

Incremental Rehearsal of Math Facts

Burns, M. K. (2005). Using incremental rehearsal to increase fluency of single-digit multiplication facts with children identified as learning disabled in mathematics computation. *Education and Treatment of Children*, 28, 237-249.

This targeted intervention helps students build fluency with basic math facts (addition, subtraction, multiplication, or division) by pairing known and unknown problems.

Materials:

- Flash cards with basic facts (addition, subtraction, multiplication, or division)

Steps:

1. The teacher reviews the flash cards with the student. The flash cards are separated into two piles, those the student can answer within two seconds (**known**) and those the student cannot answer within two seconds or answers incorrectly (**unknown**).
2. The teacher randomly selects 9 **known** flash cards and sets aside the other **known** flash cards.
3. The teacher chooses a single card from the **unknown** deck, reads the math fact and solution, and asks the student to repeat the problem and answer.
4. The teacher then pairs one math fact from the **known** deck and shows the two problems in sequence. The student is asked to read off the problem and give an answer for both math facts. If the student hesitates longer than two seconds or answers incorrectly, the teacher reads the math fact aloud along with the answer, and prompts the student to repeat the problem and answer.
5. The teacher then pairs another of the 9 **known** facts with the **same unknown** fact and repeats step 4.
6. The **unknown** fact used in this procedure is now treated as a **known** fact and placed in the **known** pile for future sessions.
7. The teacher then chooses another single card from the **unknown** deck and repeats Step 4.