
Preparation for Participant-Led Exercises

Participant-Led Exercise: Training Practice

Objectives

In this section, you will have an opportunity to conduct a practice exercise that will help you prepare for the up-coming participant-led exercise.

The upcoming participant-led exercise will assure that:

- all are comfortable with the facilitator's training role
- important training skills are developed

PRACTICE TRAINING: PARTICIPANT-LED EXERCISE

- Why: facilitator trains on the Juran Quality Improvement Process
- Objective: validate that all participants understand the assigned sub-step of the Juran Quality Improvement Process
- Format: participative, 15 minute exercise; everyone involved; *not* a lecture

LFQ601

The training principles that we observe in the following practice exercises are the principles that should guide the design of your participant-led exercise.

Pick a Number

Object: To determine the solution to a simple mathematical problem which your partner is working on.

Materials Needed: None

Steps

1. Say to your partner, "Pick a number from 1 to 10, but do not tell me what the number is." Be sure they are clear that they should not choose fractions (example: $1 \frac{1}{2}$) or negative numbers (example: -3).

Example ➤ Number is 7

2. Say to your partner, "Now multiply the number you have chosen by 2. Again do not tell me your answer."

Example ➤ $2 \times 7 = 14$

3. Say to your partner, "Add 6 to your total."

Important Note ➤ This is a critical step. You can choose any even number for this step, e.g., 2, 4, 6, 8, 10, etc. The answer to the problem will always be half the number you give them to add. Therefore, always select an even number to add, and remember that dividing the number in half is the solution to the problem.

Example ➤ $14 + 6 = 20$

4. Say to your partner, "Now divide your total by two or in half."

Example ➤ $20 \div 2 = 10$

5. Say to your partner, "Take away or subtract the original number you started with." Pause to make sure they have completed the computation. Then tell them, "Your answer is three."

Example ➤ $10-7=3$

Note: Remember, the answer to the problem will always be half the number you give them to add. You gave then the number **six** to add, so the answer is half of that, i.e., 3.

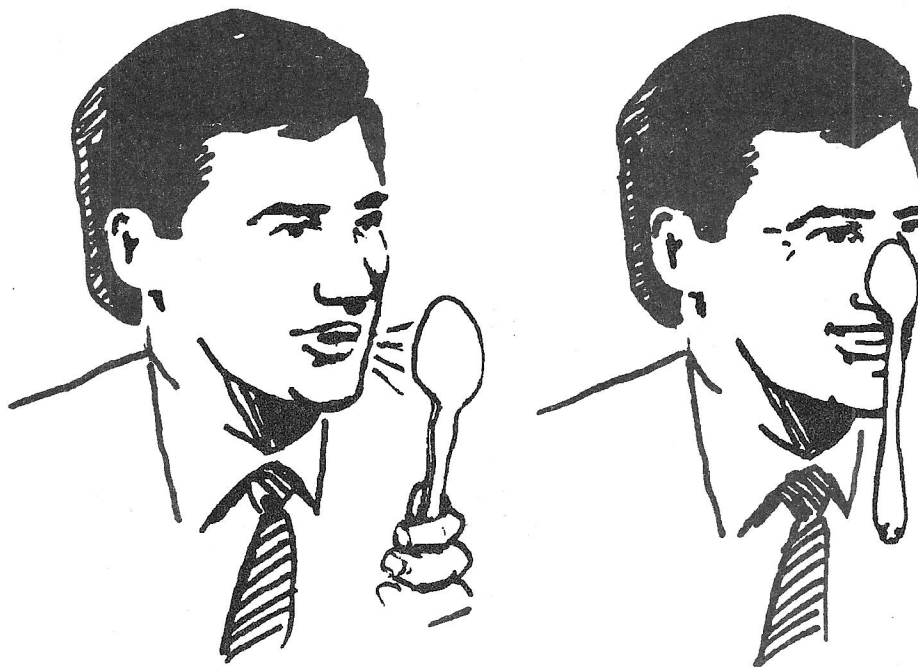
Magic Spoon

Object: To teach someone how to hang a teaspoon from the nose using no special adhesive or glue.

