PROBLEM SOLVING PROCESS

In an attempt to meet the needs of ALL students, the School District of Escambia County uses a process that focuses on the learner's current skills or level of functioning and then designs interventions to assist the student in learning. Our problem solving model involves a systematic analysis of the student’s behavior and/or academic difficulties, consisting of five steps:

- Define the problem (What is the problem?)
- Analyze the problem (Why is the problem occurring?)
- Develop a plan (What are we going to do?)
- Implement the plan (Carry out the intervention.)
- Evaluate (Did our plan work?)

Problem solving will occur within the school setting at all levels of the Instructional Support Team process based on the intensity of the presenting problem and the amount of resources needed to resolve the problem. The intent of the problem solving process is to resolve the problem using the necessary resources in the most natural (least artificial or least restrictive) fashion possible.

The following diagram illustrates this process:

- Define the Problem
  What is the problem?

- Analyze the Problem
  Why is the problem occurring?

- Develop a Plan
  What are we going to do?

- Implement Plan
  Carry out the intervention.

- Evaluate
  Did our plan work?
Step 1: Define the problem. What is the problem?
It is important to remember that problems affecting student performance occur primarily as a result of an interaction between characteristics of the learner and the demands of the educational setting including instruction, curriculum, and learning environment. Instruction relates to how material is taught. Curriculum addresses what is taught, including both the content and the processes used to ensure student learning and mastery. Environment examines where the learning takes place and the larger school district, family, and social pressures that affect the behavior under question. Learner characteristics include many factors such as learning style, motivation/persistence, and attendance. This domain should be the last to be considered because it reflects the variables least amenable to change. (See appendix document on Four Domains of Learning.)

Students often present with a multiplicity of interrelated problems. The first task is to decide what specific problem is most severely impacting the student and is most amenable to change. A targeted problem behavior should then be identified that accurately reflects performance in the area of concern and is alterable and directly measurable. In identifying a problem, a specific definition of the behavior should be developed that is so clear that two independent observers can agree whether or not the behavior has occurred. Direct measures of targeted problem behaviors include the following:

- Frequency/Rate – the behavior happens too much or too little
- Duration – the behavior happens too long or not long enough
- Accuracy – the correct behavior happens inconsistently or not at all
- Latency – the behavior takes too long to begin after a prompt or begins too soon
- Intensity – the behavior is too loud/forceful or too soft/passive

Pitfalls to avoid during this step of the Problem Solving Process:
- Remaining too vague or general in specifying the problem- You must be very specific and define the problem in observable, measurable terms. Avoid statements such as, “student is lazy, unmotivated, poor reader.”
- Jumping to solutions without moving through the entire process- This tends to lead to wasted time at best and often to poor results and frustration.
- Not gathering baseline data on the problem situation (only verbal reports of anecdotal information)- A clear understanding of the student’s present level of performance in the area of concern is essential.
- Admiring the problem- Spending time talking about how bad the situation is without working the process to improve it.
- Assuming the student will become another’s responsibility- Not making a genuine investment of time and resources.

Step 2: Analyze the problem. Why is this problem occurring?
Once the targeted problem behavior has been defined, problem analysis should be conducted to examine probable explanations for the discrepancy between expectations and performance. Problem analysis should be data-based and multidimensional, helping to answer questions like:

- Why is this problem situation occurring?
- What factors are contributing to the discrepancy between actual and desired levels of performance for the problem?
- How could resources be reorganized to help resolve this problem situation?
Hypotheses for why a problem is occurring must be generated, looking at the areas of instruction, curriculum, the student's environment, and learner's characteristics. After all hypotheses have been generated, the team must determine which hypotheses are of highest priority and have the greatest potential for response to intervention.

Pitfalls to avoid during this second step of the Problem Solving Process:

- Failing to examine situations in which the problem does NOT occur. This excludes a major source of information and may lead to a misunderstanding of the problem.
- Name only ONE hypothesis to explain why the problem may be occurring. Limiting the creative thought process at this point often leads to missing the most effective intervention in favor of the quickest one. For example, looking only at behavior and ignoring academic achievement.
- Evaluating ideas as they are generated. This is a sure way to shut down the creative processes.
- Jumping to solutions. Working the entire process is essential in order to maximize student gains while minimizing time spent trying different interventions.
- Assuming that a problem is a performance deficit (e.g., student is capable of adding three single digit numbers with regrouping correctly but does not complete assignment) and not a skill deficit (e.g., does not correctly add three single-digit numbers with regrouping). If you are not sure whether the problem reflects a skill deficit or a performance deficit, treat the problem as a skill deficit first.

