

# THE Performance Improvement CONFERENCE

**Scaling  
New  
Heights,  
Delivering  
Results**



## **Surviving Troubled Times: Five Strategies for Training Professionals**

April 12, 2011, 2:45-5:45 pm

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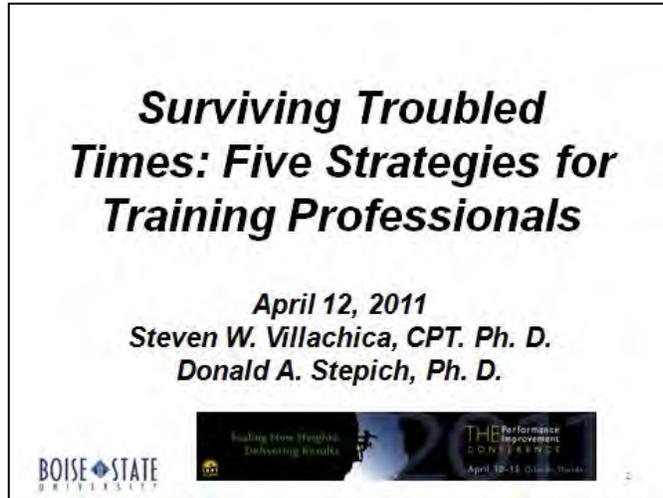
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Conference  
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## SESSION DESCRIPTION

*The current economic downturn is an opportunity for human performance technologists to focus on improving the value they provide to their organizations. Whether you're a novice or a seasoned practitioner, this fun, fast-paced, and interactive workshop will show you how to align performance improvement efforts with business goals, use training programs to address skill gaps, craft instructional objectives that describe exemplary job performance, create sound training programs that promote learning and*

*transfer, and collaborate with others to promote transfer in ways that improve performance. Participants will leave with a set of job aids to help implement these strategies in the workplace and be well on their way to becoming an even more important performance partner within their organization.*

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# PERFORMANCE AND CAUSE ANALYSIS TEMPLATE

## Performance Analysis

Performance Gap(s)	Business Goal(s)
<ul style="list-style-type: none"> <li>➤ What we want our [insert target population here] to do is [insert expected behavior here] at [insert expected measurement here].</li> <li>➤ What our [insert target population here] are doing now is [insert existing behavior here] at [insert existing measurement here].</li> </ul>	<ul style="list-style-type: none"> <li>➤ Describe the path from the expected performance to one or more business goal(s).</li> <li>➤ Provide any other evidence indicating that the gap is worth closing.</li> </ul>

## Cause Analysis<sup>1</sup>

	Sources of the Gap	Finding	Summary of Relevant Evidence	Responsibility for Further Diagnosis and Fixing
Environmental Sources of the Performance Gap	<b>① Information (35.3 %)</b> Are there clear standards specifying expected performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Do performers have on-demand access to clear and relevant guidance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Do performers receive timely, clear, and relevant feedback about the extent to which their performance meets expectations?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<b>② Resources (29%)</b> Do performers have access to the materials, tools, and time they need to do their work?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Do the processes and procedures supporting the work produce expected performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Do user interfaces match the workflow and thoughtflow of exemplary performers?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<b>③ Incentives (11.3%)</b> Are there adequate and appropriate monetary incentives to reinforce desired performance or inhibit undesired performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Are there adequate and appropriate nonmonetary incentives or consequences to reinforce desired performance or inhibit undesired performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Are there adequate and appropriate career development opportunities to reinforce desired performance or inhibit undesired performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		

<sup>1</sup> This hybrid cause analysis model combines aspects of Gilbert's (1996) BEM, Mager and Pipe's (1997) performance analysis flow diagram, Chevalier's (2003, 2008) updated BEM, and Rummel's (2006) human performance system. Percentages for each source indicate Dean's (1998) relative frequency of occurrence.