Materials Needed: Teaspoon, paper towel

Steps

1. Take a paper towel, and wipe off the oils from your nose. If water is available, dip the end of the towel lightly into the water, and wipe off the oil with the damp towel. Wipe it off again with the dry side.
2. With the inside of the spoon facing you, place the spoon about two inches from your mouth. Exhale with your mouth wide open onto the spoon so that a stream of water vapor covers the inside of the spoon. (You may want to repeat this step two or three times.)
3. Place the inside of the spoon onto your nose with the handle facing down. (See illustration below.) Slowly remove your hand from the spoon. If it does not stick, repeat steps one and two and try again. The spoon should hang freely from your nose. **DO NOT MAKE SUDDEN MOVES OR THE SPOON WILL FALL OFF!**



Participant-Led Exercise: Assignments

Assignments

Form 17 found in the appendix outlines all the available participant-led exercises that you or your colleagues will conduct throughout **Facilitating and Leading Quality Improvement Teams Workshop**.

You can sign up to conduct any exercise that interests you; please record your choice on: (1) the overhead transparency shown by the instructor, and (2) on your copy of Form 17.

Design and Examples

Following are four sample participant-led exercises. **If you have been assigned a participant-led exercise number 1 - 4**, you may choose to run your exercise as outlined, or you can develop a different exercise.

If you are assigned a participant-led exercise number 5 - 12, the following exercises are examples that can serve as a reference to help you design your own exercise.

Participant-Led Exercise: Example #1

Note ➤ The following is designed as an example of a participant-led exercise. Participants are welcome to use it or to create their own exercise.

Nominate Projects

Preparation

Find the black and white transparencies related to Nominate Projects on the Resource Table:

- LFQ705
- LFQ706

Introduction/Opening

1. Show participants a copy of Chart LFQ705 (reminding them they have seen this chart earlier) and discuss:
 - Quality improvement projects are problems that have already been recognized by the organization as warranting attention and are already scheduled to be solved.
2. Show participants a copy of Chart LFQ706 (reminding them they have seen this chart earlier) and discuss:
 - There are many possible sources of poor organizational performance and customer dissatisfaction that a Quality Council can consider when picking a quality improvement project.

Exercise

1. Tell participants that you are going to concentrate your attention on three nomination sources:
 - customers
 - managers
 - employees
2. Tell participants that you would like them to think about a situation they probably all can relate to: a visit to the Department of Motor Vehicles (DMV). As we all have observed, there are problems in the DMV in the effectiveness and manner in which it serves its customers. Customers come to the DMV for many reasons related to the renewal or acquisition of a driver's license.

Break the room up into three different teams, each team assuming a different role.

- **DMV managers.** Managers supervise the customer service clerks who wait on customers.
 - **Customer service clerks.** These are the individuals behind the counter who serve the customer.
 - **Customers.** In this case, you are customers, waiting in a long line to be helped. It happens to be the 31st day of the month when your license expires, and you are on your 45-minute lunch break.
3. **Objective:** You want to gather the input from these three diverse teams on why so many problems exist in the effectiveness and manner in which the DMV serves its customers.
 4. **Brainstorm.** Ask each team to develop a list of problems that exist at the DMV. (You may hear lots of snickering at this time.) Comment that it appears the teams are anxious to get started. Each team has 5 minutes to develop this list.

5. While the teams are working, write each team role on three different sheets of flip chart paper: Customer, DMV Customer Service Clerks, and DMV Manager.
6. Tell the teams that you would like each team to share two of their favorite problems with the full group. Capture the responses from each team on the flip chart sheets prepared earlier. (There will probably be some humorous remarks, and certainly the responses will reflect the varied perspectives of each of these teams.) You may want to comment about the diversity of the problems.
7. Ask the teams, "What have we learned about the step, **Nominate Projects**"? Learning points will probably include the following facts.
 - It is important to gather nominations on quality improvement projects from several sources because each source will have a different perspective about what problems need to be solved.
 - One group of individuals may have different priorities than another group.
 - It is important that lists of problems not become lists of those to blame or lists of remedies to the problems.

