· MATH AND LDS ·

STRATEGIES FOR PROMOTING MATH PROBLEM-SOLVING

SCHEMA THEORY INSTRUCTION

• Explicit instruction 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 a 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.

LD @school