

Problem Solving

Lesson Plan:

Duration: 50 Minutes

Teaching Method: Lecture/Discussion

References: Student Guide & Slide Presentation

Teaching Aids/Handouts: Student Guide & Slide Presentation

Reading Assignment: Student Guide

Lesson Objective: Comprehend use of the problem solving model during command.

Desired Learning Outcomes:

1. Describe the problem solving model.
2. Solve a sample problem using the model.
3. Discuss the application of the problem solving model.

Lesson Strategy

This segment is designed to introduce the problem solving model to new commanders and show them how using it will enhance their command.

Emphasis should be placed on defining the process and on its application. First, explain the steps involved in the problem solving model. Using the case study provided (or one locally composed), have the students complete the exercise. Let them do most of the work and elect a leader for the exercise. After the exercise, critique their performance. Assess their application of the process, not their solution to the problem.

The teaching outline provides an introduction, outline of the main points, and a conclusion to be adapted as required to meet the needs of a particular wing. The presenter should personalize the lesson to reflect the unique characteristics of the wing.

Lesson Outline:

MAIN POINTS:

- I. The problem solving model.
- II. Sample problem.
- III. Discuss the application of the problem solving model.

Teaching Plan

Lesson Objective: Comprehend use of the problem solving model during command.

ATTENTION:

One of the most often used and least understood skills people use are problem solving skills. Problem solving skills reflects making informed choices – identifying the dilemma, options, and consequences. Developing this skill is vital to your success as a commander.

MOTIVATION:

The classic problem solving model is the process through which we solve problems everyday – though we don't always recognize it. Gaining a better understanding of the problem solving process will enable you to work with your people to make better decisions – make more informed choices – for your unit. The solutions you arrive at using this process will be of higher quality and better tailored to suit your needs.

OVERVIEW:

This segment will describe the problem solving model, and give you the chance to apply it in a case study. You will be given a sample problem, and your task will be to solve it using this model. You'll see that the process lends itself to finding logical answers, and you'll recognize the skills as those you may already use in your daily lives.

TRANSITION:

STATE: Solving problems is an everyday occurrence, and we all go about the process in roughly the same way. We all make certain assumptions and choices when we solve problems. The classic problem solving model gives the process a structure. Let's examine the model by "going to lunch."

Note: Use the example from the student guide text to illustrate the model.

Main Points:

MP I. The Problem Solving Model

- A. Problem Solving Model set-up.
 - 1. Ask the group to provide possible consequences of hasty problem solving for complex problems. They're answers will vary, however you can anticipate these possible answers from the group:
 - a. an inefficient solution
 - b. an ineffective result
 - c. an overly expensive solution
 - d. wasted time and an incomplete solution
- B. Now explain that by utilizing a proper problem solving process, one will increase the probability of generating efficient, effective, and sound solutions to problems that are not easily solved.
- C. The problem solving model process:
 - 1. Recognize the problem.
 - 2. Gather data.
 - 3. List possible solutions.
 - 4. Test possible solutions.
 - 5. Select best solution.
 - 6. Implement solution.

MP II. Sample Problem

- A. Read problem.
- B. Use the model to solve problem.

MP III. Discuss the application of the problem solving model.

- A. Critique process

QUESTION AND ANSWERS:

Use the suggested questions to facilitate the discussion and field any questions that the students may have prior to starting the sample problem.

Sample Problem:

Problem Solving

EXERCISE OBJECTIVE: Apply what has been learned from the Problem Solving segment and reach a workable solution to the case presented.

Problem:

You are the commander of a composite squadron and have been in the job for 6 months. Your squadron consists of 14 senior members and 22 cadets. Your staff is competent and eager to participate in all facets of the program.

The Cadet Commander on your staff, C/1Lt Steven Spurance, has brought up a question at your monthly staff meeting. He says that the classes held for his cadets are utilizing training videos more and more frequently. When instructors plan to use videos in their classes, they must bring their own player & TV or rent them from a local rental store because the squadron doesn't own its own.

Cadet Spurance wants to know if the squadron can purchase a DVD player and flat panel large screen TV to both make it easier for the instructors to use training videos and make it more fun for his cadets who like the classes more with videos.

Everyone thinks it's a good idea until the Finance Officer informs you that the squadron only has \$225 in the wing banker account. Though this disappoints the staff, they still feel that getting a DVD player & flat panel large screen TV is a good idea. You agree. How do you and your staff solve this problem?

Lesson Summary:

SUMMARY:

Using the classic problem solving model can help you to more effectively solve the complex problems your unit deals with everyday. It can help you and your staff get a handle of the problem, logically discuss the possibilities and consequences, and be more confident in the choices you make – because they are informed choices.

REMOTIVATION:

The ability to quickly solve problems will serve you well as you take on and accomplish the important and often complex missions of the Civil Air Patrol.

CLOSURE:

The problem solving model helps you make more informed choices. Use it in your unit, in your life, and be more confident in your decisions.

Suggested Questions:

1. **Why is problem solving important to your local squadron?**

Answer: Unexpected obstacles are certain to present themselves as you lead your squadron on to accomplishing the important and often complex missions of the Civil Air patrol. You must be able to solve them.

2. **How can a squadron commander tackle the tough problems as they arise?**

Answer: Apply sound logic and use the problem solving model when needed.

3. **Are all solutions final?**

Answer: No, things change: the environment, the situation, technology, funding, society, the weather, etc. Our changing world requires that we re-evaluate periodically to determine if we are still doing things in an effective and efficient manner.

Field any other questions that the students may have.