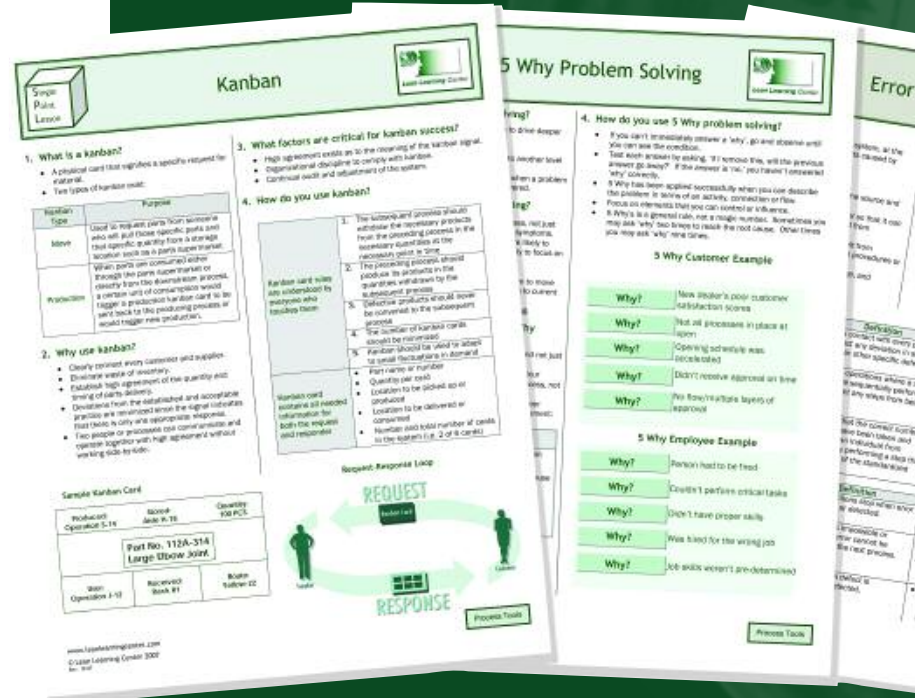


# lean Single Point LESSONS

An easy-to-use, yet powerful educational tool to help your company on its lean journey

Forget about improvising or resorting to lengthy PowerPoint presentations. Make the most of your teachable lean moments by using the simple, quick, jargon-free, and highly targeted Lean Single Point Lessons.

Developing leaders and learners for lean transformation since 2001



Available in English and Spanish

As featured in  
BUSINESSWEEK & FAST COMPANY magazines

Featured speakers at  
Industry Week Best Plants Conference,  
The Manufacturer Lean Conference, and  
Lean Product and Process Development Exchange



## Lean Learning Center

[leanlearningcenter.com](http://leanlearningcenter.com)

Transform your company to lean—one lesson at a time

# Get right to the **Point** with your lean program

You know the benefits lean can bring to your company, and you are committed to the lean transformation journey. But how do you get your employees and management on board for the journey and give them the tools and knowledge they need? Single Point Lessons is the solution.

Available in both English and Spanish, each of the more than 70 lessons is presented on a single page with concise, targeted text and graphics to effectively introduce a lean concept or tool—in *ten minutes or less*. Whenever an opportunity presents itself, whether it's during a project meeting, at a colleague's desk, on the production floor, or even in the hallway, you'll be ready to advance your lean program. Think of it as just-in-time education.



## The Lean Learning Center

We founded the Lean Learning Center in 2001 to help companies like yours make the successful transformation to lean. Many organizations desire to go lean, but are held back because they do not understand lean principles and practices. Their caution is justified. Transforming to lean means new processes, new ways of thinking, and new roles for employees, management, and leadership alike. With Single Point Lessons, your company *can* make the lean transformation.

We developed the lessons based on many years of experience transforming major organizations into lean companies. Communication and education are essential for the lean journey. We determined that easy-to-use, clear, and concise reference tools would be invaluable. We created the lessons knowing that lean teachable moments don't necessarily occur in formal classroom settings.

Single Point Lessons will give you the ability to quickly and effectively share lean concepts when and where they will make the most impact. Your employees and managers will be better able to understand and incorporate lean's fundamental principles and rules.