If these ideas are not raised by the group, summarize the items listed above for the whole group.

8. Close the exercise by stating that the next step would be to evaluate all the project nominations to determine the priority of problems for the DMV to solve. Some of the problems the teams raised will be problems that the DMV decides to solve immediately; others will be problems addressed later. This will be the subject of the next participant-led exercise.
9. Thank the teams for playing their roles so effectively.

Participant-Led Exercise: Example #2

Note ► The following is designed as an example of a participant-led exercise. Participants are welcome to use it or to create their own exercise.

Evaluate Projects

Preparation

1. Find the black and white transparency LFQ707 related to Evaluate Projects on the Resource Table.
2. You may want to use the three flip charts generated in the previous participant-led exercise: Customers, DMV Customer Service Clerks, and DMV Managers. Make sure you can find and display those charts easily.
3. You may not want to wait until the participant ahead of you has run his/her exercise. Instead, you may want to structure the exercise ahead of time. If that is the case, make up three different flip charts or transparencies with the following information.

Customer Service Clerks nominated the following DMV problems as quality improvement projects.

- Customers get confused about what line they should wait in for a license renewal, causing major delays.
- Customers do not bring the correct information or forms with them from home to complete the license renewal process, causing a return visit to the DMV.

Customers nominated the following DMV problems as quality improvement projects.

- The process for renewing a license is ineffective and inefficient. The process is time consuming, requiring that a customer stand in several lines for different clerks to complete small parts of the renewal process.
- The clerks are rude and inefficient.

DMV Managers nominated the following problems as quality improvement projects.

- The State wants the DMV to reduce its overhead costs while at the same time increasing its productivity.
- Customer Service Clerks feel abused by impatient customers; inordinate amounts of management time are spent counseling unhappy clerks, adding to the overhead costs of the DMV.

Introduction/Opening

Show participants a copy of Chart LFQ707 (reminding them they have seen this chart earlier) and discuss:

- The best method to determine **what** organizational problem(s) to tackle through a quality improvement project is to collect and analyze data. The data should be collected from several possible key areas. (Read them off the transparency.)

Exercise

Evaluate each of the problems of the DMV against the key sources found on LFQ707.

Conduct a full group discussion that evaluates each of the key problems listed by the three DMV roles against the sources found on LFQ707.

(Of course, in our hypothetical case, the teams do not have specific data on the scope and effects of the problems. However, in the spirit of an exercise, we should be able to *project* the implications of the problem.)

For example:

- Clerks say a major problem is: Customers do not bring the correct information or forms with them from home to complete the license renewal process, causing a return visit to the DMV.

Ask the participants to evaluate the above nominated problem against the items on LFQ707. Will the incomplete customer information and the necessary return visit:

1. drive the customer away?
2. drive our customers to the competition?
3. drive up the costs of poor quality?
4. adversely affect DMV employees?

- If the answers to each of the four questions are affirmative for this problem, it suggests it is a major problem for the DMV. If only one or two answers are affirmative, this is probably not a major problem for the DMV. (Since the DMV has a “captive customer audience” and there appears to be no current competition, some of the problems may have a negative response to the questions about losing customers or driving customers away to the competition.)

Summary

1. Write on a flip chart the one to three key problems that have survived the evaluation process. Explain that the Quality Council determines the key problems that will be tackled by a quality improvement project.

The Quality Council may choose to pilot a few projects in the beginning stages of the organization's quality improvement initiative. With experience, more and more quality improvement projects can be tackled simultaneously.

