Soft Skill:

Problem-Solving & Critical Thinking
Soft Skill: Problem-solving and Critical Thinking

Objectives:

- Identify the seven steps to solving a problem effectively
- Practice solving work problems as an individual and as a member of a team
- Understand how the same problem-solving process works in many settings

Purpose:

Problem-solving and critical thinking are defined as the ability to use facts, knowledge and data to successfully solve problems. Employers greatly value the ability to develop a well-thought-out solution within a reasonable time frame. This lesson will give students a process for solving problems effectively.

Materials:

- Student Workbooks
- PowerPoint Slide 6

Facilitation Steps:

1. Have students access the Seven Steps to Solving a Problem Effectively page in the Student Workbook. Show PowerPoint Slide 6.

2. Go through each of the seven steps. Highlight each of them with the following information:

   Step 1 – Clearly identify the problem. What issue(s) are you trying to solve? Be specific.

   Step 2 – Remember to see the problem from perspectives other than your own. Remember that the best solution satisfies everyone’s interests. Practice active listening to all parties.

   Step 3 – This is the brainstorming step. At this point, make a list of potential options without evaluating them. That comes next.

   Step 4 – What are the pros and cons of each?

   Step 5 – What is the best solution? What has the potential for the best outcome? What are the possible consequences of your solution?

   Step 6 – Put your decision in writing. Think about how you will get it done and the resources you will need, then implement it!

   Step 7 – Decide how to monitor or track the decision and follow-through. Are there contingency plans if circumstances change in the future?

3. Tell students that they are going to be put into a variety of problem-solving situations in this lesson, and that they should keep this process in mind as they work through to a solution.

Part 1 – Problem-solving as an Individual Employee

4. Have students access the Problem-solving Organizer in the Student Workbook. Briefly review each of the steps in the process. Have students complete the graphic organizer as you read the following work-related problem scenario to them.

Scenario:

You work in a deli. Your busiest time of the day is the lunch hour rush, when many working people from nearby factories and businesses come to grab something quick to eat. A new fast food restaurant is opening up next door to
you. How can you avoid losing your lunch customers to this new competitor?

5. Explain to students that problems like this, both small and large, are an everyday part on the job. Being able to successfully offer solutions to problems that occur is a skill greatly valued by employers. This is true both of the skill as an individual employee as well as problem-solving in a group. In this scenario, you have done so as an individual. Let’s review your answers.

6. Answers will vary, but here are some potential answers to the various steps.

   Step 1 – You may lose customers to a new competitor
   Step 2 – Deli owner, deli workers, customers
   Step 3 – Do nothing; lower prices; advertising campaign for awareness of what makes the deli unique; special giveaways; lunch specials; play up strengths
   Step 4 – This will vary
   Step 5 – This will vary, but make sure students can justify the reasoning for choosing the solution they chose
   Step 6 – Make sure the steps are logical to the solution in step 5
   Step 7 – Make sure monitoring is logical based on the solution chosen

Part 2 – Problem-solving on a Work Team

1. Problem-solving by yourself may be challenging. However, working together on a team may be even more difficult. One bad attitude or large ego can derail the problem-solving process. It requires different skills than solving a problem as an individual. The purpose of this activity is to explore how to overcome common challenges when you problem-solve on a team. It is recommended to teach the Effective Teamwork in the Workplace lesson prior to this activity.

2. Divide your class into small groups of three or four students. Have students use the Problem-solving Team Scenarios page found in the Student Workbook. Have each group act out the scenario, allowing team members to take turns acting as the difficult team member. Then they should come up with at least one solution for solving this problematic behavior so that the work team can be productive.

3. Bring the class back together and have each group read their scenario. Then have each group share what their best solution was for the scenario. Solicit additional solutions from the class.
Seven Steps to Solving a Problem Effectively

Employers want employees who can work through problem-solving, critical thinking, and decision-making as an effective member of their staff. If you follow this seven-step process to effective problem-solving, you will increase your chance for a successful resolution to the issue.

1. Identify the problem.
2. Understand everyone’s interests.
3. List the possible solutions.
4. Evaluate the options.
5. Select an option or options.
6. Document the decision and implement.
7. Evaluate and monitor.
Problem-solving Organizer

1 Problem

2 Other points of view

3 Options

4 Evaluate the options
   Pros
   Cons

5 Solution

6 Documentation and steps to emendation

7 Evaluation and monitoring
Problem-solving Team Scenarios

Here are a list of suggested workplace scenarios. Give each small group one scenario to act out and work through as a team. Team members may take turns acting as the difficult team member. Each problem-solving team should act out and come up with ways to solve the problem behavior.

