assessment principles, still less having completed any post-graduate course in the subject. Many entrants will have had teaching experience, and thus have used assessment in their work, but the fact is that they must learn what they need to know about assessment during the time they are working on it. At Cambridge Assessment we have discussed with members of staff what knowledge they think that they need to be able to do their jobs. In doing this we identified two points in a career, the first being when a person newly enters the organisation. We then asked for opinions about the knowledge that people should aspire to learn during the next few years of their work. This would be the knowledge required of someone who, in the terms used by AEA-Europe, is working towards becoming a 'Practitioner' in assessment. The topics that we have discussed with our colleagues, and their responses, resulted in this first overview of our proposed body of professional knowledge:

	Topics for induction programme	Topics for professional development
1 Context of assessment	X	
1.1 Purposes		X
1.2 Ethics of assessment		X
1.3 Needs of stakeholders		X
1.4 Assessment systems as public service		X
2 Specification / syllabus design		
2.1 Principles, standard specification frameworks		X
2.2 Structure of assessments		X
2.3 Manageability (practicality)	X	X
3 Development of examination/test papers		
3.1 Validity	X	X
3.2 Task / question writing		X
3.3 Mark schemes		X
3.3.1 Criterion referenced testing	X	X
3.4 Test statistics		X

⁵ GCSE, GCE and AEA code of practice April 2008. Ofqual. www.ofqual.gov.uk

3.5	Classical test theory		X
3.6	Item response theory		X
3.7	Revision / review processes		X
4	Marking		
4.1	Standardisation of marking		X
4.2	Reliability	X	X
5	Awarding / grading		
5.1	Preparation for awarding		X
5.2	Interpretation		X
5.3	Standard setting procedures		X
6	Validation and monitoring	X	
6.1	Purposes		X
6.2	Data to be captured		X
6.3	Comparability		X
6.3.1	Standards over time		X
6.4	Impact research		X
7	Fair administration		
7.1	Inclusion / equal opportunities	X	X
8	School / College-based assessment		
8.1	Coursework		X
8.2	Assessment for learning		X
8.3	Self- / peer-assessment		X
9	Computer-assisted assessment	X	
9.1	Computer-mediated assessment		X
9.2	Computer-based assessment		X
10	Current issues in assessment	X	X

The above topics relate to underlying themes and to generic knowledge, and the table outlines the key principles and practice of assessment, which our respondents believed were necessary for an understanding of their work. This knowledge would be required in addition to familiarity with the specific procedures which might be followed by a particular examination board. Such 'board-specific' knowledge would form the content of more explicit induction events about how the board's procedures should be carried out.

A broad view

It is the main argument of this paper that professionals working in assessment need to take a broad view of the field they are engaged in. The way in which assessment professionals do address wider issues is well illustrated by many of the themes chosen for previous IAEA conferences, for example:

- 2007 Interdependence of National Assessment Systems and Educational Standards
- 2005 Assessment and the Future of Schooling and Learning
- 2003 Societies' Goals and Assessment
- 2002 Reforming Educational Assessment to Meet Changing Needs
- 2000 Educational Assessment in a Multicultural Society: Integrating Unique Perspectives and Shared Values

There are a number of significant reasons why the knowledge required of assessment professionals should include the broad view which we are outlining here. From the perspective of individuals' understanding of and motivation for their work, professionals need

to base what they do on principles which can be transferred from one situation to another. All areas of work are changing in the modern world, and the field of assessment is no exception. Assessment professionals need a body of knowledge that they can apply to new and evolving circumstances.

We would argue that those who understand the bigger picture into which their work fits will be both more motivated and have a more nuanced view of how it should be done. Gordon Stobart places 'considerable emphasis on the cultural context in which we operate'. He states '...without understanding the situational elements our interpretations [of the results of assessments] are always going to be partial.'⁶

Additionally, a proper understanding of the key concepts in assessment, particularly that of validity, leads to the need for validation argument and validation studies to show the bases of the claims being made about what test scores and examination grades mean. Dylan William expresses it thus: 'Validation is ... a never-ending process of marshalling evidence that supports the inferences that we want to make from assessment outcomes ...'⁷ This is a fundamental issue about the worth of the work professionals are engaged in, and it requires them to have a good understanding of all the features of test development and delivery which impact on the validity of the final outcomes.

Furthermore, the ways that scores and grades are interpreted and used in society are very much a concern of those who create tests and examinations. This means that the impact of assessments on students, schools and society more generally, is a subject which the assessment professional should both understand and contribute to explaining.

