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## PublicationOpen Access

Assessment for Learning in Maths https://library.camtree.org/home

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**Context:** This action research case study was conducted in a mainstream secondary school to address the persistent attainment gap in mathematics for pupils with special educational needs and/or those significantly behind age-related expectations. The study focused on identifying and closing gaps in cumulative learning through targeted, scaffolded interventions

**Aims:** The research aimed to evaluate the effectiveness of a Maths Intervention and Supervision Programme that uses detailed baseline attainment data to inform teaching. It explored how concrete, pictorial and abstract methods could support mathematical understanding and confidence, and how best to communicate the intervention model to other educators

**Methods:** Two action research cycles were completed. Data collection included pupil progress tracking, Teaching Assistant journals, pupil voice activities, and confidence scales (including the Blob Tree). Interventions were delivered in small groups using structured resources. In Cycle 2, research conversations informed the development of a resource booklet to support wider implementation. Ethical consent was obtained for anonymous publication.

**Findings:** Year 7 pupils gained an average of +0.495 years in the 'Number' strand over 14 weeks, and Year 8 and Year 9 pupils gained +0.388 and +0.275 years respectively in Number over 7-8 weeks. Confidence increased by an average of +2.14 points for all your groups. Case studies showed improved engagement, reduced maths anxiety and greater classroom participation. The intervention booklet clarified the rationale, assessment, delivery and impact monitoring for the intervention.

**Implications:** The study highlights the importance of dynamic assessment, personalised learning roadmaps and concrete resources. It recommends early identification, small group support and staff training. The intervention model offers a replicable framework for inclusive maths practice in secondary education.



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