Scenario 1: The leader of the team wants to do everything him or herself. They have a very big ego and are difficult to work with.

Scenario 2: One team member is extremely shy. However, he or she has the most expertise and background to help solve the technical issue your team is experiencing in your best product.

Scenario 3: Two of your team members do not get along. There are many hard feelings between the two and they refuse to communicate with one another.

Scenario 4: One of your team members is very social. In fact, he or she believes they are the life of the party. This team member enjoys telling jokes continually which derails the conversation.

Scenario 5: One team member is very sensitive and emotional. This member gets upset when he/she doesn’t feel listened to and is extremely offended if all of his or her ideas do not get used. To further complicate matters, most of this team member’s ideas are not practical.

Scenario 6: One of your team members enjoys hearing themselves talk. They dominate the discussion and expect everyone to listen to them. This person is not the assigned leader of the problem-solving team.
Problem-solving

Scenario: Enrique and Anna are both sales employees at the same company. However, Anna has gone on a vacation and Enrique has volunteered to take over her business calls while she is away. On the first day of her trip, one of Anna’s customers stops in the office and asks a secretary for a price on a new product. However, the secretary notes just the customer’s first name, “Bob”. With thousands of customers, what can Enrique do to find out who the customer was and get them what they need?
Points of view to consider

- Enrique
- Anna
- Bob
- Secretary

Key questions

- What issue are you trying to solve?
- What are your options for solving the problem?
- What is the best solution?
- How does this solution satisfy everyone’s interests?
- What could be done differently in the future to prevent this scenario from happening again?
Soft Skill:

Time Management
**Soft Skill:** Time Management

**Objectives:**
- Take a self inventory of time management skills and identify how to improve
- Learn to discern urgent tasks from important tasks and plan accordingly
- Identify common barriers to time management and how to overcome these barriers
- Complete a personal time study in order to meet personal goals

**Purpose:**

Time management is an important skill that helps keep work and priorities under control. It also helps reduce stress. You've heard the saying... *time is money.* Wasted time is also a waste of money and drain on resources for employers. We need to be aware of our own time management skills and how we can strengthen areas that may need improvement. The purpose of this lesson is to have participants actively practice time management techniques in a variety of activities.

**Materials:**

- Time management self-assessment websites
  - Or other online time management self-assessment tools
- Computers with Internet access
- PowerPoint Slides 8, 9 and 10
- Student Workbook

**Facilitation Steps:**

1. Begin by introducing the concept of time management. Effective time management at work means continually striving to improve effectiveness (what you do) and efficiency (how you do it), both of which are important to managing a career.

2. There are many things to do to improve time management skills. These are: setting goals, prioritizing, managing interruptions efficiently, not procrastinating, and scheduling your day.

3. In order to improve time management skills, let’s take a self inventory to see how we measure up. Have students access one of the two time management surveys listed in the materials section, or offer another alternative. Give students five minutes to complete it.

4. Start a discussion - How did it go? Are there areas you can improve? The activities in this lesson will help strengthen time management skills.

**Activity 1 – The Priority Matrix (30 minutes)**

1. Explain that understanding the difference between urgent tasks and important tasks can make a tremendous difference in your day. Learning to prioritize can make the difference between getting the job done or not finishing.

Draw the Priority Matrix on a whiteboard or show PowerPoint Slide 8.
2. Define each of the 4 quadrants:

   Quadrant 1 – Urgent and Important: These tasks are number one on your to-do list. Do these first.

   Quadrant 2 – Not Urgent but Important: These tasks are serious and if they aren’t taken care of may move to the first quadrant. Plan your day to make sure these can get completed. Do these next.

   Quadrant 3 – Not Important but Urgent: These tasks can be put off until a bit later. If we aren’t careful, these can waste valuable time. Do these later.

   Quadrant 4 – Not Urgent or Important: These tasks are serious time wasters. Do not bother to do these tasks unless all of your other Quadrant 1-3 tasks are completed and you have the time.

3. Divide your class into small groups. Explain that each group will be given a list of work tasks that they will need to prioritize into the quadrants. There is no absolute wrong and right answer. Each group should come to a consensus as to what they believe is appropriate for each quadrant when compared to all of the other tasks on the list.