2. Thank the participants for their help in evaluating projects.

Participant-Led Exercise: Example #3

Note ► The following is designed as an example of a participant-led exercise. Participants are welcome to use it or to create their own exercise.

Select Projects and Ask: Is it Quality Improvement?

Exercise Focus Due to the short amount of time scheduled for this exercise, the focus of the exercise will be limited to Select Projects.

Preparation

1. Find the black and white transparencies of Forms 21, 22, 23, and 24 on the Resource Table, or you may make them from the copies of these forms found in the appendix.
2. You may want to use the three key project nominations chosen by the teams in the previous participant-led exercise. If this is the case, make sure you can easily find and display the charts with those key project nominations.

Pass out three copies of the Project Nomination Chart, Form 21, one to each team.

3. You may not want to use the information generated by the teams in the participant-led exercise ahead of you. Instead, you may want to structure the exercise in advance. If that is the case, use the project nomination charts: Forms 22, 23, and 24.

Introduction to the Exercise

Break the participants into three different teams to use the criteria for selecting a project.

Ask each team to take one of the project nominations and evaluate it using the criteria on the transparency provided. Give each team an appropriate transparency and a transparency pen to use to write information on the transparency.

Exercise

1. Give teams 5 minutes to evaluate their project nomination against the criteria for selecting a quality improvement project. Tell teams that they will not finish in the time provided.
2. Ask each team to summarize their findings in a 1-minute presentation for the full group. They may use the provided transparency and overhead projector to display their results.

Summary

1. Point out that not all nominated projects will survive this evaluation, making the selection criteria an important screening tool for choosing only those projects that will have an effect on the organization. Print out on a flip chart the project(s) that have survived this evaluation.
2. Ask fellow participants: "What are your major learnings from this exercise?" Write their responses on a flip chart.
3. Thank the participants for their help in selecting a quality improvement project.

Participant-Led Exercise: Example #4

Note ➤ The following is designed as an example of a participant-led exercise. Participants are welcome to use it or to create their own exercise.

Prepare a Mission Statement

Preparation

1. Find the black and white transparencies related to this subject on the Resource Table:
 - LFQ802
 - LFQ803
 - LFQ804
2. You may want to use the summary flip chart from the previous participant-led exercise. Make sure you can easily find and display this chart. On this chart, you should find the one to three projects that remain after evaluating them against the criteria for selecting a quality improvement project.
3. You may not want to wait until the participant ahead of you has run his/her exercise. Instead, you may want to structure the exercise ahead of time. If that is the case, make up two different flip charts that list the projects that have hypothetically survived the selection criteria.
 - Flip chart #1: Customers do not bring the correct information or forms with them from home to complete the license renewal process, causing a return visit to the DMV.
 - Flip chart #2: The process for renewing a license is ineffective and inefficient. The process is time consuming, requiring that a customer stand in several lines for different clerks to complete small parts of the renewal process.

Introduction/Opening

Show participants Charts LFQ 802, LFQ 803, and LFQ804 (reminding them they have seen these charts earlier) and discuss:

- The mission statement always contains two parts: The problem and what the team is to do about the problem.
- The mission statement should not suggest a remedy. The remedy may be incorrect and may send a quality improvement team down a dead-end road. If the mission statement attributes blame, the mission will just generate defensive behavior, hurting the team's ability to collect and analyze objective data.

Exercise

1. Break the participants into two teams. Ask each team to create a mission statement for one of the remaining problems. Give the team 5 minutes to write a mission statement.

Team A Project: Customers do not bring the correct information or forms with them from home to complete the license renewal process, causing a return visit to the DMV.

Give this team flip chart #1 that was previously created.

Team B Project: The process for renewing a license is ineffective and inefficient. The process is time consuming, requiring that a customer stand in several lines for different clerks to complete small parts of the renewal process.

Give this team flip chart #2 that was previously created.