Finally, we return to the concept of the competence required of the assessment professional. This issue is closely linked to a consideration of the means by which such people will become competent. Tim Oates, in a paper entitled *The role of outcomes-based national qualifications in the development of an effective vocational education and training (VET) system*⁸, writes about the evidence which suggests that the form of learning affects the nature of competence which individuals build up. He notes that knowledge is best acquired when teaching and practice are closely allied, in 'rich' learning environments. He concludes:

'From the analysis in this paper, 'competence' emerges as an inferred quality of a set of capacities which allow complex decision-making and action in diverse settings. The development of these capacities takes time, immersion in rich learning environments, guided reflection, and a complex interaction of theory and practice – both in acquiring and maintaining effective work performance'.

Defining a body of professional knowledge

If as an assessment agency, we want to make claims about the validity of our tests, we must be prepared and able to offer evidence for our claims. In the same way, if we describe the people who are engaged in producing these tests as 'professional, qualified and experienced', we should be able to substantiate this. An agreed Body of Professional Knowledge (BPK) can provide an element of this evidence, helping us to map our staff expertise against a defined curriculum.

As we have said earlier, this BPK was discussed among Cambridge Assessment staff, when the concept of the 'Assessment Professional' was also debated. The description of it has now evolved after further study and experimental use. The most recent version of our BPK refers for a structure to the 'Twelve steps for effective test development', described in *The Handbook of Test Development* (Downing & Haladyna op.cit. p.3). It uses Messick's unified view of validity⁹ and has adopted the concept of evidence-centred test design proposed by

⁶ Stobart, G. (2008) *Testing Times: The Uses and Abuses of Assessment*. Routledge, London. p.177

⁷ William, D, in Swaffield, S. Ed. (2008) *Unlocking Assessment*. Routledge, Oxford. p.132.

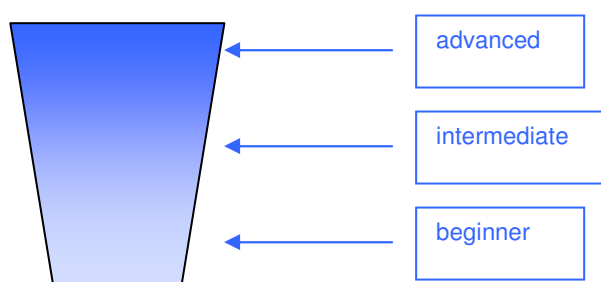
⁸ Oates, T. (2004) *The role of outcomes-based national qualifications in the development of an effective vocational education and training (VET) system* in Policy Futures in Education. Volume 2 Number 1, 2004. pp. 53-71.

⁹ Messick, S. (1989). Validity. In R.L. Linn (Ed.), *Educational measurement* (3rd ed., pp.13-104). New York: American Council on Education and Macmillan.

Mislevy, et al.¹⁰ The test development model is iterative, subject to validation studies and stakeholder requirements, e.g., regulation, market demands, etc. (See Appendix 1 for the outline of the current version of the BPK.)

Scope

We intend that the BPK should be dynamic, in that it will evolve and develop over time. It should inform programmes of study and can be adapted to provide for new and different needs. We expect that in order to use it, the current outline (Appendix 1) will be described in more detail according to the specific needs of the users. Like any knowledge bank, it will be described in a simple and concise way for beginners or those who wish only to be familiar with the basics; for those who require wider understanding or whose area of interest is more in depth, the description of their curriculum will be greater and more detailed. We can describe it as a cone, narrow at its base and wider at the top.



The issue of 'who needs to know what' was one which was addressed early on in the development of this BPK. Within our own organisation, perhaps only a restricted number of people would formerly have described themselves as assessment professionals, needing to develop their assessment knowledge. However, particularly given our understanding of our ethical responsibilities as an assessment agency, we felt it important to widen this definition of assessment professionals to include more people. So we have begun to address the needs of our staff according to their roles and responsibilities within the organisation, using the BPK and its codification of the features of assessment.

Example of the BPK in use

We intend the BPK to be operationalised in a variety of ways, e.g.,

1. At institutional or departmental level, to describe a programme for a specific group of assessment staff, e.g., validation staff, customer support staff, exam developers, etc.
2. For individuals to put together their own personalised curriculum and then proceed to access this via different sources, e.g., independent learning, group work, etc., possibly recording this in a personal portfolio
3. To set up and develop a wide-ranging programme of courses, as offered by the Cambridge Assessment Network (see our programme at www.assessnet.org.uk)

A developed example of the way the Cambridge Assessment Network is using the BPK is the Certificate in the Principles and Practice of Assessment (CPPA) course. This course is offered by the University of Cambridge Institute of Continuing Education in conjunction with Cambridge Assessment. It provides an introduction to educational assessment, using topical and relevant examples and is open to anyone who has an interest in assessment and the role it plays in society today. There are three modules and participants may choose to do any or all of the modules. See Appendix 2 for the course outline. We have mapped the course to the BPK and in this way have been able to show the rationale for the content of the programme.

