

Catch Up™ Numeracy

<http://www.catchup.org/CatchUpNumeracy/IntroducingCatchUpNumeracy.aspx>

This project is being carried out by Ann Dowker in collaboration with Graham Sigley, Julie Lawes and other member of the Catch Up Trust (CatchUp, and Wayne Holmes of the Department of Education, University of Oxford. Peter Morris is research assistant to this project.

Catch Up Numeracy is an intervention developed to support the needs of children with mathematical difficulties. This programme, which involves two 15-minute sessions a week of individualized intervention over approximately 4 months, targeted at individual children's pre-assessed specific strengths and weaknesses. It has been developed and evaluated with funding from the Caxton Trust and the Esmee Fairbairn Trust.

The first main evaluation study included 440 children, with a mean age of 106.69 months selected by their schools for being weak in numeracy. 348 children with a mean age received Catch Up Numeracy intervention, and were compared with two control groups: 50 who received the same amount of time of non-targeted individual mathematics intervention, and 42 who received no intervention beyond that typically provided within the school mathematics lessons. All children were given the Number Screening Test before and after intervention. Before intervention, the mean mathematics age overall was 96.15 months. ANOVAs showed no significant initial group differences in either chronological age or mathematics age. The Catch Up group achieved mean Mathematics Age gains on the Number Screening Test of about two and a half times that expected from the passage of time alone (mean ratio gain 2.51), and very significantly more than the gains of either of the control groups. The evidence reported here indicated that Catch Up Numeracy is an effective intervention. More generally it strongly supports the view that children's arithmetical difficulties are highly susceptible to intervention, and that the amount of time given to individualized interventions does not need to be large to be effective.

A current evaluation is being funded through a grant of £185000 from the Education Endowment Fund (with additional smaller contributions from other sources bringing it up to £210,000), and involved *randomized controlled trials* comparing Catch Up Numeracy, matched-time non-targeted intervention and no intervention. This study involves 340 children in England and Wales.

Catch Up Numeracy in practice: educational impact

Catch Up Numeracy is already being widely applied in practice. Over 3000 teachers and teaching assistants in England and Wales have been trained to use the programme since 2007,

and 43200 children and young people are estimated to have taken part. The programme is now being developed for extension to secondary school pupils. 853 trainees (mostly teaching assistants) have gained at least one unit of accreditation from the Open College Network through Catch Up Numeracy.

The programme has also been piloted in North Lanarkshire, Scotland It is now being extensively applied in Tasmania, and is being tested in smaller-scale projects in Christchurch, New Zealand and in Malta.