



CAMBRIDGE ASSESSMENT

Analysing the Cognitive Demand of Reading, Writing and Listening Tests

Jackie Greatorex and Vikas Dhawan

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Research Division
Cambridge Assessment
1 Regent Street
Cambridge
CB2 1GG

greatorex.j@cambridgeassessment.org.uk

www.cambridgeassessment.org.uk

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Abstract

The aim of the research was to ascertain whether the questions from particular reading, writing and listening tests elicited a spread of cognitive demand types and whether the questions from the question papers that offered higher grades were of a greater cognitive demand. The research was undertaken in the context of language qualifications taken by candidates from around the world. Six senior examiners used a five point scale to rate the cognitive demands of each question on each of the five dimensions – cognitive complexity, the resources the candidates use, the level of abstractness, the cognitive strategies used to understand the task and how to construct a response. The study was designed to return thirty ratings per question. The ratings were analysed using descriptive statistics. Generally, each component elicited a spread of cognitive demands and the questions from question papers offering higher grades were associated with greater cognitive demand. These findings are in line with good principles of test design. The questions in the listening question papers were less demanding than the questions in the reading and writing question papers, for all dimensions except cognitive complexity. Therefore more demanding listening texts were introduced.

Literature suggests that it is good practice for participants to develop a shared understanding of the cognitive demands for the target assessment before they individually rate questions. This shared understanding may be represented in supplementary material such as key examples of higher and lower demands from the target assessment. However, few studies detail how to develop a shared understanding and the supplementary material is infrequently reported. Therefore the present research gives a method for participants developing a shared understanding of the cognitive demands and reports an illustration of the supplementary material.

Full paper: <https://www.cluteinstitute.com/conference-proceedings/V116Proceedings.pdf>