

# Exploring the context and cognitive validity of BESTEP in an EMI HE context

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## Executive summary

Taking a mixed-methods approach, the aims of the proposed study are three-fold. First, the study established the context validity of the BESTEP Writing test (*Task 2* and *Task 3*) through a test scrutiny method (Chan & Taylor, 2020), analysing the test and documentation in relation to 70 pre-selected key parameters. Second, the study investigated evidence concerning the cognitive validity of the BESTEP Writing test through a large-scale questionnaire investigation. 344 participants, estimated at the CEFR levels of B1, B2 and C1, completed a version of the BESTEP Writing test and a test taker experience and cognitive process questionnaire. Exploratory Factor Analysis was conducted to establish the underlying construct of test taker experience and academic writing processes elicited by the test. MANOVAs were conducted to examine whether participants of three achievement groups reported their experience and processes differently. Finally, the study surveyed EMI teachers' perception of the new BESTEP Writing test.

The test scrutiny analysis shows the design of BESTEP Writing *Task 2* and *Task 3* is largely in alignment with the target EMI HE context. *Task 2* focuses on the ability to describe information and express opinions while there is a clear emphasis of academic summarising skills in *Task 3*. Importantly, the BESTEP, a bespoke writing assessment for the EMI HE context in Taiwan, is made specifically for learners in Taiwanese contexts, targeting content which learners are expected to encounter in their respective study settings.

The findings on the test taker experience component suggest that test familiarity and test-taker confidence can play significant roles in the testing experience. The association between proficiency and test-taker perceptions (self-efficacy, test knowledge, and test construction) suggests that more proficient test-takers feel more confident and familiar with the test format. This indicates that lower performing test-takers may benefit from support beyond language learning. Providing clear pre-test instructions, practice materials, or familiarization sessions may help mitigate this issue.

The findings on the cognitive process component suggest that test performance is linked not only to linguistic ability but also to cognitive strategy use, particularly planning and self-monitoring, which are more pronounced among high-proficiency test-takers. Task differences further highlight that planning and idea development play a more important role in integrated essay writing (*Task 3*) than email writing (*Task 2*) in explaining the test taker performance variance, with graph synthesis (specific to *Task 3*) posing particular challenges for lower-proficiency test-takers. For the BESTEP, test-takers at lower proficiency levels may benefit from explicit instruction in these highlighted cognitive strategies, which are essential for EMI academic writing, to enhance their performance.

The teachers surveyed in the current study perceived both tasks very positively regarding all aspects of task design and effectiveness of the tasks. The BESTEP test exemplifies how a government-led EMI policy can be effectively implemented by aligning its goals with teaching and assessment practices while incorporating key stakeholders' needs, perspectives, and insights into the development of the assessment tool. The report concludes with practical implications for the LTTC's work on BESTEP as well as wider implications for the EMI academic writing assessment.