**TAPPS – Thinking Aloud Paired Problem Solving**

In TAPPS, students work in pairs to solve a series of problems. Students have specific roles—problem solver and listener—that they alternate with each problem. The problem solver “thinks aloud,” verbalizing the steps he or she takes to solve the problem. The listener listens carefully, following the steps taken by the problem solver, attempting to understand the reasoning behind the steps, and offering suggestions if necessary.

Approximate time needed: 30-45 minutes.

**PURPOSE:**

* To have students actively engage in the learning process
* To have students learn to identify relevant information and apply it in the solution of a problem
* To have students learn and practice problem-solving strategies

**PREPARATION:**

* A set of problems to solve.
* Plenty of writing instruments for writing on the board (dry erase markers for whiteboards, chalk for blackboards, etc.)

**DIRECTIONS:**

1. Ask students to form pairs.
2. Give them the handout that describes the role of the problem solver and listener (page 1 of TAPPS handout)
3. Explain to students the roles of problem solver and listener. Say, “The role of the problem solver is to read the problem aloud and talk through the reasoning process in attempting to solve the problem. The role of the listener is to encourage the problem solver to think aloud describing the steps to solve the problem. The listener may also ask clarification questions and offer suggestions, but should refrain from actually solving the problem.” It helps to model the process so students can see what it looks like.
4. Ask students to solve a set of problems, alternating roles with each new problem.
5. Select pairs at random to choose their most challenging problem to write on the board and explain to the class.
6. Ask students to share any insights they had about learning to solve problems.