4. Have students access The Priority Matrix and a Priority Matrix Task List from the Student Workbook. The group should cut the tasks apart and put them in the appropriate quadrants as identified by the group. Allow for groups to discuss for approximately 15 minutes.

5. Call the class back together. Read off each task and ask each group to identify the quadrant they put it in. The class majority rules: put each task in the quadrant most groups agreed with.

Activity 2 – Identifying and Overcoming Barriers to Time Management

1. Introduce common time management barriers. It is easy for things to get in the way of your best attempt to make good use of your time. Have students access the Time Management Barriers and Solutions in the Student Workbook.

2. Give students one example of a barrier procrastination. They can write on the “Barriers” side of the page. Define procrastination as the action of delaying or postponing action, especially as a regular habit or practice.

3. Have the class brainstorm solutions for overcoming procrastination. Write these on a whiteboard while students write them in the “Solutions” column.

4. Potential solutions to procrastination could be:
   - Do the worst task first to get it out of the way
   - Break things into smaller bite-sized pieces
   - Plan to do these tasks when you are at your highest energy level
   - Reward yourself when you complete one of these tasks
   - Change your work environment
   - Hold yourself accountable to someone else
   - Remove distractions
   - Try to make it fun

5. Give students 15 minutes to complete the remainder of the Time Management Barriers and Solutions page. If they think of more barriers than they have space for, write more on the back.
6. Ask students to volunteer some of the barriers that they identified and write these on a white board. Make a master list of all barriers that students have identified. By a show of hands, identify the number of students that had each of the barriers on the master list. Identify the top five that the most students had. For the top five, ask students to share their solutions to each of these.

Some common barriers include:
(Show PowerPoint Slide 9)
- Procrastination
- Interruptions, i.e., cell phone, unexpected visitors
- Not setting limits
- Distractions
- Not Prioritizing

Some solutions could be:
(Show PowerPoint Slide 10)
- Use a planner/calendar
- Learn to say No
- Finish what you start
- Prioritize
- Eliminate time wasters
- Do it right the first time
- Prune or unclutter
- Reward yourself

7. Have students reference the Time Management Scenario/Solution page in the Student Workbook. Have students work in pairs to identify the barriers in the work scenario and also identify potential solutions. Allow 10 minutes for this activity.

8. Have students share the barriers that they identified and solutions to help Michael complete the project.

Activity 3 – Personal Time Study

1. Tell students that they are going to complete a one-week time analysis. Each week has 168 hours (24 hours per day x 7 days per week). Students are going to analyze how much time they spend on average on things like eating, sleeping, working, studying, being social, etc. They are going to use the data that they gather from their time study.

2. Have students access the Personal Time Study Table pages in the Student Workbook. Assign this as homework for one week. They should identify what they did for that hour. It can be summed up in a few words. Tell them to use the following categories to help identify tasks. They will be adding up categories later, so identifying tasks by category will make that easier.

- Eating
- Sleeping
- Working
- In class
- Studying
- Transportation
- Chores
- Family time
- Social time
- Other
3. After one week has gone by, have students bring in their completed time study table. Begin by having students complete the **Personal Time Study Analysis** page in the Student Workbook. Students should add up the total hours spent on each task on the list.

4. Have a class discussion about the time study when everyone has completed their analysis. What surprised students the most about their own personal time study? What are the changes or solutions they can make to their schedule in order to do the things they don’t have time for now? Do students feel overscheduled?

5. Tell students that this approach can also be used on the job if they have difficulty managing their time. When employees cannot get everything done, one way to get to a solution is to do a time study. When an employee can see in black and white how they are spending their work time, it can help point to a solution.
The Priority Matrix

Cut the list of tasks apart and, as a group, decide which quadrant they should go into.
The Priority Matrix Task List

Scenario: You are a preschool teacher and have the following list of tasks that you must do today. Cut the list of tasks apart and, as a group, decide which quadrant they should go into.