¹⁰ Mislevy, R.J. et al (2000) *Evidence-centred assessment design* available at www.ncme.org/about/awards/mislevy.html

In our earlier discussion of 'what makes an assessment professional' we flagged several underlying competences. Below we show how these competences are included in the BPK and the CPPA course.

1. Measurement theory

Under this topic, we include such areas of knowledge as test construction, classical and modern test theory, psychometrics, etc., which are prominent in the American tradition of university studies but are often omitted from UK teacher training and university courses. Sub-topics that we have included in the BPK are, Methodology of test development (2.3); Item response theory (4.5); Data analyses and professional judgement (8.2) and Evaluation (Section 10). These have been introduced into our CPPA in Modules B and C, as can be seen in Appendix 2. Currently we are considering in the light of feedback whether this is an area to which we should give more prominence.

2. Operational Knowledge

This is the application of knowledge included in the AEA-Europe's accreditation scheme, which is needed in order to deliver an assessment. As the BPK is framed around a model of test development, it naturally includes features of operational knowledge throughout. We note particularly how manageability and accessibility are included in Section 3, Specification Design: this highlights how the application of theory and principles must be acknowledged early in the process of test development. Aspects of this knowledge are included in the CPPA, predominantly in Module B The Practice of assessment. For example, this module addresses the role of new technologies in the delivery of assessment, as well as their impact on assessment design. Changes in technology affect not only what is done (the processes) but also how it is done (the systems) and this more holistic view of assessment is one which the course fosters.

3. Processes of assessing and examining

Since our (UK) model of assessment emphasises the role of judgemental decisions, we must use rigorous and reliable processes, ensure our examiners are well-trained and confident in their assessment knowledge and we must have systems in place to confirm that our processes have been followed. Hence our BPK includes Methodology of test development (2.3), Examiner training and moderation (7.1), and it also, at 11 Vocational and Professional Assessment, includes Performance assessment and Coursework as separate processes.

4. Social and political knowledge

In our view, a key competence for the assessment professional is an awareness of the social context of the assessment, the politics surrounding it and its cultural role. Clearly the context of the test is critical to its purpose and validity, so only with this wider understanding can we fully analyse and critique our tests. In the BPK, we can see this prominently included as Section 1 The context of assessment – which includes the purposes, history and ethics of assessment.

In the CPPA, Module C is structured around a four-way framework to address test validity, which starts with the Context of assessment, following Cyril Weir's model¹¹. Indeed the central role of this professional competence is demonstrated as the topic of 'context' appears at several points in the course, especially at the beginning and end of each module.

5. Impact

We maintain that an awareness of the impact of assessment is an important competence. Typically, test impact is understood as looking at the relationship of assessment and the curriculum – how does the test affect what goes on in the classroom, sometimes called washback. But we can also consider impact more widely, as in the way tests affect other users, such as university admissions tutors, employers and other stakeholders (an aspect of consequential validity) as Roger Hawkey does¹².

¹¹ Weir C (2005) *Language Testing and Validation: An evidence-based approach*, Palgrave Macmillan

¹² Hawkey R (2006) *Impact Theory and Practice: Studies of the IELTS test and Progetto Lingue 2000*, Studies in Language Testing 24, CUP

The BPK includes impact research under Section 10 Evaluation; given we use a cyclical model of test development, this implies that the study of impact should be part of test evaluation on a regular basis. The CPPA considers impact in Module C, Part 2 and it is also included within Module A The Principles of Assessment, as part of the introduction to validity.

6. Stakeholder relationships

From the point of view of validity, not only should we understand the purpose of our tests, but also the needs and expectations of the wide range of stakeholders on whom our tests have an impact.

The BPK highlights stakeholder relationships under 'The candidate, test users and stakeholders' (Section 2.1) and it presents this relationship as crucial to determining the purpose and construct of assessment. The CPPA formally assesses the validity of assessments in relation to stakeholders as part of 'the context of assessment' (Module C). However, the importance of the relationship with stakeholders is mentioned regularly throughout the course.

Conclusions

We have drawn out from the BPK examples of the competences we expect in an assessment professional and shown how they are addressed in one of our courses. As we noted earlier, the BPK must be a dynamic document, to allow us to include new thinking and topical issues. So we have Section 12: Current issues, which at the time of writing include teachers' assessments and e-assessment, whose inclusion will certainly evolve over time. We are clear that the CPD we provide for our assessment professionals must offer 'rich learning environments, guided reflection, and a complex interaction of theory and practice' (Oates, op.cit.). The development of the BPK has helped us structure our programmes to offer this.

