



Diagnostic testing for individualised academic writing support

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Abstract

The presentation explored how diagnostic testing can be used to provide individualised academic writing support to large student cohorts. Academic writing is a key part of most university courses, yet many students lack confidence with written expression (Busby and Malone, 2023). Both international and home students often struggle with basic aspects of written English, such as grammar, punctuation, and sentence structure (Jefferies et al., 2018).

Diagnostic testing has been widely used across higher education. In most cases, however, diagnostic assessments of writing are made by manually marking student submissions (Palmer et al., 2014; Xie, 2017; Shahsavar and Asil, 2019), which is too workload-intensive for a large cohort (Farrell and Leung, 2004).

The 'Writing for Success' diagnostic tool, developed at the University of Dundee, provides students in the School of Health Sciences with personalised support through a self-marking diagnostic quiz. Students answer questions concerning basic writing skills, receive feedback on their strengths and weaknesses across eight competencies, then develop their skills through eight self-directed online modules.

This presentation drew upon data from surveys and focus groups with both students and staff to evaluate the extent to which the diagnostic tool impacts students' writing abilities and academic confidence. It included practical suggestions for writing clear diagnostic questions and administering the diagnostic to a large cohort. The presentation also discussed the importance of academic involvement from inception to evaluation. Throughout, the presentation offered 'lessons learnt' to support learning developers considering adopting a diagnostic approach.

Keywords: academic writing; writing diagnostic; individual writing support.

Community response

This presentation set out an example of a writing diagnostic tool provided by reflections and raises a few questions. These questions relate to:

- When to have students undertake a writing diagnostic.
- The importance of providing a clear and timely rationale to students as to the purpose of the diagnostic.
- Considerations of students' views on diagnostics, their purpose, intent and aims.
- Possible collaboration with students in the (re)design and delivery of writing diagnostics.

The use of diagnostic testing of writing can aid students in understanding where their strengths are and what are their areas for development. What is clear from the data drawn on in the presentation is that engaging students throughout the process of designing and delivering a writing diagnostic will likely aid in its uptake. Student involvement will also increase their understanding of the purposes for the diagnostic, leading to an increased sense of relevance and ease in undertaking the diagnostic (i.e. its intention is to understand what abilities/skills are good and what needs improvement, rather than to penalise).

One member noted the significance of the findings. These could point to possible areas meriting further scholarship in order to, for example, make diagnostic testing more inclusive of different student populations.

I was struck by the finding that the diagnostic was welcomed by most students but particularly students with disabilities felt very stressed by it and unhappy. Is it because of its potential power to enhance and perpetuate, or simply trigger, some common stereotypes or narratives around misunderstood learning disabilities?

In this case, there looks to be an opportunity to reach out to students undertaking the diagnostic test in order to collaborate with them on the aims and uses for the diagnostic, while (re)creating it to be sensitive to how such tests are perceived.

Members shared a response noting how one institutional model informed another, which gave food for thought on how the initial model might be (re)considered.

It was very interesting to see how the Abertay model, which I'm familiar with, had been adapted for the Dundee University context. I have taken away the information about progress and will reflect on whether this progression is seen by the students in the Abertay context.

In both cases, sharing ideas and resources might help colleagues address these areas. While LearnHigher (ALDinHE, n.d.) has a growing bank of resources on academic writing, there is scope for further resources encompassing diagnostic writing activities.

To this end, there are two resources that might offer food for thought. While primarily for North American year one writing instructors, the openly available ebook, 'Reading and Writing in College' (Mendez and Conner, 2021) by colleagues at Texas Woman's University first-year composition team may offer academic writing tutors some inspiration for imagining and crafting diagnostic writing tasks. In addition, the accompanying website to the book 'The Academic Skills Handbook Your Guide to Success in Writing, Thinking and Communicating at University' by Hopkins and Reid (2024) offers annotated texts that can provide ideas to colleagues interested in creating their own diagnostics.

Next steps and additional questions

Some questions arising from the community relate to clarifying students' views on academic writing (and writing diagnostics) and what the results mean. Specifically:

- What are students' views on when/how they would like to see writing diagnostics and interventions? In other words, would they like to see this very early on and regularly throughout a course, or as an intensive focus on writing, or something else?
- How do we clarify the purpose of diagnostic writing and the results to students before they undertake such activities? (i.e. that writing diagnostics are not a measure of intelligence or predictor of success)

- To what extent is diagnostic writing clear to students as a tool to 1) bring focus to the learning process/the process of writing, and 2) identify strengths and areas for development in knowledge and skills for writing?
- How do we track the results of a writing diagnostic? For example, if students undertake a diagnostic at the start of the academic year, are they then re-assessed to demonstrate progress?

Author's reflection

The author appreciates the ALDinHE community's responses to the presentation, both in discussion at the conference and as part of this collaborative paper. Currently, the research team at the University of Dundee are preparing the implementation of the diagnostic for the upcoming academic year.

One area of significant discussion has been the timing and order of the diagnostic. Student feedback through surveys and focus groups revealed that students would prefer to have the diagnostic earlier in the year, when the semester is less busy and there is more time for them to follow up with the modules. In the upcoming academic year, the diagnostic will run in the second week of term, rather than in the seventh week, as happened last year.

The team have decided, however, to maintain the order of the diagnostic followed by the self-directed modules. It had been suggested that the order could be reversed, so that students would only be "tested" on what they had already learned, but discussions with colleagues from other institutions who have tried this order suggested that it reduced student motivation. Similarly, while some students in focus groups requested 'pre-reading' before the test, others noted that this would undermine the diagnostic element. Thus, students will still be instructed to complete the diagnostic first, but they will also be given the option to complete the diagnostic a second time after the modules, to measure learning gain.

The primary area of development is that of creating an encouraging and supportive atmosphere for students when completing the test, particularly for neurodivergent students or those with learning disabilities. This will require discussion with disability services, but may also simply involve greater training for tutors leading the sessions, helping them

emphasise the developmental nature of the tool. Focus groups with students also indicated that moving the sessions earlier will make them feel more relaxed, as students will not yet have begun working on their essays and will know they have time to improve before their first submission.

In all these discussions, it is important to recognise that different groups of students experienced the diagnostic differently. Outwith the pilot study in Health Sciences, the diagnostic was also made available to a largely international cohort of students on the Master of Public Health. No formal research data is available on this pilot, but anecdotal conversations with teaching staff indicate that students found the experience helpful and that their writing was markedly better than the previous year's. This is despite the students initially appearing confused and overwhelmed in the original session. Although this experience was not part of the current research study, it demonstrates that broader research is needed, as results from one cohort may not generalise across programmes.

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