



## Cognitive validity of the Linguaskill Writing test

May 2021



In Cyril Weir's (2005) socio-cognitive framework of test validation, 'cognitive validity' of a test concerns the extent to which the cognitive processes required to complete test tasks resemble those that a test-taker would normally employ in non-test situations. This notion can also be referred to as 'authenticity' of the test tasks as authentic tasks prompt test takers to demonstrate language use behaviours as would be observed in real life.

Several studies have been conducted to investigate cognitive validity of Linguaskill.

A group of language testing researchers from the University of Innsbruck recently conducted a study to investigate the cognitive validity of the writing component of Linguaskill (Eberharter et al., 2020). Specifically, the study investigated the cognitive processes engaged by thirty L2 English learners of various proficiencies when responding to two Linguaskill writing tasks, i.e. a short informal email to a person familiar to the writer and a longer and more formal piece of writing addressed to an unknown reader. An investigation of the test takers' cognitive processes while writing was carried out using triangulated data collected from stimulated verbal recall, keystroke logging, text analysis, and eye-movement analysis.

The study demonstrated that the test takers engaged in a range of planning, translation, execution and monitoring processes during the completion of the two Linguaskill writing tasks. These processes, according to the researchers, reflect the cognitive processes that one typically would engage in real-life writing tasks as specified by the theoretical models of writing. The results also indicate that these processes are in line with the test developer's intentions to elicit various writing behaviours as seen in the real world. For example, eyetracking and keystroke-logging data suggested that the two writing tasks are of appropriate complexity and thus result in different cognitive processes, behaviours and text features, which help distinguish writers' proficiency levels.

Latimer and Chan (2020), two researchers from the University of Bedfordshire, have completed a study on the cognitive validity of Linguaskill Listening and Reading tasks. The researchers studied the cognitive processes of 65 B1, B2 and C1 level students who were English as a Second Language (ESL) learners studying at British universities, including University of Bedfordshire, University of Northampton, University of Essex and University College London. Eye-tracking, stimulated recall interviews and questionnaires were used to provide insight into students' cognitive processes involved in completing the Linguaskill Listening and Reading tasks.

One of the conclusions the researchers made was that computer-adaptive tests such as Linguaskill open up opportunities for better learning and assessment experiences when prompt-individualised feedback can be provided to direct more effective teaching and learning.

For more details about the above-mentioned research, please read the following two research reports. Eberharter, K., Guggenbichler, E., Holzknecht, F., Zehentner, M., Schwarz, V., & Kremmel, B. (2020). *Probing the cognitive validity of the Linguaskill writing component: Exploring test takers' cognitive processes using eye tracking and keystroke logging* (Funded Research Programme Report Series). Cambridge, UK: Cambridge Assessment.

Latimer, N. and S. Chan (2020). *The cognitive processes of B1, B2 and C1 students performing the Linguaskill extended listening and reading tasks: an eye tracking investigation* (Funded Research Programme Report Series). Cambridge, UK: Cambridge Assessment.









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