



Rx 4 Discovery Maths II

This is a lecture and laboratory workshop designed to train educators to provide mathematical intervention in a group setting.

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

The time required for assignments and prerequisite assignments has been estimated at 6 hours.

Workshop description

Rx 4 Discovery Math II is specifically intended for students in grades 6th-8th who would benefit from intensive, small-group instruction in mathematics with an emphasis on fostering self-regulated learning behaviours and beliefs, improving problem-solving skills, strengthening mathematical fluency, enhancing discourse and peer collaboration, building metacognitive skills, and improving non-cognitive factors affecting mathematical thinking and learning.

Rx 4 Discovery Math II supports educators in establishing classroom contexts that develop students' self-regulated learning behaviours and beliefs. Students who are self-regulated apply knowledge, skills, and dispositions to engage in mathematics learning with confidence.

The Rx 4 Discovery Maths II training strengthens your skills in 3 essential ways:

1. **To provide weekly, small-group mathematical intervention**, including activities to strengthen mathematical reasoning, computational fluency, conceptual understanding, and self-regulation.
2. **To create a learning environment** where mediation and discovery are the means by which students grow in their understanding of mathematics and of themselves as competent learners.
3. **To encourage a sense of belonging** in each small group where cognitive functions are strengthened in a safe environment and collaborative academic struggle is embraced and seen as a way to strengthen thinking skills and increase individual confidence and competence.

WORKSHOP OBJECTIVES

General:

Successful completion of this workshop will enable the educator to facilitate deeper mathematical thinking for students by understanding how to strengthen students' conceptual understanding, computational fluency, and mathematical reasoning skills by developing self-regulation and cognitive functions through a safe mathematical community where productive disposition, self-efficacy, a sense of belonging and mathematical exploration is encouraged.

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.