

Computerized Adaptive Testing in Spain: Description, item parameter updating and future trends of eCAT

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eCAT is a CAT developed and applied in Spain to assess English proficiency in Spanish speakers. The test was developed by psychometricians from the School of Psychology (Universidad Autónoma de Madrid) and the IIC (Engineering Institute of Knowledge). Psychometricians constructed the item bank and designed the adaptive algorithm. The IIC takes care of the marketing and control of the applications via Internet. At this time, thousands of applications have been done in the context of personnel selection processes and for the assessment of undergraduate's language competences in several Spanish universities. In this communication we will summarize the work done for the design and updating of the system. We will address four different aspects of eCAT: (a) test construction, including item bank design and calibration, adaptive algorithm, psychometric properties of the θ scores (reliability and validity), computerized reports, and software for web-based application; (b) main results of the application (descriptive study of θ scores, estimation errors, execution time and exposure rates); (c) analysis of parameter drift and its impact on the θ scores, assessed by means of a comparison between the estimates of parameters in the initial calibration sample and those obtained under eCAT ordinary operation; and (d) work in progress: item parameters updating, increasing the bank size using on-line calibration procedures, and calibrating a new bank of items to assess the level of English listening (eCAT-listening).