MATH AND LDS

Strategies for Promoting Math Problem-Solving

SCHEMA THEORY INSTRUCTION

- Explicit instructions of mathematical problem structures and problem-solving strategies.
- Schema-broadening instruction to teach students to generalize strategies to novel problems.

F.A.S.T. D.R.A.W.

F - Find what you are solving for.
- Underline keywords.

A - Ask "What is important information?"
- Find and circle number phrases.

S - Set up the equation.
- Write equation with numbers in correct order.

T - Tie down the equation.
- Solve the problem if you can, or solve using DRAW.

D - Discover the sign.
- Circle the sign and say the name of the operation.

R - Read the problem.

A - Answer the problem or draw.
- Answer the problem if you know how to, or draw pictures to solve it.

W - Write the answer.

COGNITIVE STRATEGY INSTRUCTION

1. Read the problem for understanding.
2. Paraphrase the problem in your own words.
3. Visualize a picture or diagram to accompany the written problem.
4. Hypothesize a plan to solve the problem.
5. Estimate/Predict the answer.
6. Compute the answer.
7. Check your answer.