2. Each team should present its project mission statement to the whole group via a transparency or flip chart.
 - Ask Team B to comment on Team A's mission statement. Ask: Does it meet all the criteria for a well-written mission statement?
 - Ask Team A to comment on Team B's mission statement. Ask: Does it meet all the criteria for a well-written mission statement?

Summary

1. Ask participants what major things they have learned about writing a mission statement?
2. Thank the participants for helping to develop mission statements for these two quality improvement projects.

Background Resources

Form 16, found in the appendix, outlines where you will find background information to use as you prepare your participant-led exercise. These background resources are located in your training room for easy reference. You need only use one of the outlined sources, depending on your industry:

Health Care

Quality Improvement for Health Care™
*Team Preparation Workbook and
Team Training Workbook*

Manufacturing and Service

**Juran's Breakthrough for Quality
Improvement Teams™**
*Team Preparation Workbook and
Team Training Workbook*

Manufacturing

Juran on Quality Improvement
Videotape series

Step 2: Establish the Project/ Prepare a Mission Statement

Overview

You will learn how to prepare a problem description and evaluate some sample problem descriptions.

Assignment

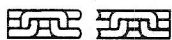
Activity	Pages/Transparency	Time
Workbook Reading	Pages 1-3 – 1-6	5 minutes
Individual Exercise 1,	Page 1-7	5 minutes
Evaluating Problem Descriptions		
Exercise Discussion		10 minutes

Total Time

20 minutes

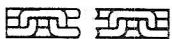
Materials

Team Training Workbook



Workbook Assignment (10 minutes)

- Pages 1-3 – 1-6.
- Individual Exercise 1, Evaluating Problem Descriptions, on page 1-7.



Exercise Discussion (10 minutes)

Individual Exercise 1, page 1-7

Problem description 1: More than 35 percent of our customers responded in a recent survey that they were very or somewhat dissatisfied with our service.

- Ask** ► **Q** Is the first problem description effective?
- A** The problem description indicates that more than 35 percent of the customers are not fully satisfied with customer services. The statement is specific, measurable, and observable, but the project may not be manageable.

Step 2: Establish the Project/ Prepare a Mission Statement

(continued)

Q How would you rewrite the problem description?

A Suggested rewrite: Any rewrite that narrows the focus of this problem would be appropriate.

Point out ► A more manageable project would narrow the focus of the problem by:

- concentrating on a specific complaint (e.g., long period of time spent “on hold” when calling, or the inability to get specific information from a customer representative)

or

- specifying complaints about a particular aspect of customer service (e.g., shipping, repair)

- In the real world, teams may need to start with a broad problem description if no data are available to narrow the focus. Part of the team’s task would then be to narrow the focus.

Problem description 2: We produce too many defective pumps.

Ask ► **Q** Is the second problem description effective?

A The present statement is not specific and no measurements are mentioned. It does not explain how many pumps are considered **too** many, what type of defects, etc.

Q How would you rewrite the problem description?

A Suggested rewrite: Two percent of our pumps must be scrapped because they do not pass our safety/durability checks.

Point out ► The rewritten statement refers to a specific problem that has been measured. While prior measurement is not necessary, this problem is now focused enough to be manageable.

Step 2: Establish the Project/ Prepare a Mission Statement

(continued)

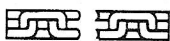
Problem description 3: We receive an average of 24 written complaints per week regarding billing mistakes.

- Ask ▶**
- Q** Is the third problem description effective?
 - A** Yes. There is observable evidence of the problem (written complaints) and the problem is specific (billing mistakes) and measurable (an average rate of billing mistakes of 24 per week). In addition, the problem is manageable.

- Point out ▶** Providing specific information helps to “remove the blindfold.” When there is a specific, observable, measurable description of the problem and the problem is manageable, it is more likely to be solved to everyone’s satisfaction.

Problem description 4: Communication among our departments is poor.

