

Expanding the Explicit Inquiry Routine (EIR)

What is the purpose?

- This study will expand and replicate the validation of an instructional routine called the Explicit Inquiry Routine (EIR). EIR is alternative to “typical” mathematics instruction, which combines validated teaching practices from both general and special education (i.e., inquiry and explicit/direct instruction).
- This study will increase the ability of students with various disabilities to solve problems involving fundamental pre-algebra concepts such as one-variable equations contained within word problems.
- Through this study, students will gain a fuller understanding of equality, variables, as well as the connection between equations and word problems. The data collected on the EIR will be used to replicate previous validation studies.

Who should be involved?

- Students who have yet to master solving one-variable equations
- Students who are struggling with pre-algebra concepts
- Students with and without disabilities who have documented difficulties in mathematics (low scores on standardized measures)

What is involved?

- Teachers pass out and collect parental permission for those who agree to participate
- Students complete the Solving Equations Test before, during and after participating in the instruction (approximately 25 minutes each)
- Class/Students participate in 7-10 lessons (approximately 40 minutes each)
- Students complete a brief survey about the instruction (approximately 5-10 minutes)

What is furnished?

- Lesson instruction for classes provided by researcher (certified teacher).
- Strategy modeled for teaching staff by researcher.
- Teaching staff will have access to EIR for use in the future.
- Monitoring of student progress
- Instructional materials, management, and organization

What are the ultimate outcomes?

- Students will gain an understanding of the fundamental pre-algebra concept of equality as demonstrated in one-variable equations.
- Students’ performance on solving simple one-variable equations will increase.
- Teachers will observe and evaluate the effectiveness of EIR within their classrooms
- Data will be collected to determine the effectiveness of EIR with pre-algebra concept instruction (i.e., simple one-variable equations)
- Data will be collected documenting the nature of teacher-student dialogue that occurs during the inquiry segment of instruction.
- Final data report will be provided to participating teachers and administrators.

For more information, please contact
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