Sources of the Gap		Finding	Summary of Relevant Evidence	Responsibility for Further Diagnosis and Fixing
Individual Sources of the Performance Gap	<b>④ Motives (6.3%)</b> Are performers willing to meet performance expectations?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Are performers willing to work for monetary or nonmonetary incentives and consequences?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<b>⑤ Capacity (7.5%)</b> Do the performers have the innate physical, cognitive, and emotional abilities for the desired performance?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	<b>⑥ Knowledge and Skills (10.5%)</b> Do performers possess the knowledge and skills to perform to expectations? (i.e., If they could perform to expectations if they absolutely had to, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Have performers performed to expectations in the past? (i.e., If they could perform to expectations at some point, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Do performers perform to expectations sometimes but not at others? (i.e., If performers perform to expectations inconsistently, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input type="checkbox"/> No		

## Assumptions

List any assumption you need to make in order to proceed here. Then collect any necessary information to verify them and discuss them with the client.

# EXAMPLE PERFORMANCE AND CAUSE ANALYSIS TEMPLATE: TEAM LUCKY

## Introduction to Welding Defects

### Performance Analysis

Performance Gap(s)	Business Goal(s)
<ul style="list-style-type: none"> <li>➤ What we want our welders to do is weld without defects 100% of the time.</li> <li>➤ What the welders are doing now is welding without defects 90% of the time.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The stated mission on TruckCo's website states: "All levels of management within TruckCo are committed to implementing an effective quality management system and strive for continuous improvement in our products and services."</li> <li>➤ Defective welds represent an opportunity to improve products while decreasing rework costs by \$5M annually.</li> <li>➤ Defective welds violate ISO 9001 and 14001 standards.</li> </ul>

### Cause Analysis<sup>1</sup>

Sources of the Gap		Finding	Summary of Relevant Evidence	Responsibility for Further Diagnosis & Fixing
<b>Environmental Sources of the Performance Gap</b>	<b>① Information (35.3 %)</b> Are there clear standards specifying expected performance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Welders have access to appropriate standards via workstation computers and a 3-ring binder.	
	Do performers have on-demand access to clear and relevant guidance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The QA14 document is 12 pages long. The QA3 document is 5 pages long, excluding forms. Access is not on demand. Welders must interrupt their work to refer to these documents.	Welding Management and Team Lucky
	Do performers receive timely, clear, and relevant feedback about the extent to which their performance meets expectations?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Each welder has a stamp that identifies his or her welds. Quality Assurance inspects welds for compliance with specifications, compiling data about each welder, including the rejected welds each produces. If a weld is rejected or does not meet specs, the welder's supervisor meets with the welder. The feedback may not be timely. The amount of time between finishing a weld, when a defect is spotted, and when feedback is provided varies.	Welding Management
	<b>② Resources (29%)</b> Do performers have access to the materials, tools, and time they need to do their work?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The maintenance staff keeps all equipment functioning properly. The welders are also responsible for cleaning and maintaining some equipment (i.e., the gun, its tip, etc.), and they have the tools necessary to do this.	
	Do the processes and procedures supporting the work produce expected performance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	The maintenance staff calibrates all equipment annually. Frequent inspection and replacement of questionable machines means equipment failure is rare. Fixtures are verified and checked before each weld, and welders are responsible for checking their own weld guns and other materials for general maintenance. As part of the Kaizen program, welders can submit an official request for adjustments in their work area (e.g., table height, lighting, etc.) to make it more comfortable to do their jobs.	

<sup>1</sup> This hybrid cause analysis model combines aspects of Gilbert's (1996) BEM, Mager and Pipe's (1997) performance analysis flow diagram, Chevalier's (2003, 2008) updated BEM, and Rummler's (2006) human performance system. Percentages for each source indicate Dean's (1998) relative frequency of occurrence.