Some observations from participants who have completed the CPPA course are worth noting here:

- *An unanticipated outcome has certainly been the opportunity to interact with professionals working in similar fields*
- *I was able to reconsider my approach to my work and to take a wider view*
- *The course content was indepth and interesting. I had many new learning moments. I was inspired by the presentations and felt motivated to read around the topics*
- *I have found the totality of the course to be empowering, fascinating and extremely useful*

We hope to have shown in this paper that to support public understanding of assessment, we need well-rounded assessment professionals who have a broad view of assessment as well as an underlying knowledge of educational measurement. They must be able to take a wider view, appreciating the major role which assessment plays in society and acknowledging their responsibilities. We hope that the BPK which we have developed will assist them in their professional development and help them to play their part in giving meaning to measurement.

APPENDIX 1

A BODY OF PROFESSIONAL KNOWLEDGE of educational assessment

1	The context of assessment		
1.1	Assessment in society		
1.2	Purposes of assessment (including Formative & Summative)		
1.3	History of assessment		
1.4	The ethics of assessment		
2	Purpose and Construct		
2.1	The candidate, test users and stakeholders		
2.2	Validity: construct and content analysis		
2.3	Methodology of test development		
2.4	Norm and criterion referencing		
3	Specification design		
3.1	Blueprints		
3.2	Structure of assessments		
3.3	Mode		
3.4	Interpretation of scores (norm & criterion referencing)		
3.5	Manageability (practicality and safety)		
3.6	Accessibility		
4	Development of examination / test papers		
4.1	Task / question writing		
4.2	Test writer training		
4.3	Marking schemes		
4.4	Criterion-based assessment		
4.5	Item response theory		
4.6	Revision / review processes		
4.7	Pre-testing		
5	Delivery		
5.1	On demand tests		
5.2	Computer mediated assessment		
5.3	Small and large scale testing		
6	Administration		
6.1	Security		
		6.2	Accessibility
		7	Marking and scoring
		7.1	Examiner training and moderation
		7.2	Electronic Script Management
		7.3	Objective and expert marking
		7.4	Reliability
		8	Standard setting (Awarding / grading)
		8.1	Norm and Criterion referencing
		8.2	Data analyses and professional judgement
		8.3	Standard setting procedures
		9	Reporting Results
		9.1	Interpretation of scores
		9.2	Inferences: recognition and currency
		9.3	Appeals
		10	Evaluation
		10.1	Validation analyses
		10.2	Data
		10.3	Comparability
		10.4	Standards over time
		10.5	Item banking
		10.6	Impact research
		11	Vocational & professional assessment
		11.1	Teacher assessment
		11.2	Competence / Performance assessment
		11.3	Coursework
		11.4	Moderation and verification
		12	Current issues in assessment
		12.1	School-based assessment
		12.2	E-assessment
		12.3	Credit-based assessment
		12.4	Other, etc.

APPENDIX 2

CERTIFICATE IN THE PRINCIPLES AND PRACTICE OF ASSESSMENT

Module A Principles of Assessment

1: What is assessment? What are the qualities of good assessment?

What is assessment?
The background to assessment today – how did we get here?
Validity in assessment
Fairness in assessment

2: Standards

Reliability and comparability
What are standards? How are they defined?
Professional judgement vs statistical evidence
Criterion and Norm Referencing

3: Modes and Purposes of assessment

Purposes of assessment
Formative assessment
Summative assessment
Modes of assessment
Evaluating the principles of assessment – individual, public, political

Module B Practice of Assessment

1: Specification Development and Assessment Design

Introduction: public expectations - transparency and accountability; regulation and Codes of Practice
Specification development: subject criteria; stakeholders and marketing; choice and competition
Structuring assessments: differentiation and tiering; modularisation
Designing assessments (i): tasks and question types; setting and revision; pretesting; readability and accessibility
Designing assessments (ii): mark schemes and assessment criteria

2: Assessors, Marking and Awarding

Assessor training and monitoring: the standardisation and moderation processes
Awarding: Modular and linear specifications; professional judgement and statistical analysis

Post-awarding processes: marking review / results publication / result enquiries and appeals

3: E-assessment

Computer based assessment
On-screen marking
Assessment: today and tomorrow

Module C Evidence in Assessment

1: The context of assessment

Meeting the needs and expectations of stakeholders
Manageability: the delivery and conduct of assessment

2: The candidate

Knowledge and skills, equal opportunities
The impact of assessment – how does assessment affect the candidate and other stakeholders

3: The test

Ensuring reliability: capturing and using the data
Ensuring validity: collecting and using the evidence

4: The results

Using evidence to set standards
Maintaining standards; concurrently and over time.