Step 3: Develop a plan. What are we going to do about the problem?
An intervention is planned to address the problem based on knowledge of the student, a clear definition of the problem, and the support of educational research. Effective interventions capitalize on student strengths and enhance resiliency factors. They focus on the factors which are most easily changed and then look for the simplest intervention believed to make the desired impact on the area of concern. The team must consider the feasibility, resources, and the naturalness of the intervention. The planned intervention needs to be clearly written with specific detail. A goal should be set and a procedure for evaluating the effectiveness of the intervention should be established concurrently with the intervention procedures. The plan should include specifics on the who, what, when, and where of the intervention as well as state who will be responsible for collecting data and providing support. It is important to remember that interventions are not activities intended to remove students from the general education setting; rather, they are activities requiring a range of resources designed to improve student performance and provide information about factors needed to assist the student's achievement in the general education setting. (See appendix document Developing a Plan: Intervention Considerations)

Pitfalls to avoid during this third step of the Problem Solving Process:

- Setting a goal that is not linked to the problem analysis.
- Setting a goal that is overly ambitious or not ambitious enough.
- Limiting intervention ideas to programs that are currently in place. Often the best solution transcends current programs or doesn't need a program at all.
- Seeing a person, setting, or placement as the intervention. A good intervention specifies what happens with the person or in the setting or placement that is hypothesized to bring about the desired change.
- Jumping to an intrusive or intensive strategy. Given a range of strategies equally likely to have the desired impact upon the area of concern, the simplest, least intrusive intervention is most likely to be faithfully implemented and produce the desired results with greatest teacher satisfaction.
• Failure to thoroughly describe the details of the action plan. The plan should be so clearly stated that someone unfamiliar with the plan could read and implement it, including making decisions based on the data collected.

Step 4: Implement the plan. Carry out the intervention.
In order to provide meaningful information the intervention should be implemented faithfully and consistently for a reasonable time. Its effectiveness cannot be determined prior to implementation; therefore, support must be provided to those implementing the interventions, and the intervention itself must be monitored, reviewed, and modified as necessary. Again, the intensity and severity of the problem will indicate the resources necessary to provide support and follow-up for the intervention.

Pitfalls to avoid during this fourth step of the Problem Solving Process:
• Not continuing to implement the intervention for a long enough period of time to determine its efficacy. All interventions will take time to show results. It is important to continue faithfully implementing until sufficient data have been collected before making any changes.
• Continuing the intervention despite data showing its ineffectiveness. It is also important to have a plan that determines when it is time to move to a different intervention and not waste valuable learning time.
• Not graphing the data as it is collected so that it can be reviewed and used for decision making. The only purpose for collecting data is to use it for making informed instructional decisions.
• Not implementing the intervention as planned. Without accurate implementation there is no way to determine what is or is not working for the student.
• Providing no support to the person implementing the intervention. Nothing ever works exactly as planned. Support is necessary to work through the “bugs” in the plan, to provide consultation in decision making between meetings, and to assure faithfulness in implementation of the intervention.

Step 5: Evaluate effectiveness. Did our plan work?
Data gathered during the problem solving process are used to make decisions regarding the effectiveness of the educational strategy for that student and a determination as to what the next step will be. Decisions are made based on a trend of student performance over a period of time while participating in the intervention, rather than on any one measure of student performance representing performance at only a single point in time. It is important that the Instructional Support Team agrees during the planning stage on how to evaluate effectiveness and then revises the intervention based on those agreed upon decision making factors.

Pitfalls to avoid during this step of the Problem Solving Process:
• Evaluating the intervention based on verbal report. Accurate data is the only basis for making sound educational decisions.
• Failure to use the data obtained at the follow-up. The data should be the primary source of information in determining whether or not to continue, modify, or discontinue the intervention, as well as providing direction as to how to proceed next.
• Assuming the problem solving process is over if the first area of concern has been successfully eliminated. Be sure all areas of concern have been addressed based upon the initial (or revised) prioritized list of concerns before closing out the request for assistance.