



## Numeracy Across the Australian Curriculum: Opportunities from F to 6

Seyum Getenet  
*University of Southern Queensland*  
seyum.getenet@unisq.edu.au

Jill Fielding  
*University of New England*  
jill.fielding@une.edu.au

Penelope Baker  
*University of New England*  
pbaker31@une.edu.au  
Tracey Muir  
*Australian Catholic University*  
tracey.muir@acu.edu.au

This study examines numeracy opportunities across various primary curriculum areas and grade levels in the Australian Curriculum v.9. Using document analysis, the study identifies and tracks these opportunities, highlighting areas with significant numeracy potential and those with missed opportunities.

Numeracy, the ability to apply mathematical knowledge in diverse contexts, is crucial for developing students' capabilities (Geiger et al., 2015). The Australian Curriculum includes a numeracy icon to identify such opportunities across different subjects. However, comprehensive research on their distribution and representation is lacking. The study analysed the Australian Curriculum v.9 from Foundation to Year 6. It focused on identifying numeracy opportunities across curriculum areas, categorising them by year level and mathematical strand, and identifying missed opportunities not explicitly marked.

Results revealed that Science has the most identified numeracy opportunities across all grade levels, with 43 occurrences. Statistics emerged as the most prominent mathematics content strand, followed by Space. Variations were observed across different curriculum areas and year levels. For instance, English had no identified numeracy opportunities, while Science consistently provided numerous opportunities. Missed numeracy opportunities were particularly evident in English, Arts, Health and Physical Education, and Humanities and Social Science (HASS). These findings suggest that teachers need to recognise and incorporate numeracy opportunities beyond those explicitly marked in the curriculum. Activities like mapping events in literature on timelines or discussing symbolism in HASS can enhance students' numeracy skills.

Identifying and utilising numeracy opportunities across all curriculum areas can enhance students' mathematical understanding and application, fostering critical thinking and problem-solving skills (Bennison, 2015; Getenet, 2023). Future research should focus on providing teachers with practical examples of numeracy integration to support effective lesson planning and teaching strategies.

## References

- Bennison, A. (2015). Supporting teachers to embed numeracy across the curriculum: A sociocultural approach. *International Journal on Mathematics Education*, 47(4), 561-573. <https://doi.org/10.1007/s11858-015-0706-3>
- Geiger, V., Forgasz, H., & Goos, M. (2015). A critical orientation to numeracy across the curriculum. *International Journal on Mathematics Education*, 47(4), 611-624. <https://doi.org/10.1007/s11858-014-0648-1>
- Getenet, S. (2023). Investigating pre-service teachers' skills in designing numeracy activities across curriculum areas involving statistics. In B. Reid-O'Connor et al. (Eds.), *Proceedings of the 45th annual conference of the Mathematics Education Research Group of Australasia*. Newcastle: MERGA.