	Sources of the Gap	Finding	Summary of Relevant Evidence	Responsibility for Further Diagnosis & Fixing
	Do user interfaces match the workflow and thoughtflow of exemplary performers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Not applicable	Not applicable
	<b>③ Incentives (11.3%)</b> Are there adequate and appropriate monetary incentives to reinforce desired performance or inhibit undesired performance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pay for the job is competitive. Monetary incentives come in the form of bonus pay awarded in yearly performance reviews.	
	Are there adequate and appropriate nonmonetary incentives or consequences to reinforce desired performance or inhibit undesired performance?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aside from peer pressure to produce reject-free welds, there is a lack of nonmonetary incentives.	Welding Management
	Are there adequate and appropriate career development opportunities to reinforce desired performance or inhibit undesired performance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	There are opportunities for promotion to more experienced welding positions associated with higher pay.	
Individual Sources of the Performance Gap	<b>④ Motives (6.3%)</b> Are performers willing to meet performance expectations?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Welders want to live up to the peer pressure from fellow welders. Welders report they want to produce good welds.	
	Are performers willing to work for monetary or nonmonetary incentives and consequences?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Welders are willing to work at existing pay grades with current opportunities for promotion and bonuses.	
	<b>⑤ Capacity (7.5%)</b> Do the performers have the innate physical, cognitive, and emotional abilities for the desired performance?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Welders possess the physical, cognitive, and emotional abilities to meet performance expectations.	
	<b>⑥ Knowledge and Skills (10.5%)</b> Do performers possess the knowledge and skills to perform to expectations? (i.e., If they could perform to expectations if they absolutely had to, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Twenty-five percent of welders do not know how to identify weld defects. They do not understand how Quality Assurance inspects their welds or how to prevent many of the common defects. Additionally, at least two welders openly stated that they do not know how to use weld gauges. During the group interview, welders mentioned six aspects for which they would like training, all of which dealt with defects. At least twice in the focus group, welders mentioned they would like to know more about the gauges.	Team Lucky
	Have performers performed to expectations in the past? (i.e., If they could perform to expectations at some point, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	None of the welders having problems with their welds have performed to expectations in the past.	Team Lucky
	Do performers perform to expectations sometimes but not at others? (i.e., If performers perform to expectations inconsistently, then they possess the necessary knowledge and skills.)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The welders with problem welds produce them consistently.	Team LKKY

## Assumptions

List any assumption you need to make in order to proceed here. Then collect any necessary information to verify them and discuss them with the client.

1. The welders are motivated to weld well.
2. The QA14 requirements encompasses and builds on certification requirements (i.e., just because an employee can pass the certification test does not mean s/he will automatically meet TruckCo standards).
3. Following #3, training welders to meet the QA14 standards and requirements should prepare welders to pass the certification test.

# RVMART TRAILER HITCH SALES SCENARIO

## Background

Last year, RVMart of River City sold \$60,500 in RV hitch sales. However, management estimates that the Parts department experienced \$15,000 to \$20,000 in hitch sales that reps could have made but did not. If sales and service reps could have made these “lost sales,” RVMart would have achieved its Parts sales goal for 2009. The primary factor contributing to the lost hitch sales occur when reps failed to either close or up-sell hitch sales. In order to significantly reduce lost sales, RVMart needs their reps to correctly ask customers appropriate questions to identify their hitch needs—matching the right type of hitch with the right customer vehicle, recreational lifestyle, and RV. After selecting an appropriate type of hitch, reps need to be able demonstrate specific “good,” “better,” and “best” options for each type of hitch. By providing better customer service and reducing the number of lost sales, the Parts department will meet its profit goals.

RVMart sold 139 hitches in 2009. Of those, approximately 70 hitch sales (50%) required the knowledge of Assistant Sales and Parts Manager, Mike Thompson, to complete the sale. This percentage could have been higher as Mike was absent during two busy summer months with an injury. Mike is the “go to guy” for hitch sales. All of the reps go to Mike to get his help in selecting appropriate hitches and rely on him for any upselling they may do. Fearing lost sales in a down economy, Mike is afraid to take vacation or leave the store after his eight-hour shift is over. Mike would be happy if reps could make sales without relying on him 80% of the time.

To identify the sources of the performance gap, the ID team observed reps, reviewed extant data, and administered a survey. Relevant findings follow.

## Observations

Upon watching a rep take a call from a customer looking to purchase a RV hitch:

*The customer had to be called back after first looking up the information. The rep did not seem/sound at all confident and his call-back did not give the customer definite information (\*\*even using current job aids). Rather, he asked if the customer would like to call back later to speak with “our parts guru” when he becomes available to clarify all the parts and prices.*

Reps receive no guidance describing what constitutes exemplary, adequate, and unacceptable performance. There is extensive parts manual and Word documents for each manufacturer that the Parts Dept. stocks. These manuals are lengthy and difficult to decipher. They do not always provide the same information or support comparison shopping. Using these guides increases the time to hitch customers. Reps do not always trust or rely on current job aids to provide the knowledge/information necessary to close hitch sales.

