

## Problem Solving Certificate Program

*This online learning program was developed by the NYS & CSEA Partnership for Education and Training for CSEA-represented NYS employees. It has been designed for all employees who wish to develop or improve their problem solving and decision-making skills. Participants were required to successfully complete the following ten courses and achieve a passing grade of 70% or higher in each course.*

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### **Problem Solving: Determining and Building Your Strengths** (1.1 hours)

Whatever you think of your current problem-solving skills, it is always possible to improve upon them, and even to develop new skills. To improve, you first need to assess your existing problem-solving style, identify your strengths and weaknesses, and develop an ongoing strategy for sharpening and building your skills. You also need to recognize the key barriers that lie in the way of effective problem solving your biases and develop techniques for reducing their impact on your ability to solve problems.

### **Getting to the Root of a Problem** (.4 hours)

If you've ever had to apply temporary fixes to an issue that just kept coming back up, you know how frustrating it can be. To get to the root cause of the problem, to implement a proper solution you need to ask the right people the right questions. In this course you'll learn how to identify and survey the right stakeholders, how to determine the root cause, and acquire tools to enable you to dig deeper and ultimately help solve the problem.

### **Generating Creative and Innovative Ideas: Maximizing Team Creativity** (1 hour)

What makes a person creative? Do you consider yourself creative? Certain personal characteristics have been linked with creativity (for example, a willingness to take risks, the ability to connect diverse ideas, and open-mindedness). Topics focus on the conditions of the work environment that can help boost creative output, including the amount of time available to ponder and experiment with ideas, the diversity of the team, and the relative openness of communication.

### **Defining Alternative Solutions to a Problem** (.4 hours)

Part of problem solving is creating alternative solutions. Before you jump in and start looking for alternative solutions to a problem, it's helpful to know what people want in an ideal world. This provides some direction when solving problems and coming up with new ideas. In this course you will learn how to get people to define their ideal states and use basic techniques for generating and evaluating alternative solutions. You'll also learn to recognize and avoid common pitfalls that can occur during the process.

### **Choosing and Using the Best Solution** (.4 hours)

The time has come to make a final decision. In this course, you will learn how to make smart decisions by paying attention to key criteria such as costs, time constraints, and alignment with organizational goals. In addition, you'll find out about different decision-making styles, and ways to plan and manage the implementation of your solution. Finally, you'll learn how to evaluate an implementation, and the importance of celebrating your efforts and accomplishments.

### ***Decision Making: Making Tough Decisions*** (1 hour)

Making decisions in your personal and professional life is not always easy, especially when you're dealing with an uncertain or unknown future. There are many situations that can make decision making particularly challenging, such as weighing alternatives and having to make compromises and trade-offs between them. Or, sometimes you must determine whether to trust logic, intuition, or some combination of the two. This course reviews a number of these decision-making challenges and introduces strategies for dealing effectively with uncertainty, making informed trade-offs using a systematic process, and placing appropriate trust in your intuition when making difficult decisions.

### ***Decision Making: Tools and Techniques*** (1.1 hours)

Before you can make a good decision, you need to first identify and evaluate your alternatives. Fortunately, several tools and techniques are available that can help you to formalize the process of identifying alternatives, carefully evaluating them, and making the best decision possible. This course introduces a variety of tools and techniques to use at the three most important steps of the decision-making process: generating, evaluating, and choosing between alternative courses of action. Nominal group technique (NGT) is used to brainstorm and prioritize options as a team. Return on Investment (ROI) measures distill the costs and benefits of each alternative into a monetary value. Three other decision-making tools the devil's advocate technique, Plus/Minus/Interesting (PMI) analysis, and the ease-and-effect matrix provide alternate methodologies for challenging and evaluating alternatives before making a decision. Equipping yourself with these tools will ensure you have an edge when you're facing an important decision.

### ***Using Active Listening in Workplace Situations*** (.6 hours)

Active listening skills are used by professionals in a wide range of occupations to enhance their work. In this course, you'll learn listening skills that can help in the workplace, and techniques for becoming an effective active listener.

### ***Interpersonal Communication that Builds Trust*** (.5 hours)

Communication works best when your intention is clear, your audience is engaged, and your verbal and nonverbal behavior are respectful. When you hit these notes, you'll build trust with the people you communicate with.

### ***Connecting with Others through Diplomacy and Tact*** (.4 hours)

It's important to understand how our biases, stereotypes, and expert knowledge can become barriers to effective communication. The essence of communicating with tact and diplomacy is overcoming these barriers and engaging with the minds of others. In this course, you'll explore methods for developing empathy with others, for framing yourself properly, and for removing personal biases.

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## **Foundational Competencies**

Workplace development competencies are job-based skills employees need to succeed across a wide variety of occupations. Having completed this certificate, you have enhanced your skills in one or more competency areas. You can learn more about these competencies by visiting the [Workforce Development Competencies](#) page. This certificate assisted you in developing the following competencies:



Critical Thinking, Problem Solving and Math