***Whether you are new to lean or have been pursuing it for some time, Single Point Lessons will complement and enhance your educational efforts in many ways, including:***

lean **lean** lean  
**Coaching • Learning Briefs**  
**Group Training • Kaizen Workshops**  
**Reference Library for Individuals**  
**Event-Driven Education**

### To order: [leanlearningcenter.com/orderform.cfm](http://leanlearningcenter.com/orderform.cfm)

You will receive more than 70 Single Point Lessons. Also, we will add you to our subscription list and send you updates as we create new Single Point Lessons or revise existing ones.

There are four different packages to meet your company's needs:

#### Regular Package with PDF files

You will receive more than 70 Single Point Lessons in PDF format on a USB drive along with a User Guide.

- Regular package, English-language: \$6,500
- Regular package, includes Spanish-language version as well as English: \$9,750

#### Deluxe Package with editable Word files

You will receive more than 70 Single Point Lessons in Word format on a USB drive along with a User Guide. With the Word files, you will be able to add your logo, insert photos, enter text, and make other modifications to personalize the lessons. By incorporating your unique culture, your Single Point Lessons will resonate across your company.

- Deluxe package, English-language: \$13,500
- Deluxe package, includes Spanish-language version as well as English: \$20,250

#### Consulting available

The Lean Learning Center can help you edit your Single Point Lessons as well as create additional company-specific lessons for a fee based on the scope of the project. Call (248) 478-1480 to learn more about this option.

#### More Info

[leanlearningcenter.com](http://leanlearningcenter.com) • [info@leanlearningcenter.com](mailto:info@leanlearningcenter.com) • (248) 478-1480



# lean Single Point LESSONS

A library of quick, actionable lean reference tools

## Single Point Lesson Topics

A partial list of the more than 70 lessons

### Process Tools

- 3-Flows Map
- A3 Report
- Activity Map
- Communication Room
- Control Chart
- Control Point Standardization
- Decoupling
- Error Proofing
- Failure Mode Effect Analysis
- Five S
- Five Why Problem Solving
- Kanban
- Leveling (Heijunka) Box
- Scoreboard
- Standard Work Instructions
- Supermarket
- Top-Down Flow Chart
- Training Within Industry
- TWI: Job Instruction

### Principles and Rules

- Principle: Systematically Eliminate Waste
- Principle: Create a Learning Organization
- Rule: Structure Every Activity
- Rule: Improve Through Experimentation

### Concepts

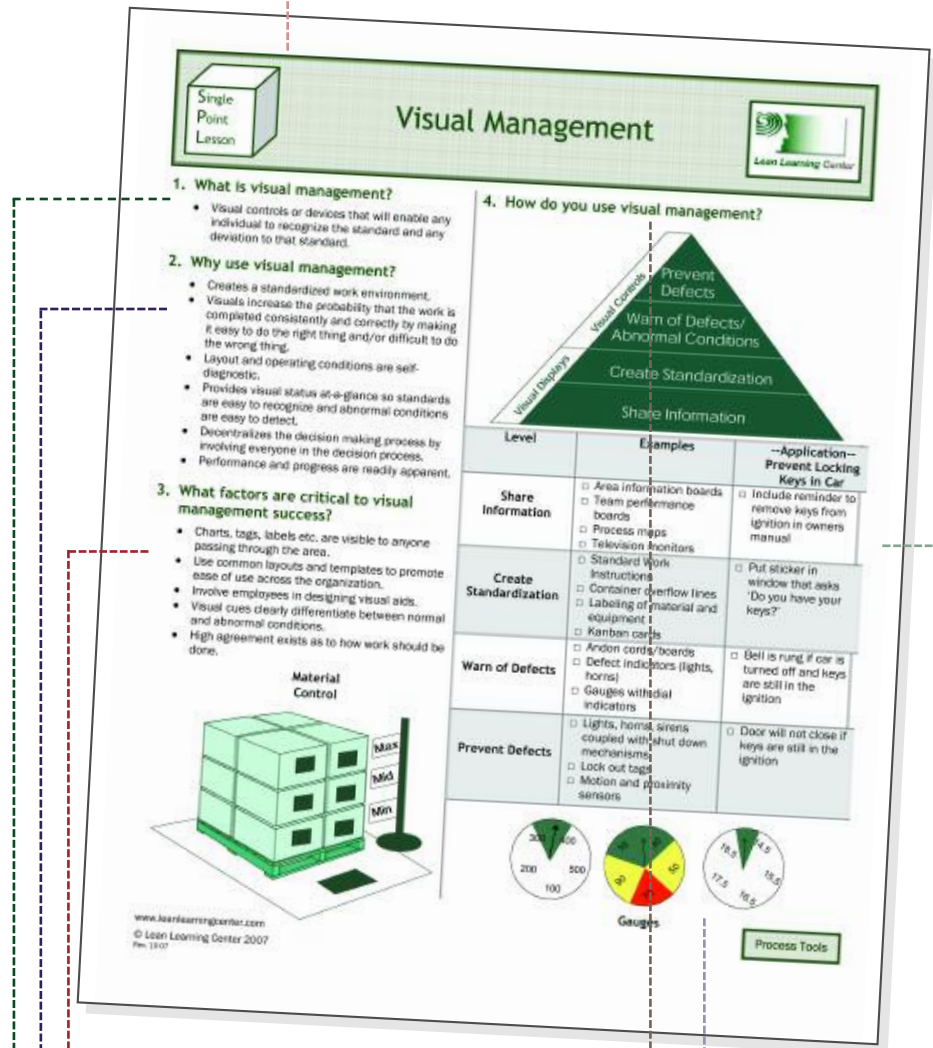
- Creative Tension
- One Piece Continuous Flow
- Help Chain
- Plan-Do-Check-Act
- Pull System