Reps are willing to work at existing pay grades.

### RVMart Web Site

#### Our Mission

Be the leader in our industry through our tradition of honesty and fairness to customers, employees and business partners.”



RVMart Founder  
Ron Villanueva  
(RV)

#### Our Vision

Treat every customer in a manner that they will do business with us for the rest of their lives.”

Reps possess the physical, cognitive, and emotional abilities to meet performance expectations.

## ***Extant Data***

There are established sales goals.

Reps have no materials or tools to close hitch sales.

The existing manuals are organized by topic, rather than the process for selecting hitches and upselling using good, better, best options.

## ***Interviews***

“Time of Sale (hitch information sheets) sheets are hard to use and part #s don’t match what is in the application charts in the parts catalog.”

“If you are using a parts catalog to try to find information for a customer, you may spend a lot of time finding information on one hitch, and then after you find that information the customer asks what you have in a different hitch manufacturer instead, and you have to start all over again. Current job aids do not provide comparison information.”

“Reps have never selected appropriate hitches or discussed good, better, best hitch options on their own.”

“Reps consistently fail to perform to standards.”

## ***Survey***

75% of those surveyed cited that they cannot independently complete a hitch sale without the assistance of a SME or other more knowledgeable staff members.

75% of those surveyed also did not feel that they have received enough training to assist customers on their own.

When asked about motivation, several reps made comments similar to this: “Not having the customer doubt “our” ability to know the **right** product.” “Getting the sale!”

## Objectives Template

#	Performance on the Job	Condition(s) on the Job	Criteria on the Job
1			
2			
3			

## Objectives Worksheet

This session teaches a job-focused variation of a 3-part instructional objective that Mager (1997) popularized. Each objective consists of a performance, condition, and criteria. Use these guidelines and the Objectives Template to create problem-based instructional objectives.

**Step 1: Specify the performance using a single action verb that describes what an exemplary performer does on the job.**

**Step 2: Specify the conditions for the on-the-job performance.**

Cues	What tells the individuals to perform? Example: First responders react to an alarm.
Setting	Where will the individuals be expected to perform? Example: Nurses might be asked to work in a clinic or a hospital ward.
People	Will the individuals have access to supervisors, team members, or other people? Example: Managers might be asked to work as part of a project team.
Equipment	What tools, supplies, facilities, etc. will the individuals have to work with? Example: Auditors might be able to use calculators and spreadsheet templates.
Information	What information or reference materials will be available to the individuals? Example: Peace officers might be able to use online criminal databases.
Constraints	What predetermined limits or constraints are the individuals expected to adhere to? Example: Customer service personnel might be required to meet prescribed call length limits.

**Step 3: Specify the criteria the on-the-job performance.**

Time	Duration	Specifies the required length of the performance. Example: Paramedics will maintain a steady CPR rate for at least 10 minutes.
	Rate	Specifies the speed at which the performance must take place. Example: Court reporters will record at a rate of 150 words per minute.
Accuracy	Number of errors	Specifies the maximum number of errors allowed. Example: Flight attendants will announce preflight boarding instructions with no more than two verbal errors.
	Tolerances	Specifies the maximum range of measurement that is acceptable. Example: Quality assurance analysts will calculate a mean to the nearest .01.
Quality	Essential characteristics	Specifies the features or characteristics that must be present in the performance. Example: Salespersons will employ a consultative sales approach to identify a customer need.
	Source	Specifies the documents or materials that will be used to judge the performance. Example: Graphic designers will create a series of computer screens that are consistent with established principles of screen design.
	Consequences	Specifies the expected results or the performance. Example: Managers will be able to develop a response to an employee conflict that reduces the company's legal liability.

