**Introduction and Concrete Problem Solving**

**Third Grade**

**Time:**

Approximately 30-40 minutes

**Materials**:

* Dry Erase Markers
* 5 different simple jigsaw puzzles
* 2 pieces of poster board
* Sharpie Marker

**School Counselor Input**:

* Introduction (5 min.):
  + The school counselor will distribute a jigsaw puzzle to each table group (assuming that student desks are arranged in pods). Each group will have a different puzzle.
  + The school counselor will ask the students to spend the next 5 minutes solving as much of the puzzle as possible.
* Discussion 1 (5 min.):
  + The school counselor will call time on the puzzle-solving, and she/he will give the students a moment to observe the progress made by each group.
  + The school counselor will ask the students to explain how their group approached solving the jigsaw puzzle. Students will share with their peers and school counselor.
  + The school counselor will ask the students to help her/him to come up with the steps to solve a problem. The school counselor will ask leading questions and assist in helping students discover the 6 main steps to problem solving.
  + The school counselor will record the problem solving steps on a piece of poster board. This will be left in the classroom.
* Discussion 2 (after guided practice) (5 min.):
  + The school counselor will have the students share how they used the problem solving steps to solve the puzzle. (Hopefully they will have completed the puzzle.)
  + Students will share if solving the puzzle the second time was easier/harder than the first and why they believe the way they do.
* KWLH Chart (5-8 min.)
* School Counselor will ask students to share what they already know about problem solving.
* Students will share what they’d like to know about problem solving...These questions will hopefully be used to adapt/form the subsequent lessons/activities.
* School counselor will record their information on the poster board.
* School Counselor will share that at the end of their problem-solving unit that they will discuss what they’ve learned about problem solving and its uses in school and life.

**Guided Practice** (5 min.)**:**

* The students will switch tables (to a new puzzle), and they will approach a new puzzle using the problem solving steps.

**Independent Practice** (5-10 min):

“Here are the Facts”

* The school counselor will explain the directions for “Here are the Facts”.
* Each day that the school counselor does not visit the classroom, she will send the class a clue.
* Using the problem solving method and the clues, students will determine who owns the computer and who drank the water.

**Closure/Evaluation:**

* The school counselor will close by recapping what the class has done and discovered today, and she/he will briefly preview what the class will be doing the next time she/he visits.
* The school counselor will determine how well students work together by observing and making notes of how they perform in their puzzle groups.
* The school counselor will determine what students already know about the problem solving process by what they say during the KWLH portion and brain-storming the problem-solving steps.

**Here are the facts**

* This activity will be done over the four-week period. On the first day the counselor will explain the activity and then on the days that the counselor is not in the classroom (Monday, Tuesday, Thursday, Friday) of each week, the classroom teacher will reveal a new clue.
* The purpose of this is to keep the students thinking about problem solving during the days in between the classroom guidance. With the poster on a back board and a new clue each day the students will more easily be ready to think about problem solving during the next classroom guidance.
* The counselor will explain that each day she/he is not there a clue will be added to the poster, and by the last class they will need to figure out the answers to the questions on their own and then be able to explain how they got their answers.

**Questions:**

Who owns the computer?Who drinks the water?

**Here are the facts:**

The teacher lives in the red house. The engineer owns the microscope. Coffee is drunk in the green house. The architect drinks tea. The green house is immediately to the right of the ivory house. The baseball player owns a video camera. The golfer lives in the yellow house. Milk is drunk in the middle house. The mechanic lives in the first house on the left. The man who plays football lives in the house next to the man with the laser. Golf is played by the man living in the house next to the house where the robot is kept. The tennis player drinks orange juice. The technician plays soccer. The mechanic lives next to the blue house.