

OUTLINE OF RONIT BIRD'S DYSCALCULIA COURSE FOR TEACHERS AND SPECIALISTS

The course is spread over 9 sessions (18 hours). The sessions will take place after school during a single academic term, on the school's premises in London. Each 2-hour session begins with a presentation during which there are several opportunities to try out some suggested activities. This is followed by a 5 minute break, after which the rest of the time is devoted to a hands-on workshop, trying out a variety of games designed to target that week's topic. The very detailed weekly course notes cover both parts of the session. Because of the highly practical nature of the course and the central role given to trying out activities and games that make use of concrete resources, numbers are limited to a maximum of 12 participants, who should aim to attend every session.

Session 1

First hour: An Introduction to Dyscalculia. What are the learner's difficulties? How can teachers help?

Second hour: A hands-on introduction to Cuisenaire rods, including a series of sequential activities designed to help you and your pupils become familiar with the rods and begin to use them for maths.

Session 2

First hour: Counting and the development of number sense.

Second hour: A 'show and tell' of a variety of concrete materials, followed by six teaching games to try out. Five of the games are based on concrete or pictorial dot patterns; one uses Cuisenaire rods.

Session 3

First hour: Early number work with numbers up to 10, including an analysis of the stages of early calculation, the dangers of the 'counting trap' and the benefits of an approach based on components.

Second hour: Six teaching games, including four dot pattern games and two more abstract games.

Session 4

First hour: Basic calculation with numbers above 10, including practical activities that promote understanding and lead to key calculation strategies, in particular the bridging technique.

Second hour: Six teaching games, including both concrete (Cuisenaire rods) and abstract games.

Session 5

First hour: Building understanding of times tables for pupils who cannot memorise them reliably.

Second hour: Teaching games and puzzles, that practise single tables as well as mixed tables.

Session 6

First hour: The decimal place value system, including a look at common problems and misconceptions.

Second hour: There are eight teaching games to try out, two concrete and six abstract.

Session 7

First hour: Written calculations methods for addition and subtraction, both standard and informal.

Second hour: An examination of word problems that relate to different aspects of the four operations.

Session 8

First hour: The concepts of multiplication and division, focusing on the area model of multiplication.

Second hour: Six teaching games and puzzles, including four abstract games and one pictorial game.

Session 9

First hour: Assessment. The main focus is the diagnostic qualitative assessment developed by Dorian Yeo (published by Emerson & Babbie, Continuum 2010). This will double as a review of the whole course.

Second hour: An open session for questions, general discussion, requests for a quick recap of particular topics, an opportunity to share your own experiences of trying out ideas from the course on pupils, future plans for your teaching groups or your school, etc.