## Objectives Checklist

### Performance

- |    |  |                          |                          |
|----|--|--------------------------|--------------------------|
| 1. | Does each objective include a single performance, represented by a single verb?  | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |
| 2. | Is the performance represented by an action verb that concisely describes the exemplar's performance of the task on the job? | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |
| 3. | Does the performance focus on a higher-level problem-solving skill?  | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |

### Conditions

- |    |  |                          |                          |
|----|--|--------------------------|--------------------------|
| 4. | Does each objective include conditions that are consistent with the job? | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |
| 5. | Do the conditions appear to be complete?                                 | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |
| 6. | Do the conditions appear to be appropriate?                              | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |
| 7. | Do the conditions avoid mentioning the instructional setting?            | <input type="checkbox"/> | <input type="checkbox"/> |
|    |  | Yes                      | No                       |

### Criteria

- |     |   |                          |                          |
|-----|---|--------------------------|--------------------------|
| 8.  | Does each objective include relevant, measurable criteria associated with exemplary performance on the job? | <input type="checkbox"/> | <input type="checkbox"/> |
|     |   | Yes                      | No                       |
| 9.  | Do the criteria describe the standard for each time the performance is performed?                           | <input type="checkbox"/> | <input type="checkbox"/> |
|     |   | Yes                      | No                       |
| 10. | Do the criteria appear to be complete?  | <input type="checkbox"/> | <input type="checkbox"/> |
|     |   | Yes                      | No                       |
| 11. | Do the criteria appear to be appropriate?   | <input type="checkbox"/> | <input type="checkbox"/> |
|     |   | Yes                      | No                       |

# Merrill's First Principles

(Five prescriptive design principles for problem-centered instruction and for each of the four instructional phases)

Principle 1: Learning is promoted when learners are engaged in solving real-world problems

Principle 2—Learning is promoted when existing knowledge is activated as a foundation for new knowledge

Principle 3--Learning is promoted when new knowledge is demonstrated to the learner

Principle 4—Learning is promoted when learners are required to use their new knowledge or skill to solve problems

Principle 5—Learning is promoted when new knowledge is integrated into the learner's world

**Principle 1—Problem-centered: Learning is promoted when learners are engaged in solving real-world problems**

**A problem is defined as some whole task rather than only components of a task & the task is representative of those the learner will encounter in the real world following instruction (contrast with topic-centered instruction where components of the task are taught in isolation before introducing the real-world task to the learners)**

1.1 Show Task: Describe the tasks learners will be able to perform or the problem they'll be able to solve as a result of completing the module or course	Using a demonstration of the whole task provides a better orientation than using abstract "the learner will be able to..." objectives  Worked examples show students the type of whole task that they will learn to complete
1.2 Task Level: Enable learner engagement at the problem or task level, not just the operation or action level	Effective instruction engages learners at all four levels: <ul style="list-style-type: none"> <li>• The problem</li> <li>• The tasks required to solve the problem</li> <li>• The operations that require that comprise the tasks</li> <li>• The actions that comprise the operations</li> </ul>
1.3 Problem Progression: Enable learners to solve a progression of problems that are explicitly compared to one another.	Start with less complex problems, then progress to increasingly complex problems

## Activation Phase

**Principle 2--Activation: Learning is promoted when relevant previous experience is activated.**

**If learners have not had sufficient relevant experience, then provide three-dimensional experience that they can use as a foundation for the new knowledge (instead of abstract representations)**

2.1 Previous Experience: Direct learners to recall, relate, describe, or apply knowledge from relevant past experience that can be used as a foundation for the new knowledge.	<ul style="list-style-type: none"> <li>• Simple recall is ineffective</li> <li>• Information-oriented pre-tests are ineffective</li> <li>• Provide an opportunity for learners to demonstrate what they already know</li> </ul>
2.2 New Experience: Provide learners with relevant experience that can be used as a foundation for the new knowledge.	If new learning is foreign to learner's previous experience, don't immediately jump into instruction (may be overwhelming)
2.3 Structure (Advanced Organizer): Provide or encourage learners to recall a structure (we've called it an "advanced organizer") that can be used to organize the new knowledge.	<ul style="list-style-type: none"> <li>• Be careful about using inappropriate (irrelevant) motivational themes</li> <li>• Activate learners to recall &amp; use their current mental model if one exists,</li> <li>• If they don't have one, provide a structure that the learner can use</li> </ul>

## Demonstration Phase

**Principle 3 Demonstration (Show Me): Learning is promoted when the instruction *demonstrates* what is to be learned rather than merely *telling* information about what is to be learned**

