

Title: Beyond High Fidelity: Refining Preparation, Differentiation, and Checklist Usability for the the New Numeracy Curriculum (2026)

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Summary

This study examined teachers' implementation of a new numeracy curriculum across N2, K1 and K2 classrooms, focusing on implementation fidelity, perceived difficulty, and the usefulness and ease of an accompanying tracking checklist. Teachers completed a structured implementation survey using four-point rating scales. Overall implementation fidelity was high, while lesson implementation difficulty was moderate. The main challenges involved preparing materials, balancing discussion with hands-on activities, and responding to differing learning needs. When fidelity and difficulty were considered jointly, 51% of teachers demonstrated high fidelity with lower implementation difficulty, while 49% maintained high fidelity despite experiencing greater implementation burden. The tracking checklist was perceived as useful, although ease of use was more mixed. Overall, the findings indicate that the prototype was implemented with high fidelity, but successful implementation was accompanied by considerable effort for some teachers. Refinement should therefore focus on reducing preparation and delivery demands and improving checklist usability to support sustainable classroom implementation.

Background and Purpose

The New Numeracy First Year Eval Study examined teachers' experiences implementing the new numeracy curriculum, with particular attention to whether the lessons were delivered as intended and whether teachers experienced difficulties in using the lesson materials and accompanying tracking checklist. Rather than evaluating whether the prototype improved children's numeracy outcomes, this phase of the study focused on implementation. Specifically, it sought to understand: (1) teachers' fidelity of implementation; (2) areas of difficulty during lesson implementation; (3) the perceived usefulness and ease of using the tracking checklist. These findings are intended to inform subsequent refinement of the prototype and identify areas where additional resources, guidance or professional support may be useful.

Method

Teachers implementing the prototype across N2, K1 and K2 classes completed a structured implementation survey. Items were rated on four-point scales and were combined into four main measures: fidelity of implementation, lesson implementation difficulty, checklist usefulness and checklist difficulty. Descriptive analyses were used to examine overall patterns and identify specific aspects of implementation

that teachers found easier or more challenging. Two implementation matrices were also constructed by jointly considering fidelity and difficulty, and checklist usefulness and difficulty.

Key Findings

Overall, teachers reported high fidelity in implementing the numeracy prototype. Mean fidelity was 3.32 out of 4, suggesting that most components were implemented relatively consistently. The strongest area of implementation was the use of hands-on activities ($M = 3.40$), while maintaining the intended lesson duration received the lowest rating ($M = 3.17$). Importantly, even the lowest-rated component remained above the midpoint of the scale. Implementation difficulty was more mixed. Overall lesson difficulty averaged 2.55 out of 4. The most commonly reported challenges were preparing lesson materials ($M = 2.82$), balancing discussion with hands-on activities ($M = 2.63$), and responding to children with different learning needs ($M = 2.57$). Planning the lessons was comparatively less difficult ($M = 2.40$). This pattern suggests that the main implementation burden arose during lesson preparation and delivery rather than from understanding or planning the lesson structure itself.

When fidelity and difficulty were considered together, approximately half of teachers fell within the “sweet spot” of high fidelity and lower difficulty (51%), while the remaining teachers were predominantly in the “High Burden” group (49%), characterised by high fidelity despite relatively greater implementation difficulty. No teachers were observed to be in the low-adoption or critical-redesign categories. This distinction is important. High fidelity alone does not necessarily indicate that implementation is sustainable. Teachers may be successfully delivering the prototype while simultaneously investing substantial effort to do so. The findings therefore point towards opportunities to reduce implementation burden without fundamentally redesigning components that teachers are already delivering successfully.

Teachers also generally viewed the tracking checklist positively. Checklist usefulness averaged 3.23 out of 4, with very little variation across the four usefulness items (approximately 3.22–3.25). Checklist difficulty averaged 2.47 out of 4, indicating more mixed experiences regarding ease of use. The checklist therefore appears to have perceived value, although its usability could potentially be streamlined.

Implications and Next Steps

Taken together, the findings provide a generally positive picture of implementation. Teachers were able to implement the prototype with high fidelity and perceived the tracking checklist as useful. The principal issue emerging from the study is therefore not low adoption, but the effort required to maintain successful implementation. Future refinement should focus particularly on reducing preparation demands, supporting teachers in balancing discussion and hands-on components, and providing strategies for differentiating lessons for children with differing learning needs. The tracking checklist could similarly be reviewed for opportunities to reduce friction while retaining the aspects teachers find useful.

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