

## 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**

- Students read the problem carefully
- Regulate their thinking through self-questions
  - “What facts do I know?”
  - “What do I need to find?”
- Write down facts

**2. Translate the words into an equation in picture form**

- Students choose a variable for the unknown
- Identify the operation(s)
- Represent the problem using the CONCRETE application of CSA
- Draw a picture of the representation (SEMI-CONCRETE)
- Write an algebraic equation (ABSTRACT application)

See Below for Further  
Details of These 3 Steps

**3. Answer the problem**

- Use the appropriate operations (+, -, x, or /)
- Use rules of solving simple equations
- Use rules to add/subtract positive and negative numbers

**4. Review the solution**

- Reread the problem
- Check the reasonableness of the answer
- Check the answer

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

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

**References:**

Achen and Paris. (2007). *Autism in the schools*. 1-4.

Atwell, N. (2008). Research-based math interventions for students with disabilities. Retrieved September 25, 2008 from [http://edtech.wku/~nwheeler/new\\_math\\_presentation.ppt](http://edtech.wku/~nwheeler/new_math_presentation.ppt)