3.1 Demonstration Consistency: Demonstrate the desired performance in a matter consistent with the instructional objectives.	Use <ul style="list-style-type: none"> <li>• examples and non-examples for concepts</li> <li>• demonstrations for procedures</li> <li>• visualizations for processes</li> <li>• modeling for behavior (note: " a widely recognized method for modeling problem solving is worked examples" -Jonassen 1999).</li> </ul>
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3.2 Learner Guidance: Direct learners to relevant sources of guidance:	<ul style="list-style-type: none"> <li>• Direct learners to relevant information by identifying and mapping features (fade this focus role s the instruction progresses)</li> <li>• Use multiple representations for the demonstrations, including alternate points of view for ill-defined problems</li> <li>• Explicitly compare multiple demonstrations</li> </ul>
3.3 Relevant media: Employ media that play a relevant instructional role and multiple forms of media that don't compete for the learner's attention.	<ul style="list-style-type: none"> <li>• Gratuitous illustrations make little or no instructional contribution</li> <li>• Some combinations compete for learner attention (text and graphic)</li> <li>• Some combinations support one another and promote more effective learning (audio and graphics)</li> </ul>
<b>Application Phase</b> <b>Principle 4—Application (Let Me): Learning is promoted when learners are required to use their new knowledge or skill to solve problems</b>	
4.1 Practice Consistency: Provide practice and assessment opportunities that are consistent with the stated or implied objective.	Different kinds of practice as appropriate to the goal: <ul style="list-style-type: none"> <li>• "information-about" practice: recall or recognize information</li> <li>• "parts-of" practice: locate and name or describe each part</li> <li>• "kinds-of" practice: identify new examples of each kind</li> <li>• "how-to" practice: do the procedure</li> <li>• "what happens" practice: predict a consequence of a process given conditions, or find faulted conditions given an unexpected consequence</li> </ul>
4.2 Diminishing Coaching: Provide feedback and coaching that guides learners in detecting errors and solving problems. Then gradually withdraw the coaching and feedback.	<ul style="list-style-type: none"> <li>• Provide support early in learning, then gradually reduce amount of guidance and shift control to the student</li> <li>• Feedback is the most important form of learner guidance</li> </ul>
4.3 Varied Problems: Require learners to solve a sequence of varied problems.	Application of knowledge to a single problem is insufficient
<b>Integration Phase</b> <b>Principle 5—Integration: Learning is promoted when learners are encouraged to integrate (transfer) the new knowledge or skill into their everyday life</b>	
5.1 Watch Me: Provide learners with an opportunity to publicly demonstrate their new knowledge or skill	<ul style="list-style-type: none"> <li>• Provide opportunities to demonstrate to an associate or friend</li> <li>• Being able to observe one's own progress is motivating (e.g. advancing through different skill levels in computer games)</li> </ul>
5.2 Reflection: Provide opportunities where learners can reflect on, discuss, and defend their new knowledge or skill.	Coaching provokes learners to reflect on (monitor and analyze) their performance (Jonassen, 1999)
5.3 Creation: Provide opportunities where learners can create, invent, and explore new and personal ways to use their new knowledge or skill.	Creating, revising, editing, synthesizing, refocusing—modifying new knowledge to make it one's own moves the learner beyond the instructional level and takes the new knowledge & skill into the world beyond

Compiled by Nancy Torkewitz

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## DETAILED INSTRUCTIONAL PLAN

### Descriptive Title for the Project

[Insert title for the project]

### Course Information (Copy from PCA)

Performance Gap(s)		Business Goal(s)	
Sources of the Gap		Summary of Relevant Evidence	Responsibility

Mode of Delivery	Rationale
<input type="checkbox"/> Instructor-led	
<input type="checkbox"/> Self-paced manual	
<input type="checkbox"/> Standalone eLearning	
<input type="checkbox"/> Blended learning	
<input type="checkbox"/> Other: _____	

### Sequencing of Objectives

[Copy the objectives and list them in the order in which they will be presented during the training program.]

### Division of objectives into units

[Divide the list of objectives into units.]

Course Element	Description / Explanation	Resources	Graphics	Estimated Time
Course introduction [HINT: You may want to write the course introduction after you've written the summary]	Briefly describe how you plan to introduce the training program to the learners Describe the structure (advance organizer) for the training program as a whole ( <i>structure</i> )			

### Plan for each unit

[Start each unit on a new page.]

