From Evaluation to Action: Course-Specific Diagnostic Skills Tools in HSS

Ahmad Alkuchikmulla
Jackson Peace

Background

- In higher education, self-evaluation is a process by which students evaluate the strength of their skills and knowledge.
- Self-evaluation can improve motivation, engagement, and quality of learning (McMillan and Hearn, 2008).
- Developing competencies and skills are crucial for personal, academic, and professional growth (Andrade, 2020).
- Students need opportunities to reflect on their competencies, recognise their strengths, and identify areas for further development (Boud, 2000).

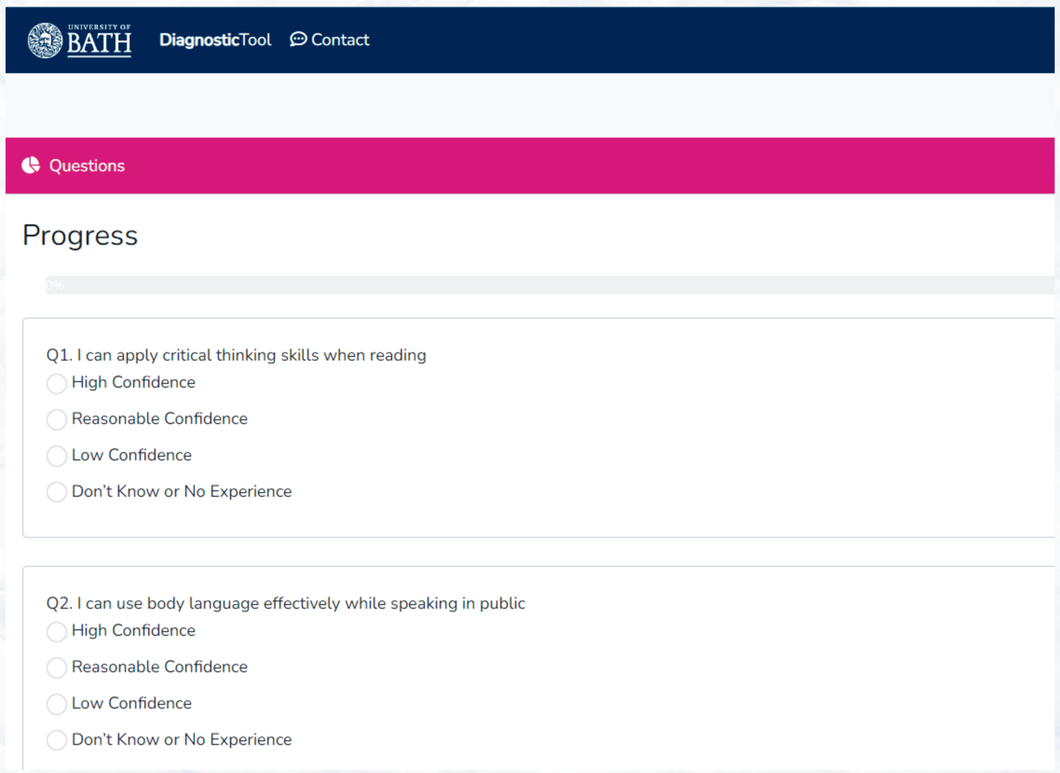

Image 1: An example of what a student will see accessing a DST

Tool use and data analysis

- Students see their results filtered by category, enabling them to focus on areas where they feel least confident.
- The tool allows students to "commit" to specific resources for improving low-confidence skills.
- Individual results can be downloaded as PDFs and are automatically added to a staff-accessible database.
- Data from DSTs can be analysed either through the built-in dashboard or by downloading CSV files for use with pre-configured Excel Macros (as shown in image 3).
- The dashboard offers multiple detailed views for in-depth analysis of each tool.
- Macros are useful for sharing analytics without adding users manually to access the DST dashboard.

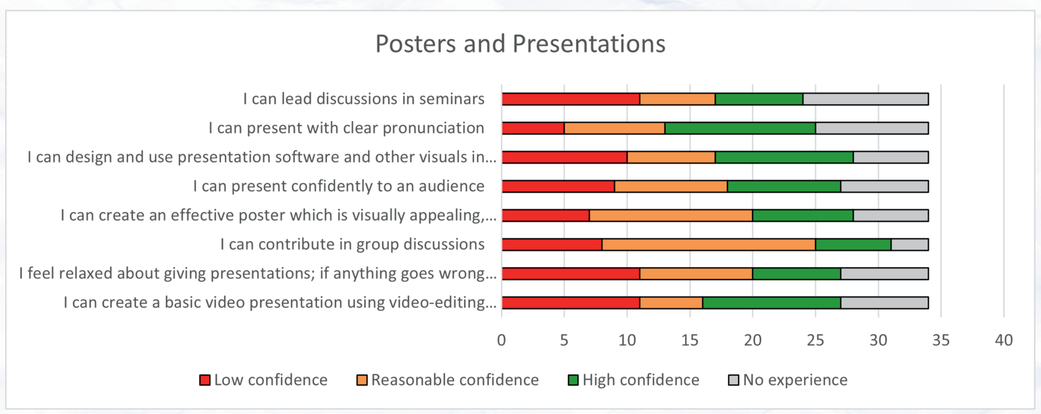

Image 3: A proportional stacked bar chart showing DST data, generated by a Macro

The Diagnostic Tool

The Skills Centre and Centre for Learning & Teaching developed a Diagnostic Skills Tool (DST) framework that enables the creation of custom tools for students to assess their confidence in key skills needed for their course. The tool generates a personalised action plan, recommending resources to support skill development.

