A Primer on Differences between

Norm-reference Based and Criterion-Referenced Assessments

(Dr Zita Lysaght, IoE, DCU)

Most university lectures use assessments to make two broad categories of judgements:

a. Judgements based on comparing student performance to their class peers or year-group, often using summative exams for which students receive a grade. This is known as norm-referencing;

b. Judgements based on comparing student performance against predefined standards or standards, often linked with detailed feedback. This is known as criterion-referencing.

While the key objective in both cases is to establish, with as much validity and reliability as possible, the status of students' learning in defined domains (or areas of study or modules) at the point of assessment, there are clear differences between the two approaches.

Table 1: Noteworthy Differences between Norm- and Criterion-Referenced Assessment

	Norm-Reference Based Assessment	Criterion-Referenced Assessment
Students' performance is compared with:	That of other students in the class or year group identified as the norm group.	A predefined performance criterion or set of criteria.
Comparison is made using:	A grading curve (often designed by an individual lecturer for the purposes of his/her assignment); the Bell Curve/Normal Distribution is used in the case of norm-referenced, standardised tests.	Predetermined criteria and/or cut scores determined by the lecturer who decides the knowledge, skills and/or competences that students must demonstrate at each grade or proficiency level.
The score or grade awarded indicates:	How the student performed in comparison with the norm group.	How the student performed relative to the predetermined criteria which should reflect what was taught in the module.

The primary advantage (indeed, objective) of norm-referenced based assessment and grading is that it allows us to differentiate between high, average and low performing students and communicate to them their relative achievements in the form of ranked marks and grades and classified degree awards. A key limitation of this kind of assessment is that it does not

provide (without analysis of exam papers, scripts etc.) any information about *what* and *how* a student is learning; grades, in and of themselves, provide no formative or diagnostic information that can be used to inform student learning and/or our teaching.

Rather than thinking of norm- and criterion-referenced assessments in binary terms, it is helpful to focus on the complementary, albeit different, kinds of information and evidence the two forms of assessment provide about students' learning. This is one of the main arguments in favour of combining the two approaches when assessing students' work.

Related documents of potential interest include:

A Primer on Criterion-referenced Assessment and Rubrics

A Primer on Norm-reference based Assessment and Grading on the Curve

A Primer on Performance Standards, Cut Scores and Weighting

An Example of a Weighted Rubric

A PowerPoint on Rubrics.