**Unit 1 [Add a title for the unit.]**

[Copy this section for each unit comprising the course.]

Course Element	Description / Explanation	Resources	Graphics	Estimated Time
Transition from preceding unit (if applicable)				
Unit Objective(s)	Copy the objective(s) for the unit here.			
Activation	Specify some relevant existing knowledge ( <i>previous experience</i> ) Describe how you will connect that existing knowledge to the skills to be learned ( <i>bridging previous and new experience</i> )			
Demonstration	Describe how you will demonstrate the skills to be learned in this unit ( <i>demonstration consistency</i> ) Describe how you will direct attention to relevant information and/or compare multiple demonstrations/representations ( <i>learner guidance</i> )  Describe the media to be used and how those media are relevant to demonstrating this skill			
Application	a. Number of practices: ___ Number of assessments: ___ b. Write a short description of each application activity in the order in which learners will complete them. c. Describe how the set of application activities aligns with Merrill's corollaries Practice Consistency: Diminishing Coaching: Varied Problems:			
Integration	Describe how you will help the learners publicly demonstrate their new skills ( <i>watch me</i> )  Describe how you will help the learners reflect on what they have learned ( <i>reflection</i> ). Describe how you will help the learners create personal ways to use their new skills ( <i>creation</i> ).			
Estimated total time				

Course Element	Description / Explanation	Resources	Graphics	Estimated Time
Course summary	Briefly describe how you plan to bring the training program to a close. Describe the final assessment for the training program OR briefly explain why you are not planning to give the learners a final assessment.			

**Total course estimated time = \_\_ minutes**

## DETAILED INSTRUCTIONAL PLAN: TEAM LUCKY

### Course Name: Introduction to Welding Defects

#### Course Information

Performance Gap(s)		Business Goal(s)
What we want our welders to do is weld without defects 100% of the time.		<ul style="list-style-type: none"> <li>➤ The stated mission on TruckCo's website states: "All levels of management within TruckCo are committed to implementing an effective quality management system and strive for continuous improvement in our products and services."</li> <li>➤ Defective welds represent an opportunity to improve products while decreasing rework costs by \$5M annually.</li> <li>➤ Defective welds violate ISO 9001 and 14001 standards.</li> </ul>
What our welders are doing now is welding without defects 90% of the time.		
Sources of Gap	Summary of Relevant Evidence	Responsibility
Information	Each welder has a stamp that identifies his or her welds. Quality Assurance inspects welds for compliance with specifications, compiling data about each welder, including the rejected welds each produces. If a weld is rejected or does not meet specs, the welder's supervisor meets with the welder. The feedback may not be timely. The amount of time between finishing a weld, when a defect is spotted, and when feedback is provided varies.	Welding mgr.
Incentives	Aside from peer pressure to produce reject-free welds, there is a lack of nonmonetary incentives.	Welding mgr.
Knowledge	Results of a group interview with welders includes: that at least 25% of employed welders: <ul style="list-style-type: none"> <li>• At least 25% of employed welders do not know how to identify weld defects. They do not understand how Quality Assurance inspects their welds or how to prevent many of the common defects.</li> <li>• At least 25% of employed welders do not know how to use the weld gauges. During the group interview, welders several times mentioned that they would like to know more about weld gauges.</li> <li>• Welders mentioned six aspects of their job for which they would like training. All of these were about welding defects.</li> </ul>	Team Lucky

Delivery Mode	Rationale
√ Instructor-led	To provide appropriate feedback, and practice with real samples, the course should be instructor-led. The TruckCo. environment is such that welders communicate about their opinions of each other's work. An instructor-led course would give them that outlet in a structured environment, and give them knowledge to provide educated comments.

### Unit 2: Visible and Measurable Weld Defects

Course Element	Description / Explanation	Resources	Graphics	Time
Unit Objective(s)	<p>Given a variety of weld samples with and without visible defects, correctly identify all the visible weld defects.</p> <p>Given a variety of good and bad weld samples and weld gauges, correctly identify all the visible and measurable weld defects.</p>			
Activation	<i>Previous Experience corollary.</i>	-----	Graphic	5 min.