### Change Management and Improvement Tools

- After Action Review
- Cultural Assessment
- Cascade Teaching
- Kaizen Workshop
- Lean Assessment
- Lean Transformation Roadmap
- Value Stream Map

## Color-Coded and Organized

Optimized to quickly identify the category and topic



## Consistent Formatting Addresses Common Questions

- WHAT is it?
- WHY use it?
- WHAT factors are critical for success?
- HOW do you use it?

## Actionable Items

Swiftly incorporate and implement lean processes

**Available in English and Spanish**

## Clear, Instructive Graphics

Visually convey concepts in easy-to-grasp form

To order: [leanlearningcenter.com/orderform.cfm](http://leanlearningcenter.com/orderform.cfm)

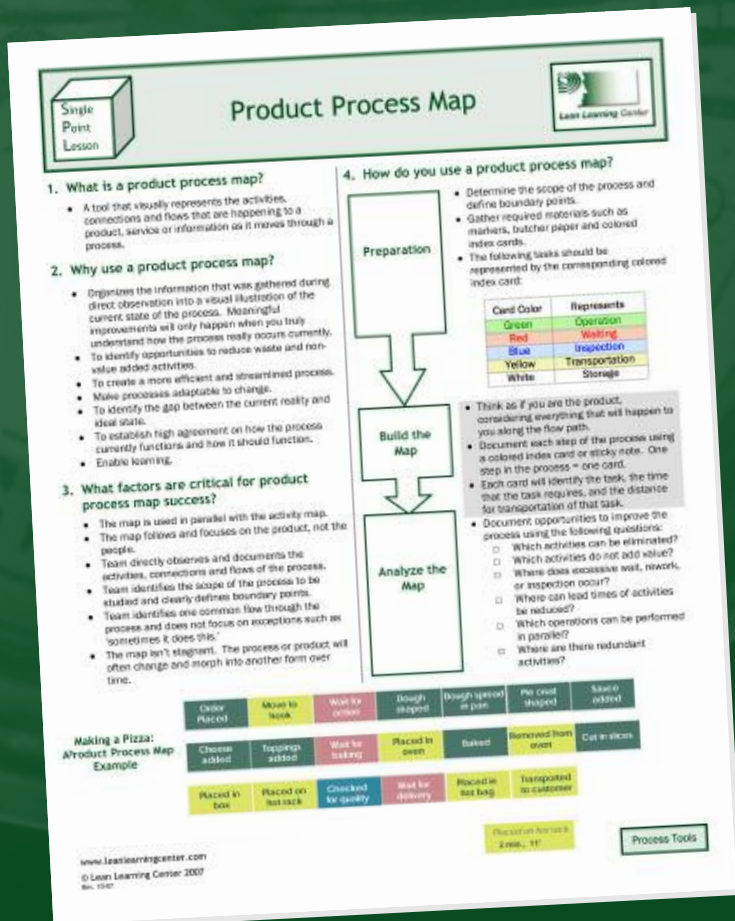
More info: [leanlearningcenter.com](http://leanlearningcenter.com) • [info@leanlearningcenter.com](mailto:info@leanlearningcenter.com) • (248) 478-1480



