



Mathematics Proficiency in F-6 in Version 9.0 of the Australian Curriculum

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In 2020, the Australian Curriculum underwent its first 6-yearly review and sought to refine, realign and declutter the curriculum content, resulting in the 2022 revised version 9.0 Australian Curriculum (ACARA, 2022). Whilst several revisions occurred, the four proficiency strands remained the consistent underpinning key ideas for the F-10 AC:M. Watson and Sullivan (2008) describe that for all proficiency strands to be present in a lesson, “teachers have to plan specifically for each and not merely offer tasks which tend towards one strand in the hopes that other strands will somehow develop automatically” (p. 112). It appears that the new AC:M has attempted to explicitly support teachers in doing this, given the new curriculum revisions state that the new version has “embedded the proficiency strands into content descriptions” (ACARA, 2022, p. 3). Therefore, this study aimed to understand how the proficiency strands were represented in the content descriptions of the AC:M.

Using a content analysis methodology, we documented the frequency of verbs used in the F-6 content descriptions and mapped these verbs to the proficiency strands. Fluency was found to be the dominant proficiency strand represented in all content descriptions, followed by understanding. Reasoning and problem solving were the lowest indicated proficiency strands. If mathematics learning serves as a tool for students to develop problem-solving and reasoning skills, these proficiency strands need to be emphasised. It was found that a very low proportion of the content descriptions addressed problem solving and reasoning (less than 1/4 on average). Problem solving was also less frequently observed in the lower grades.

Curriculum is crucial in education, however it only comes alive through teachers who interpret, transform, and implement it in their own classrooms (Nguyen & Tran, 2022). Therefore, it is teachers’ ability to effectively interpret the curriculum that reforms the learning experiences delivered to students. This is important to note, as if the curriculum intends to drive effective mathematics education through its focus on mathematical proficiencies, then the proficiencies must be clearly indicated for teachers in the content descriptions. We advocate that more thoughtful use of verbs in content descriptions may better support teachers in equitably embedding mathematical proficiency in their teaching.

References

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