



## What 'counts' as numeracy preparation in enabling education programs? Results of a national audit

### Key Words

academic numeracy, enabling education, preparedness, pedagogy, support, assessment

### Abstract

Enabling education plays an important role in facilitating the entry of 'non-traditional' students into Australian higher education through offering a cost-free, low stakes alternative pathway into undergraduate study. As such, enabling programs have opened access to students who would otherwise be prohibited from studying at university. In offering pathways that are alternative to the 'norm' of school to university transition, enabling education occupies a multifaceted space in higher education and although the definition of enabling education offered by Commonwealth legislation is very broad, we understand its role to be meeting entry requirements through preparing, inducting, and supporting students for the demands of undergraduate study. This paper focuses on perceptions and practices with regard to academic numeracy in enabling education. The rationale for this focus is two-fold. Firstly, in a previous study we explored the national terrain of academic language and literacies provision in enabling education (Baker & Irwin, 2015), and in this work we identified five dominant programmatic models for enabling education, with academic literacy and/or academic numeracy featuring as compulsory modules in all but one of the 35 programs surveyed. Secondly, the literature suggests that students' decisions to seek alternative entry into higher education appear to be strongly connected to their experiences of school mathematics (Wilkins, 2016). For many students, these experiences may leave an emotional legacy of negative attitudes and emotions related to fear and anxiety (for example, Wedege, 2002; Whannell & Allen, 2012). These rationales necessitated a fresh look at the field of enabling education through the lens of numeracy as social practice (Baker & Street, 2004). In seeking to map and understand what enabling educators consider to be key content and concepts for 'academic preparedness', and in looking for similarities and differences in how numeracy is taught, assessed, supported and valued in enabling education programs, we aim to add more detailed information to the field of enabling education and to develop richer understandings of what enabling educators perceive as constituting 'preparedness' for undergraduate study. This paper will present the major findings of this second audit of enabling education, which was also funded by the AALL. These findings will explore patterns connected to:

- What is considered to be 'core' numeracy content for academic preparation;
- How it is positioned within enabling programs;
- What connections exist (if at all) with undergraduate discipline areas;
- How academic numeracy development is supported; and
- Whether academic numeracy is considered to be part of 'academic literacies'.

In addition to presenting these findings, we will showcase our updated digital typology of Australian enabling education, which will have detail and description of the academic numeracy provision in each enabling program added to the current version, which outlines the academic language and literacies provision. The Association for Academic Language and Learning has funded all the work presented in this paper, and we wish to express our gratitude for this support.



## References

Baker, D. & Street, B. (2004). Mathematics as Social, For the Learning of Mathematics, 24(2): 19-21.

Baker, S. & Irwin, E. (2015). A national audit of academic literacies provision in enabling courses in Australian Higher Education (HE). Report compiled for the Association of Academic Language & Learning.

Wedegé, T. (2002). 'Mathematics - That's what I can't do': People's affective and social relationship with mathematics, Literacy & Numeracy Studies, 11(2): 63-78.

Whannell, R. & Allen, B. (2012). First year mathematics at a regional university: Does it cater to student diversity? The International Journal of the First Year in Higher Education, 3(2): 45-58.

Wilkins, L. (2016). The role and positioning of numeracy in Australian universities – does it matter? Journal of Academic Language & Learning, 10(1): A69-86.