Research and Analysis

Glossary – Grading Vocational & Technical Assessments

Paul E. Newton from Ofqual’s Strategy, Risk and Research directorate
Glossary

This glossary has been written to accompany three reports on grading vocational and technical assessments:

1. *Grading Vocational & Technical Assessments.*
2. *Grading Vocational & Technical Qualifications: Recent policies and current practices.*
3. *Grading Competence-Based Assessments: Notes from a small literature.*

The following passages provide brief explanations for certain of the novel, or less familiar, technical terms that have been used within these reports.

**Aggregation.** The combination of assessment (measurement) information, from multiple sources, to provide an overall summary of proficiency within a domain, or subdomain. At the unit level, assessment information might exist in the form of marks, scores, or criterion judgements, which are aggregated (within each unit) to determine the unit grade. At the qualification level, it might exist in the form of unit marks, unit grade points, or unit grade profiles, which are aggregated (across units) to determine the qualification grade.

Four distinct aggregatory principles were identified within Report 2 (*Grading VTQs*):

1. mastery – overall result represents (or tends towards) the lowest level of proficiency across a specified domain, or subdomain;
2. compensation – overall result represents the average level of proficiency across a specified domain, or subdomain;
3. configuration – overall result represents a particular pattern, or configuration, of proficiencies across a specified domain, or subdomain; and
4. charity – overall result represents (or tends towards) the highest level of proficiency across a specified domain, or subdomain.

**Best-fit grading.** See Description-related grading.

**Charity (charitable).** See Aggregation.

**Command verb.** Command verbs (eg ‘describe’, ‘explain’, or ‘evaluate’) are used within assessment criteria to specify the kind of performance that is required in order for a candidate to demonstrate that they have attained a particular learning outcome. More cognitively/behaviourally complex command verbs (eg ‘explain’

---

versus ‘list’) may be used within criteria for higher grades, to indicate that a particular learning outcome can be attained at higher levels.

**Competence-Based Assessment.** Since the 1960s, grading approaches have often been classified as either norm-referenced or criterion-referenced. Norm-referenced approaches specify measurement standards in relation to a particular group; for example, when the criterion for being awarded the highest grade is an exam mark that exceeds that achieved by 90% of the exam cohort. Criterion-referenced approaches specify measurement standards in relation to particular proficiency profiles; for example, when the criterion for being awarded the highest grade is an exam performance that resembles the kind of performance that would be expected of a domain ‘expert’.

Competence-Based Assessment refers to a form of criterion-referencing that is characterised by being linked to professional or occupational standards. It also tends to be characterised by:

- the atomistic specification of measurement standards, for each assessment unit, via lists of learning outcomes alongside associated assessment criteria;
- a mastery measurement model, meaning that a certificate of competence could be interpreted to mean competent across each and every learning outcome and assessment criterion;
- assessment based on the exhaustive sampling of learning outcomes and assessment criteria, which leaves no learning outcome nor assessment criterion unassessed.

Since the 1990s, Competence-Based Assessment has been associated with vocational and technical qualifications; and, in particular, with qualifications that have only a single measurement standard – for the passing grade – which represents the minimum level of competence that is required to practise within a domain.

In the accompanying three reports, the term is also extended to include vocational and technical qualifications that are less tightly linked to the idea of competence-to-practise, including qualifications that have multiple measurement standards (ie for higher grades too). Many regulated vocational and technical qualifications in England bear some, if not all, of the hallmarks of Competence-Based Assessment – atomistic specification, mastery measurement, and exhaustive sampling – although some are designed upon quite different principles.

**Configuration (configural).** See Aggregation.

**Compensation (compensatory).** See Aggregation.

**Criterion-Referenced Assessment (criterion-referencing).** See Competence-Based Assessment.

**Criterion-related grading.** Criterion-related grading approaches might be thought of as ‘grading for Competence-Based Assessments’ because they extend the logic of Competence-Based Assessment in a fairly instinctive manner. Thus, higher-grade criteria are simply ‘tagged onto’ the assessment criteria (which are nested within
learning outcomes, which are nested within units). Higher-grade criteria are specified either for each and every assessment criterion, or for a restricted set of criteria.

In effect, this transforms a list of criteria for the passing grade into a grading grid; with criteria for higher grades, typically Merit and Distinction, appended to the passing criteria. Thus, measurement standards are defined, on a criterion-by-criterion basis, in terms of a simple set of statements; typically, three statements – one for Pass, one for Merit, and one for Distinction.

**Curriculum-Embedded Assessments.** Curriculum-Embedded Assessments are linked to specific courses of learning. They are often tailored to particular learners in particular learning contexts; and can often be understood in terms of a learning trajectory, whereby learners are presumed to progress from being relative novices to being relative experts.