<table>
<thead>
<tr>
<th>Task</th>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the daily observation sheet which includes information on</td>
<td>Lead the children in a painting activity.</td>
</tr>
<tr>
<td>meals eaten, naps, significant health issues, problem behavior or</td>
<td></td>
</tr>
<tr>
<td>accomplishments.</td>
<td></td>
</tr>
<tr>
<td>Complete lesson plans for next week and give to director.</td>
<td>Serve lunch to your group and clean up.</td>
</tr>
<tr>
<td>Read a book to your group during story time.</td>
<td>Teach the children a lesson on stranger danger.</td>
</tr>
<tr>
<td>Take your students outside to play games.</td>
<td>Help your students learn their letters and numbers</td>
</tr>
<tr>
<td>Organize and store the toys to ensure the area is picked up before</td>
<td>Use bleach and sanitize the toys because one child was found to</td>
</tr>
<tr>
<td>going home.</td>
<td>have hand, foot and mouth disease.</td>
</tr>
<tr>
<td>Teach your students to sing “This Little Light of Mine.”</td>
<td>Complete a class on infant and child CPR.</td>
</tr>
<tr>
<td>Contact a parent to set up a meeting where you can discuss</td>
<td>Give one of your students a time-out because they bit another child.</td>
</tr>
<tr>
<td>transitioning the child to a new room for older children.</td>
<td></td>
</tr>
<tr>
<td>Write your monthly class newsletter to parents highlighting</td>
<td>Teach a lesson on how to properly wash your hands.</td>
</tr>
<tr>
<td>upcoming activities, field trips, and announcements.</td>
<td></td>
</tr>
</tbody>
</table>
# Time Management Barriers and Solutions

In the space provided, identify common time management barriers and suggest solutions for overcoming those barriers.

<table>
<thead>
<tr>
<th>Time Management Barrier</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Time Management Scenario/Solution

Read the scenario below and work with a partner to 1) identify the barriers to getting the project done and 2) provide solutions to overcoming these barriers.

**Scenario:** Michael is a website designer in the marketing department of a local sporting goods manufacturer. He has been given the task to design the annual product catalog that will be sent to 10,000 customers. His deadline to go to print is one week from today. He started this project 2 months ago but isn’t as far along as he should be. He needs to work with the product manager to get final pricing but the product manager hasn’t provided it to him yet. Michael recently purchased a new iPhone and enjoys trying new apps on it at work. Michael also has a new girlfriend and they enjoy meeting for lunch at least twice a week. Sometimes lunch hours get extended because they are having so much fun. Michael’s sales manager needs to review the catalog at least twice before it can go to print. Michael has still not given him the first draft so he can edit and identify any needed changes. Michael really enjoys taking the product photos and working with his photo editing software. In fact, he enjoys that task so much that he spends far more time than he should getting the photos for the catalog to look ‘just right.’ What advice do you have for Michael to help him get this catalog project completely done and to his manager for review, and to the printer in time?

**Time Management Barriers:**

**Time Management Solutions:**
**Personal Time Study Table**

Identify your activities for one week at each time of the day.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 AM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Personal Time Study Table

Identify your activities for one week at each time of the day.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 PM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Personal Time Study Analysis

How many hours did you spend on each of the following activities?

<table>
<thead>
<tr>
<th>Task</th>
<th>Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eating</td>
<td></td>
</tr>
<tr>
<td>Sleeping</td>
<td></td>
</tr>
<tr>
<td>Working</td>
<td></td>
</tr>
<tr>
<td>In class</td>
<td></td>
</tr>
<tr>
<td>Studying</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
</tr>
<tr>
<td>Chores</td>
<td></td>
</tr>
<tr>
<td>Family time</td>
<td></td>
</tr>
<tr>
<td>Social time</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168 hours</td>
</tr>
</tbody>
</table>

Questions:

1. Are there things you would like to do that you cannot find time for? If so, list them below.

2. What can you change in your schedule to free up time to do the things you listed above? Think about the solutions to time management barriers you learned about earlier in this lesson.
Time Management

Scenario: You have a really busy day with many things to do at work and in your personal life. You work in the marketing department at a local company. The final layout of the annual catalog is due today to your manager, Stan, by 5pm. You are easily distracted and have a hard time keeping focused when busy. Here are the tasks you have noted to accomplish today:

- Go out to dinner to celebrate your friend Madison’s birthday
- Meet with the catalog photographer, Al, to make sure you have final digital copies of all catalog photos
- Meet with the product manager, Julio, to double check pricing accuracy in the catalog
- Clean off your desk so you can find files quicker
- Read personal email
- Check your Facebook
- Schedule a meeting with your manager, Stan, to review the final layout
- Answer your work emails received today
- Go grocery shopping
Points of view to consider

- You, the employee
- Stan, your manager
- Madison, your friend
- Al, the photographer
- Julio, the product manager

Key questions

- Using good time management strategies, prioritize your task list into these four areas:
  - What is urgent and important?
  - What is important but not urgent?
  - What is urgent and not important?
  - What is not important and not urgent?