## Lean Learning Center

40028 Grand River, Suite 300  
Novi, Michigan 48375

PRSRT STD  
US POSTAGE  
PAID  
PERMIT 912  
BOSTON, MA



# Get right to the Point with your lean program

## LEADING EDGE COMPANIES are clients of the Lean Learning Center

Amazon.com	Land O'Lakes
BISSELL	M&M Mars
Boeing	Nemak
Bombardier	Northeast Health
Coca-Cola Bottling	Northrop Grumman
Deere & Co.	Philip Morris
Del Monte	REACH Air Ambulance
Detroit Medical Center	Revere Smelting & Refinery
DTE Energy	Sara Lee
Foster Dairy	Siemens
Glanbia Foods	Simmons Foods
Guidant Corporation	Takasago
Harley-Davidson	Technicolor
Intel	United Technologies
J. D. Power	Wm. Wrigley Jr. Co.

**Order Single Point Lessons**  
[leanlearningcenter.com/orderform.cfm](http://leanlearningcenter.com/orderform.cfm)  
 (248) 478-1480

**lean** The revolutionary system that slashes waste and cost while boosting speed and flexibility.

[illegible]

# User Guide



TABLE OF CONTENTS
-------------------

<b>Welcome Note.....</b>	<b>1</b>
The Purpose of Single Point Lessons .....	1
The Single Point Lesson Structure .....	2
 <b>Organizing Your Single Point Lessons.....</b>	<b>3</b>
Single Point Lessons Topics.....	4
 <b>Using the Lessons .....</b>	<b>6</b>
Coaching.....	6
Learning Briefs .....	7
Groups .....	7
Kaizen Workshops.....	8
Individuals .....	8
Event-Driven Education.....	8

## Welcome Note to the User

Welcome to *Single Point Lessons: A Daily Education Tool*. This tool has been carefully designed to serve as both an excellent introduction for those new to the lean transformation journey and as a knowledge center that will compliment and enhance existing organizational education initiatives for those who have been pursuing the journey for some time. We hope that you will find these lessons to be an invaluable addition to your lean implementation efforts.

## Purpose of Single Point Lessons

We recognized the need for a quick reference tool that would provide a foundational overview of a concept or tool. As users of reference material ourselves, we understood that users would benefit from something that they could grab quickly when an opportunity presented itself, regardless of whether that opportunity occurred during a project meeting, kaizen event, at someone's desk or on the production floor. We strived to design a product that was effective and user friendly, but most importantly, required less than ten minutes to introduce a concept or tool for right-sized, just-in-time education. Creating a product that satisfied the critical information gathered during our needs analysis was the focal point during our design and development process. The result was the collection of Single Point Lessons that have now become a powerful tool in your lean education efforts.



## The Single Point Lesson Structure

We understand that you don't have time to search for information when an opportunity for education presents itself. We want to answer your question as quickly as possible. That is why we have designed our Single Point Lessons to answer the same common questions that everyone must know. The information presented in the Single Point Lessons will be organized and presented in the following structure:

1. What is it?
2. Why use it?
3. What factors are critical for success?
4. How do you use it?

By organizing the Single Point Lessons in this format, you will be able to quickly find or communicate the answer.



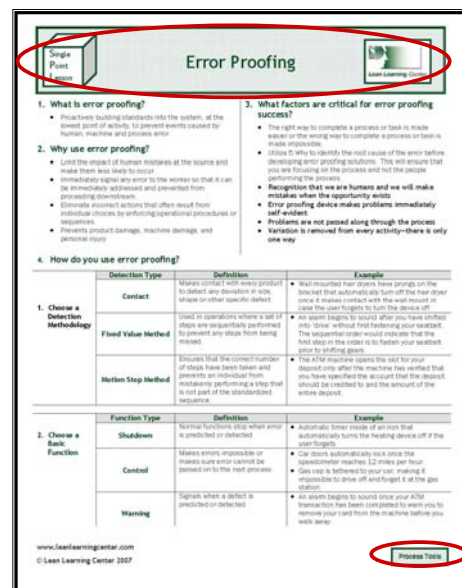
# Organizing Your Single Point Lessons

There is no beginning and ending point to the concepts and tools presented within the Single Point Lesson package. Why? Because you will need to be able to access concepts and tools as opportunities present themselves and these opportunities do not always follow a prescribed, logical order. The Single Point Lessons have been designed using a categorization system that will make it easy and convenient to grab these valuable reference guides, use what you need, return them, and most importantly, keep the Single Point Lessons organized and ready to go for the next opportunity that presents itself. This categorization system will ensure maximum usability and ease.

