

STRATEGIES FOR PROMOTING MATH COMPUTATION AND FLUENCY

STRATEGIC NUMBER COUNTING



- Direct instruction of efficient counting, followed by guided practice.
- 2 number addition: start with larger number and count for smaller number.
- 2 number subtraction: start at 'minus number' and count up to 'starting number,' tallying numbers.
- Use of flashcards or number lines.

DRILL AND PRACTICE



- Paper-and-pencil and/or computerized drills of math facts or problem-solving strategies.
- Math facts appear for 1 - 3 sec.
- Students must reproduce the whole equation and the answer.

DETECT-PRACTICE-REPAIR



- 3 phase Test-Teach-Test procedure.
- **Detect phase:** timed exercises to determine automatic (< 2 sec.) vs. slow (>2 sec.) math fact responding.
- **Practice phase:** use Cover-Copy-Compare (see below).
- **Repair phase:** using 1-minute math exercise with items requiring practice embedded in equations that are already automatic for the student.

COVER-COPY-COMPARE



- Students look at math problem, cover it, copy it, and evaluate response compared to original.
- Brief error correction procedure undertaken before next item introduced.

RECIPROCAL PEER TUTORING



- Students are paired and take turns being the "tutor".
- Tutor shows flashcard, tutee responds verbally.
- If incorrect, tutee writes problem and correct answer 3 times on paper.
- Roles change after 2 minutes.