- Ask ▶**
- Q** Is the problem description effective?
 - A** No. The problem description is vague and unmeasurable. For example, what one department considers “good communication” may be very different from another department’s criteria.
 - Q** How would you rewrite the problem description?
 - A** **Suggested rewrite:** This problem description would have to be changed to reflect the specific nature of the poor communication. For example, have deadlines been missed because a department did not receive correct deadline information from another department? If so, the problem description should reflect this particular problem. To rewrite this problem description effectively, team members have to probe for a **specific** problem to address.



Activity Wrap-up

Answer any questions participants may have.

- Bridge ▶** There are two components to an effective mission statement: (1) a problem statement and (2) a description of the objective. The next activity focuses on describing the objective.

Prepare a Mission Statement

Overview	You will learn what to avoid when describing a mission objective and evaluate some sample mission statements.		
Assignment	Activity	Pages/Transparency	Time
	Workbook Reading	Pages 1-8 – 1-11	5 minutes
	Individual Exercise 2,	Page 1-12	5 minutes
	Evaluating Mission Statements Exercise Discussion		5 minutes
Total Time	15 minutes		
Materials	Workbook		

Workbook Assignment (10 minutes)

- Pages 1-8 – 1-11.
- Individual Exercise 2, Evaluating Mission Statements, on page 1-12.

Exercise Discussion (5 minutes)

Individual Exercise 2, page 1-12

Mission Statement 1: It takes Shipping too long to send extra parts to customers. Reduce the time it takes for the part to reach the customer.

Ask ► Q Is the first mission statement effective?

A No. The statement is not specific about how long it takes to ship extra parts to customers, and it blames the shipping department for the problem.

Q How would you improve the mission statement?

A Possible rewrite: In more than 50 percent of the orders, it takes more than five days to ship extra parts to customers. Reduce that time.

- Not specific
- Assigns blame

Prepare a Mission Statement

(continued)

Mission Statement 2: The organization pays \$1.3 million annually in interest charges associated with billing errors and the resulting late collection of payment. Reduce the dollar value of accounts receivable resulting from billing errors.

Ask ▶ Q Is the second mission statement effective?

A Yes. The problem is stated in terms that are specific, observable, and measurable. The problem is manageable, and the statement does not imply a cause, suggest a remedy, or assign blame.

Mission Statement 3: We need a computerized project tracking system to plan project deadlines and track work completion accurately. Procure and install such a system by the end of the year.

Ask ▶ Q Is the third mission statement effective?

A No. The mission statement suggests a remedy—install a computerized project tracking system to plan project deadlines—without stating that there is a problem with work deadlines being missed. In addition, even if this problem exists, the statement suggests a remedy even though the cause of the problem is not known. Finally, this statement could easily be describing a quality planning project instead of a quality improvement project. A quality improvement project will always address an existing problem which is specific, observable, and measurable.

Q How would you improve the mission statement?

A The mission statement must address the problem. **Possible rewrite:** Project deadlines are being missed by an average of 15 days. Correct this problem so that project deadlines are never missed.

What is the problem?

Is it a Quality Improvement?

Prepare a Mission Statement

(continued)

— Implies a Cause
— Suggests a Remedy
Ask ▶ **Mission Statement 4:** Reception does not inform Housekeeping promptly when a guest has checked out. Improve communications between Reception and Housekeeping to reduce the time needed for room turnaround.

Q Is the fourth mission statement effective?

A No. The statement implies cause (delay caused because Reception does not inform Housekeeping) and suggests a remedy (improving communications between Reception and Housekeeping will reduce room turnaround time).

Q How would you improve the mission statement?

A **Possible rewrite:** Reduce room turnaround time from an average of X minutes to an average of Y minutes.

Activity Wrap-up

Answer any questions participants may have.

- Bridge** ▶ Next you will begin to work on the Case Study you will return to at several intervals today and tomorrow.
- ▶ As you learn the steps and activities of the quality improvement process, you will read about how an actual quality improvement team handled the same steps and activities.
 - ▶ Then you will work with your team to evaluate how effectively the team followed the quality improvement process.