All of the Single Point Lessons have been classified into categories and color coded so that you will be able to identify where the topic belongs in the overall product package after you are done using it. The categories and identifying color for each category are as follows:

1. Lean Principles and Rules
2. Process Tools
3. Concepts
4. Change Management and Improvement Tools

To identify the category, simply look for the identifying color at the top of the page in the topic box and again at the bottom of the page as shown in the example:



**Single Point Lesson**

## Error Proofing

**1. What is error proofing?**

- Headlong learning standards into the system, at the lowest point of activity, to prevent events caused by human, machine and process error

**2. Why use error proofing?**

- Limit the impact of human mistakes at the source and make them less likely to occur
- Immediately signal any error to the worker so that it can be immediately addressed and prevented from proceeding downstream
- Eliminate incorrect actions that often result from individual choices by enforcing operational procedures or sequences
- Prevent product damage, machine damage, and personnel injury

**3. What factors are critical for error proofing success?**

- The right way to complete a process or task is made easier or the wrong way to complete a process or task is made impossible
- Utilize 5 Why to identify the root cause of the error before developing error proofing solutions. This will ensure that you are focusing on the process and not the people performing the process
- Recognition that we are humans and we will make mistakes when the opportunity exists
- Error proofing device makes problems immediately self evident
- Problems are not passed along through the process
- Variation is removed from every activity—there is only one way

**4. How do you use error proofing?**

Detection Type	Definition	Example
<b>Contact</b>	Makes contact with every product to detect any deviation in size, shape or other specific defect	• Wall mounted hair driers have prongs on the back that automatically turn off the hair drier once it makes contact with the wall mount in case the user forgets to turn the device off
<b>Fixed Value Method</b>	Used in operations where a set of steps are sequentially performed to prevent any steps from being missed	• An alarm begins to sound after you have unlocked the door without first feeding your wallet. The sequential order would indicate that the first step in the order is to feed your wallet prior to unlocking doors
<b>Motion Step Method</b>	Ensures that the correct number of steps have been taken and prevents an individual from mistaking performing a step that is not part of the standardized sequence	• The ATM machine opens the slot for your deposit only after the machine has verified that you have inserted the amount that the deposit should be credited to and the amount of the entire deposit

Function Type	Definition	Example
<b>Shutdown</b>	Stops functions stop when error is predicted or detected	• Automatic error inside of an apt that automatically turns the heating device off if the user forgets
<b>Control</b>	Makes errors impossible or makes sure error cannot be passed on to the next process	• Car doors automatically lock once the speedometer reaches 12 miles per hour • Gas key is tethered to your car, making it impossible to drive off and forget it at the gas station
<b>Warning</b>	Signals when a defect is predicted or detected	• An alarm begins to sound once your ATM transaction has been completed to warn you to remove your card from the machine before you walk away

www.leanlearningcenter.com  
© Lean Learning Center 2007

**Process Tools**

## Single Point Lesson Topics

The following topics are included in the complete Single Point Lesson package:

<b>Principles and Rules</b>	Principle: Directly Observe Work as Activities, Connections and Flows	Rule 1: Structure Every Activity
	Principle: Establish High Agreement of Both What and How	Rule 2: Clearly Connect Every Customer-Supplier
	Principle: Create a Learning Organization	Rule 3: Specify and Simplify Every Flow Path
	Principle: Systematic Problem Solving	Rule 4: Improve Through Experimentation
	Principle: Systematically Eliminate Waste	
<b>Process Tools</b>	3-Flows Map	5S
	5S Step 1: Sift	5S Step 2: Sweep
	5S Step 3: Sort	5S Step 4: Sanitize
	5S Step 5: Sift	A3 Report
	Activity Map	Communication Room
	Control Chart	Control Point Standardization
	Correct Count Containerization	Decoupling
	Error Proofing	Failure Mode Effect Analysis
	Five Why Problem Solving	Kanban
	Leveling (Heijunka) Box	Master Schedule
	Milk Run	Policy Deployment
	Preventive Maintenance	Product-Process map
	Quick Changeover	RACI Chart
	Scoreboard	Standard Work Instructions
	Supermarket	Top-Down Flow Chart
	Training Within Industry	TWI: Job Instruction
	TWI: Job Methods	TWI: Job Relations
	Visual Management	Waste Walk
	Waterspider	Work Cells/U-Shaped Cells

