

Criterion-Referenced and Norm-Referenced Assessment

Category: Assessment, Feedback and Learning

Criterion-referenced assessment interprets performance against defined knowledge, skills or standards. Norm-referenced assessment interprets performance relative to a specified comparison group. The distinction concerns the basis of interpretation, not the visible format of the task: the same responses could be reported using either frame.

Criterion reference asks what a learner can do and whether an established threshold has been met. Norm reference asks how the learner ranks within a distribution. Each can support legitimate decisions, but the reference group, standards and consequences must be explicit ([Popham & Husek, 1969](#)).

Two Frames of Reference

1. **Criterion question:** Compare evidence with predefined outcomes, descriptors or performance standards.
2. **Norm question:** Compare an individual's score or rank with an identified reference population.
3. **Appropriate use:** Use criteria for attainment decisions and norms when relative selection is defensible.
4. **Interpretation:** Report what the result means, including threshold or comparison group and uncertainty.
5. **Quality assurance:** Review task validity, standard setting, group representativeness, reliability and fairness.

Examples in Practice

A language test may certify everyone who demonstrates the specified communicative standard; this is criterion-referenced. If limited scholarships are allocated to the highest scorers within the applicant cohort, that decision adds a norm-referenced interpretation.

Why It Matters

Confusing the frames can obscure what a grade means. Criterion reference is not automatically objective, because standards require judgement; norm reference does not establish mastery, because relative position may remain high or low regardless of absolute competence. A percentile, pass mark or grade is therefore incomplete unless users know the reference frame and the decision intended to support ([Burton, 2006](#)).

Further Reading

6. Glaser, R. (1963). [Instructional technology and the measurement of learning outcomes: Some questions](#). American Psychologist, 18(8), 519–521.
7. Popham, W. J., & Husek, T. R. (1969). [Implications of criterion-referenced measurement](#). Journal of Educational Measurement, 6(1), 1–9.
8. Burton, K. (2006). [Designing criterion-referenced assessment](#). Journal of Learning Design, 1(2), 73–82.

Related Terms: Standards-Referenced Assessment | Grading | Standard Setting | Assessment Reliability