They contrast with pure Competence-Based Assessments, which do not presume any particular curriculum, course of learning, or learning context. As such, Curriculum-Embedded Assessments tend to be linked to course specifications (syllabuses), and to be associated with fairly predictable cohorts; both of which help to explain why their measurement standards are often not specified in quite the same level of detail as pure Competence-Based Assessments.

**Description-related grading.** Whereas criterion-related grading approaches aim to define measurement standards via highly detailed lists of criteria, description-related grading approaches aim merely to exemplify measurement standards via broad-brush descriptions. This is typically achieved by producing paragraphs that are intended to characterise the performance of a ‘typical’ candidate within each grade. Candidates are then classified into grades on a ‘best-fit’ basis, ie they are awarded the grade whose generic description best-fits their observed performance, reflecting the overall quality of that performance. Although best-fit grading approaches are inherently compensatory – allowing better performances in one area to compensate for worse performances in another – they are perhaps better described as operating on the aggregatory principle of configuration.

**Domain-general (generic) criteria.** The Australian literature on grading Competence-Based Assessments (Report 3 – Grading CBAs) foregrounds an important distinction between domain-specific grading criteria and domain-general ones. When grading is based upon generic criteria, the same criteria (eg communication skill, problem solving skill) can be used across qualifications. Conversely, domain-specific criteria refer exclusively to the unique competencies that are certificated by each qualification.

**Domain-specific criteria.** See Domain-general criteria.

**Grading.** In the three accompanying reports, the term ‘grading’ is used to indicate the award of higher grades (eg Merit and Distinction) beyond the passing grade. Competence-Based Assessments are generally designed either to pass or to fail a learner. Because they do not recognise gradations of competence, they are assumed not to involve grading, per se, even though they do award the passing grade.

**Mastery.** See Aggregation.

**Measurement model.** The approach(es) adopted to aggregating assessment (measurement) information.
Measurement standard(s). The measurement standard is the ultimate criterion against which candidates are to be judged. Historically, Competence-Based Assessments have tended to specify only a single measurement standard – for the qualification passing grade – which represents the minimum level of competence that is required to practise within a domain. This qualification standard comprises the set of (sub-)standards specified for each unit. Many qualifications, including some Competence-Based Assessments, award multiple grades, which requires the specification of multiple measurement standards.

Norm-Referenced Assessment (norm-referencing). See Competence-Based Assessment.

Performance complexity (criterion-related) grading. Performance complexity (criterion-related) grading differentiates between candidates on the basis of the complexity of their performances in response to an assessment task. They frame criterion statements, for each grade, in terms of increasing complexity, indicated by the use of increasingly challenging command verbs, derived from Bloom’s Taxonomy. For instance, if the Pass criterion statement for a particular learning outcome specified that it must be ‘described’ (eg describe the marketing strategy), then the Merit criterion statement might specify a higher-level command verb (eg explain the marketing strategy), and the Distinction criterion statement might specify an even higher-level command verb (eg critically evaluate the marketing strategy).

Performance quality (criterion-related) grading. Performance quality (criterion-related) grading differentiates between candidates on the basis of the quality of their performances in response to an assessment task. They frame criterion statements, for each grade, in terms of increasing quality of performance, typically holding complexity constant across the statements/grades. For instance, if the Pass criterion statement for a particular learning outcome specified complexity in terms of a command verb like ‘explain’ (eg explain the marketing strategy...), then the Merit criterion statement might specify that same command verb at a higher level of quality (eg explain with clarity and detail...), and the Distinction criterion statement might specify the same command verb at an even higher level of quality (eg comprehensively explain...).

Proficiency continuum. The acquisition of competence within a domain can be understood as a trajectory of learning, from relative novice to relative expert. This introduces the idea of a proficiency continuum, with: the competence of the relative novice at one end; the competence of the relative expert at the other; and a variety of distinguishable levels of competence in between. Grades can be understood as sets of proficiency bands, arranged hierarchically to represent positions along the proficiency continuum.

Standards-Referenced Assessment. Standards-Referenced Assessment is a model of assessment, derived from criterion-referencing. It was introduced to the literature by the Australian scholar, Royce Sadler. ⁴

Standards-Referenced Assessment is premised upon the effective calibration of assessors’ professional judgements to a common set of standards. It requires those standards to be externalised, in order to make them visible and shareable.

---

Assessors’ judgements are therefore referenced to standards via descriptions and exemplifications of various sorts. Assessors are treated as members of a professional community of practice.

Sadler’s explication of Standards-Referenced Assessment emphasises the centrality of holistic judgement of learner proficiency, and the idea of configuration as an aggregatory principle. This contrasts with Competence-Based Assessment, as it is typically practised (atomistic specification, mastery assessment, and exhaustive sampling). Also, contra Competence-Based Assessment, Sadler’s explication emphasises the centrality of a proficiency continuum, which becomes evident, through assessment, as a continuum of performance quality.