## Single Point Lesson Topics (Cont.)

<b>Concepts</b>	Creative Tension	Help Chain
	One Piece Continuous Flow	Operating System
	Plan-Do-Check-Act	Practical Problem Solving
	Pull System	Quick Problem Detection and Correction (Jidoka)
	Single Point Scheduling	Takt Time

<b>Change Management and Improvement Tools</b>	After Action Review	Cascade Teaching
	Coaching Conversation	Cultural Assessment
	Demonstration Projects	DMAIC
	Idea Program	Kaizen Workshop
	Lean Assessment	Lean Learning Laboratory
	Lean Transformation Roadmap	Operating Review
	SWOT Analysis	Value Stream Map

## Using the Lessons

It is important to note that the Single Point Lessons are not designed to replace your existing training or act as a stand-alone training tool. The Single Point Lessons were designed to supplement and enhance your existing training initiatives by providing the reader with a basic foundational overview of lean processes and tools.

There are a number of uses for the Single Point Lessons. The following is a list of the most common usages that we have identified, as well as brief instructions on how to best utilize the Single Point Lessons in these learning situations.

### Coaching

These lessons are a great addition to any coaching conversation. Explaining tools and concepts does not come easily to everyone. These Single Point Lessons will help any coach to simplify the concept or tool and explain it using every day, common language that the learner will identify with and understand.

When utilizing the Single Point Lessons as reference material for a coaching conversation, we would recommend that the person acting as the coach is knowledgeable on the topic that he or she is coaching. The coach's previous experience and knowledge will provide additional valuable information that the learner may find interesting and in turn, positively impact learner retention.

For maximum effectiveness, utilize the Single Point Lessons at the point of activity whenever possible. When you see an opportunity to utilize them, go grab the Single Point Lessons and bring them back to the opportunity. Don't wait to use them later and rely upon memory to recreate the situation.

When used as a reference in coaching conversations, we recommend following the local structure provided in the Single Point Lesson. To promote maximum retention, present the information in the order it is presented on the Single Point Lessons since each bullet builds on to the previous bullet. Begin with presenting bullet one that provides the definition, and work your way to bullet four.



## using the Lessons (Cont.)

### Learning Briefs

The Single Point Lessons provide an excellent training opportunity in a matter of minutes. Consider distributing one Single Point Lesson to employees prior to regularly scheduled meetings. Devote ten to fifteen minutes of the regularly scheduled meeting to allow for discussion of the Single Point Lesson concept or tool. The discussions will reinforce the information presented in the Single Point Lessons and allow the facilitator of the meeting to answer questions and clarify information that was not understood. Furthermore, these discussions can serve as a planning session to identify opportunity areas where the concept or tool should be applied. These group discussions can empower the organizational culture to act on their new lean knowledge.

### Groups

The Single Point Lessons can be used as a lesson plan for a facilitator who is knowledgeable on the topic or concept to present information to a group. The Single Point Lessons are presented in a logical sequence beginning with the basic definition and moving on to application of the tool or concept. A knowledgeable facilitator can easily integrate his or her own experiences into any of the four sequential bullets that the Single Point Lesson information is organized into.

Don't have time for a formal training session on a concept or tool? No problem. The Single Point Lessons are brief and convenient which makes them a quick agenda addition to any regularly scheduled staffing or production meeting. Simply add one topic to the meeting agenda and briefly present that concept or tool to the group during the meeting.

## using the Lessons (Cont.)

### Kaizen Workshops

Distribute Single Point Lesson concepts or tools during kaizen workshops for participants to reference while directly observing processes and brainstorming potential improvements. As specific concepts and solutions become evident, you can use the Single Point Lessons to educate the team before getting started on implementation. Access to Single Point Lessons may help inspire solutions during any brainstorming session. Add a package of the full set of Single Point Lessons as a standard part of your kaizen kit.

### Individuals

Experimentation is pivotal to the lean journey. Keep a complete set of Single Point Lessons in a common area that can be easily accessed by everyone. Individuals who are working on projects or improvements can then use the Single Point Lessons as reference material to assist them with their project or improvement.

### Event-Driven Education

When starting a team or an improvement project for implementing a Five S, standardized work or any other initiative, use the Single Point Lessons to support the concept or tool being implemented. Distribute the Single Point Lessons for people participating in the event or initiative to reference.