This project expanded the scope of the initial DST project by developing a suite of course-specific DST for use within the Faculty of Humanities & Social Sciences. By focussing on specific skills required by each particular course, the DST will be more relevant, tuned to students' needs, and produce more useful data for analysis. Analytics will be generated which can be used by: Director of Studies to evaluate the needs of a cohort; by Unit Convenors to group students together to receive targeted support; and by Academic Advisors to structure initial meetings and support students.

Objective

To improve the educational experience of students in their first semester through the systematic use of:

1. Personalised, self-guided learning plans generated by course-specific Diagnostic Skills Tools.
2. Analytics to inform curriculum design and teaching practice.

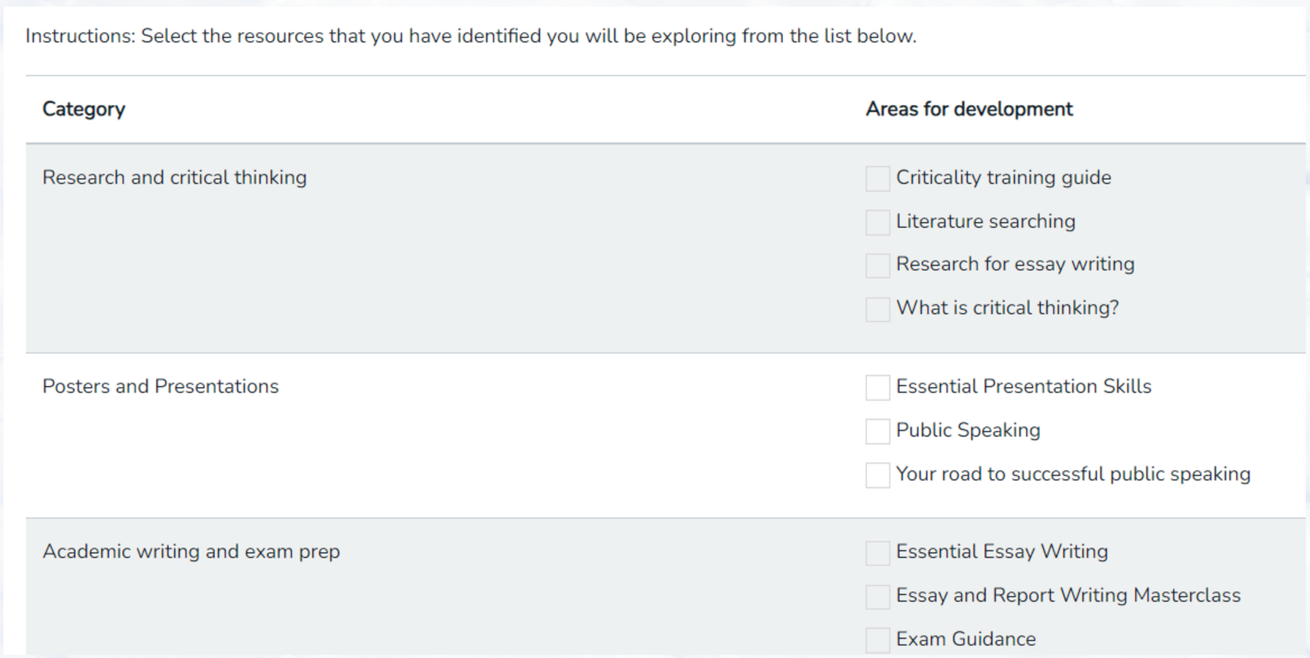

Image 2: the 'Next Steps' plan generated by a DST based on student responses

Impact and outcomes

- Provides structure for initial Academic Advisor meetings.
- Tools direct students to relevant asynchronous resources.
- Tracks confidence trends within and across cohorts.
- Enhanced tools available for 12 courses, supporting first-year and postgraduate students.
- Broad adoption: 600+ students are expected to use the tool in 2024-2025.

Future directions

- Expansion of DST to more courses
- Tighter integration with existing university systems
- Greater level of automation
- Greater customisation of existing DST system

Andrade, M. S. (2020). Cross-cutting skills: strategies for teaching & learning. Higher Education Pedagogies, 5(1), 165–181. https://doi.org/10.1080/23752696.2020.1810096

Boud, D. (2000). Sustainable Assessment: Rethinking assessment for the learning society. Studies in Continuing Education, 22(2), 151–167. https://doi.org/10.1080/713695728

McMillan, J. H., & Hearn, J. (2008). Student Self-Assessment: The Key to Stronger Student Motivation and Higher Achievement. Educational Horizons, 87(1), 40–49. http://www.jstor.org/stable/42923742

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