

Rx 4 Discovery Maths

This is a lecture and laboratory course designed to train teachers to provide mathematical intervention in a group setting. Rx 4 Discovery Math is specifically intended for students in Grades R – 5 who would benefit from early intervention or whose basic mathematics skills are below expected standards.

Hybrid workshop with pre-course work and one day in person.

The time required for assignments and prerequisite assignments has been estimated at 7 hours.

Workshop description

Rx 4 Discovery Math will build and strengthen number sense, maths fluency, maths vocabulary, and problem-solving strategies within three 30-minute or two 45-minute weekly small sessions. Students who need to master basic number sense skills as well as those who rely on procedural understanding would benefit most from this programme.

Students will be challenged to apply their growing understanding of number sense to solve novel problem-solving activities that challenge thinking and reasoning. Hands-on, research-based, number sense activities will be utilised as the core content of this dynamic intervention while mediation, Socratic questioning, and the strengthening of cognitive functions will serve as the core methodology.

In this dynamic intervention, students' foundational maths concepts will be strengthened while their thinking and problem-solving skills will be challenged, all within an atmosphere where maths anxiety is reduced and thinking is maximised.

The Rx 4 Discovery Maths training strengthens your skills in 4 essential ways:

1. To provide small-group mathematical intervention that includes activities to strengthen the foundation of mathematical thinking: Number Sense.
2. To immerse students in dynamic activities that foster the understanding of what numbers mean as well as think and reason flexibly with numbers, use numbers to solve problems, spot unreasonable answers, understand how numbers can be taken apart and put together in different ways, see connections among operations, figure mentally, and make estimates.

3. To strengthen conceptual understanding of numbers and encourage the development of self-generated mathematical strategies for efficient mathematical methods that produce independent thinkers.
4. To provide instruction in mathematical language and problem solving through mediation, questioning, and small-group interactions where students' competency in routine and non-routine mathematical problems and awareness of patterns and relationships is strengthened.

WORKSHOP OBJECTIVES

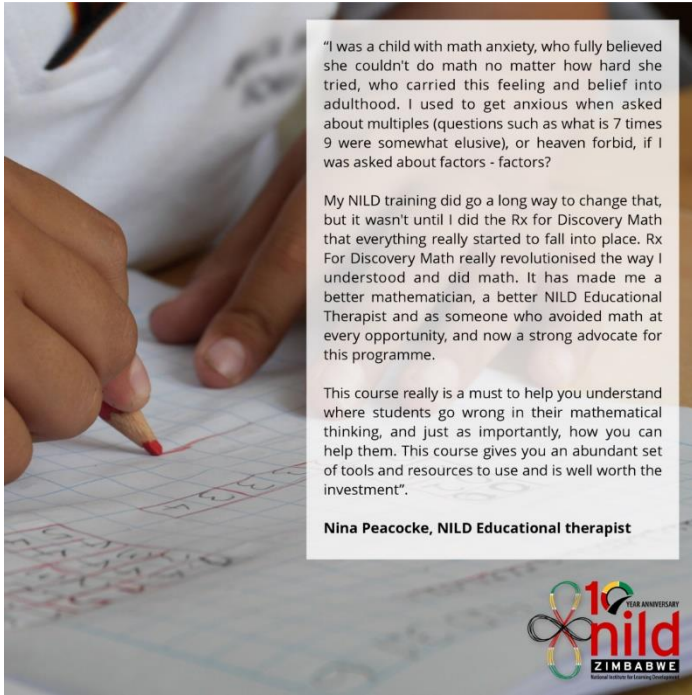
General:

Successful completion of this course will enable the participant to better understand student needs in maths, based on the four subtypes of maths disabilities and understand how to strengthen number sense, develop maths fluency, and bolster problem solving skills, while also learning how to utilise the group model for Rx 4 Discovery Math to teach students conceptual, procedural, and problem-solving maths skills and strategies to strengthen students' foundational grasp of numbers.

Specific:

Upon completion of this course, the participant will be able to:

1. Communicate an understanding of the differences between group and individualized interventions.
2. Demonstrate an ability to work with groups of 4-6 students in the teaching of basic mathematical skills focused on number sense.
3. Communicate the theories of mediated learning in a group setting
4. Design a plan for group implementation that would meet the learning needs of specific groups of students.



"I was a child with math anxiety, who fully believed she couldn't do math no matter how hard she tried, who carried this feeling and belief into adulthood. I used to get anxious when asked about multiples (questions such as what is 7 times 9 were somewhat elusive), or heaven forbid, if I was asked about factors - factors?"

My NILD training did go a long way to change that, but it wasn't until I did the Rx for Discovery Math that everything really started to fall into place. Rx For Discovery Math really revolutionised the way I understood and did math. It has made me a better mathematician, a better NILD Educational Therapist and as someone who avoided math at every opportunity, and now a strong advocate for this programme.

This course really is a must to help you understand where students go wrong in their mathematical thinking, and just as importantly, how you can help them. This course gives you an abundant set of tools and resources to use and is well worth the investment".

Nina Peacocke, NILD Educational therapist

