STAR Strategy

Description: The STAR program is used to equip pupils with enough social skills to function in a mainstream classroom. STAR lessons involve step-by-step behavioral instruction and visual prompts. This strategy cues students to complete general problem-solving steps and related substeps. It is often used with students with Autism, but it also effective with older students with mild disabilities.

Materials:

✓ Math worksheet with word problems

What Does STAR Mean:

S – Search the word problem
T – Translate the words into an equation in picture form
A – Answer the problem
R – Review the solution

Steps:

1. Search the word problem
   a. Students read the problem carefully
   b. Regulate their thinking through self-questions
      i. “What facts do I know?”
      ii. “What do I need to find?”
   c. Write down facts

2. Translate the words into an equation in picture form
   a. Students choose a variable for the unknown
   b. Identify the operation(s)
   c. Represent the problem using the CONCRETE application of CSA
   d. Draw a picture of the representation (SEMI-CONCRETE)
   e. Write an algebraic equation (ABSTRACT application)

3. Answer the problem
   a. Use the appropriate operations (+, -, x, or /)
   b. Use rules of solving simple equations
   c. Use rules to add/subtract positive and negative numbers

4. Review the solution
   a. Reread the problem
   b. Check the reasonableness of the answer
   c. Check the answer

Concrete-Semi-concrete-Abstract (C-S-A) Phase of Instruction

- Instructional sequence supporting students’ understanding of mathematical concepts.
  - Concrete phase
    o Students represent the problem with concrete objects - manipulatives.
  - Semi-concrete or representational phase
    o Students draw or use pictorial representations of the quantities
  - Abstract phase of instruction
    o Students involve numeric representations, instead of pictorial displays. C-S-A is often integrated with meta-cognitive instruction (i.e. mnemonics)
References: