

Setting the cut-offs: a presentation of the statistical analysis behind Intercollege's online English multiple-choice placement test

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The New English Placement Test Online (NEPTON) is the first online English Placement Test developed in Cyprus. It was commissioned by Intercollege (<http://www.intercollege.ac.cy>). The project leader was Dr Papadima-Sophocleous who worked mainly on test content, key features of test interface and areas of item analysis. Dr Alexander in the NEPTON project mainly designed a graded-difficulty test-slide cut-off system and analysed key data derived from this test-slide system. Dr Papadima-Sophocleous and Dr Alexander are lecturers in TESOL and Applied Linguistics, they both specialise in areas of CALL and e-testing.

In recent years, more and more second language (L2) test developers have been moving from pen-and-paper to computer based tests (CBT). Yet often no justification or information is given to explain how scores are arrived at or how boundaries are determined and scrutinised (Alderson et al 2001: 163-4). This paper presents the statistical considerations behind an iteration process for calculating cut-offs in an online placement test that uses a six-point cut-off scale comprising groups of progressively difficult test items. The NEPTON generates randomized multiple-choice tests from a large and varied database that organizes test items according to test-item type and six test-item difficulty levels. The test gives results instantaneously to test-takers regardless of location and uses six cut-offs to place students into six levels from beginner (Common European Framework of Reference CEFR A1) to upper-advanced CEFR (C2). An innovative test slide paradigm is used as a framework for creating a single unique test; a single test comprises six progressively difficult nine-item slides. Each test item has mainly five multiple-choice options.

A brief description of the test background and stages of test development will precede a detailed presentation of the method for placing students. It is held that this method is fair to the student and places students effectively. Test-taker data indicate that lower-level students sometimes perform better on higher-level test items despite regular item analyses and test-item moderation. However this unusual individual test performance data does not skew overall test performance averages: this suggests that the test items discriminate well as global averages indicate that higher-level items appear more difficult for lower-level learners. The method of analysing student performance and calculating cut-offs therefore takes such unusual individual student performance into consideration.

The NEPTON test tutorial is available on <http://nepton.engine.intercol.edu/>

Alderson, J.C., Clapham, C., & Wall, D. (2001). *Language Test Construction and Evaluation*. New York: Cambridge University Press