	<ul style="list-style-type: none"> <li>The instructor will ask the class to call out the types of visual defects; the instructor will add any not mentioned.</li> <li>The instructor will ask, if he/she's not told, if any rejected welds the participants have had recently were due to a visual defect.</li> <li>The instructor will explain that the skills they just learned in Unit 1 will be required for the last part of the day's activities.</li> </ul> <p><i>New Experience corollary:</i> The instructor will mention that visually inspecting one's weld can help the welder quickly evaluate the weld before it is sent off to QA. If QA approves the weld, a notice won't be filed in the employee's record.</p> <p><i>Structure corollary:</i> The instructor will use the graphic organizer from unit 1 to show the class that they they've already learned how to use measurement tools, and identify measurable defects. Now it's time to identify visual defects, and then combine all of their knowledge to look for both.</p>		organizer	
Demonstration	<p><i>Demonstration consistency corollary:</i> The instructor will then use a PowerPoint presentation to review each of the 12 types of visual defects possible in a weld, showing the participants the difference between side-by-side samples of a bad weld of a particular type and a good one of that same type.</p> <p><i>Learner Guidance corollary:</i> During the PowerPoint presentation, the instructor shows pictures of each type of visual defect. The instructor shows how each of the factors from "QA14: Weld Reference Table" are apparent in each defective weld.</p> <p><i>Relevant Media corollary:</i> PowerPoint presentation and "QA14: Weld Reference Table"</p>	Computer / projector QA14: Weld Reference Table	Images of bad welds with good welds for comparison	15 min
Application	<p>Number of practices: 2 Number of assessments: 1</p> <p>Practice 1: Visual Defect Hide-and-Seek: Participants will locate one example of each of the 12 visual defects from anywhere on the five tables set up in the room.</p> <p>Practice 2: All-Defect Discrimination: Participants will evaluate five samples from any of the five tables to determine if the weld will pass or not.</p> <p>Assessment 1: Participants will evaluate 10 welds not seen before. They must look for measurable and visual defects on each sample and note any found on their assessment sheet. They are allowed to use the "DOC14: Weld Reference Table" because they are allowed to use this document at their workstations</p>	QA14: Weld Reference Table  For P1: 3 samples of each visual defect (3x10=30)  For P2: 25 new samples	-----	10 min  10 min

	<p>after the course.</p> <p><i>Practice Consistency corollary:</i> Both practices ask participants to identify defects similar to those they will see on the job.</p> <p><i>Diminishing Coaching corollary:</i></p> <ul style="list-style-type: none"> <li>• During practice 1, participants are given an opportunity to practice looking for visual defects while the instructor and an advanced level welder assist each participant as needed with his/her selections.</li> <li>• During practice 2, participants must evaluate good and bad welds primarily on his/her own. The instructor/advanced welder will not provide immediate assistance, but will encourage participants to answer his/her own questions, using an available answer key.</li> <li>• During both practices, participants who do not get correct answers the first time will be encouraged to pick another sample and to continue practicing.</li> <li>• Participants will receive no coaching or feedback during the assessment.</li> </ul> <p><i>Varied Problems corollary:</i></p> <ul style="list-style-type: none"> <li>• During practice 1, participants look for the 12 visual defects from varied welds.</li> <li>• During practice 2, participants choose 5 welds to evaluate. Some welds will have multiple defects and different types of defects. This adds the variation of having good welds.</li> <li>• During the assessment, participants will examine 10 welds they have not previously seen.</li> </ul>	<p>Weld gauges</p> <p>Answer keys</p>		60 min
Integration	<p><i>Watch me corollary:</i> Pairs of participants will be asked to “show and tell” about a weld with a defect they are assigned. They will demonstrate how s/he measures/evaluates the weld, and the result.</p> <p><i>Reflection corollary:</i> The class will discuss if they agree with each participant's evaluation.</p> <p><i>Creation corollary:</i> The instructor will ask the class how they plan to use what they've learned when they get back to work.</p>	<p>Weld gauges</p> <p>1 weld sample for each pair of learners</p>		10 min

## Course Summary

Course Element	Description / Explanation	Resources	Graphics	Time
Course summary	<ul style="list-style-type: none"> <li>• The instructor will ask the participants if they have any final questions.</li> </ul>			10 min

	<ul style="list-style-type: none"><li>• The instructor will ask the participants what they learned in the course.</li><li>• The instructor will remind the participants that producing a bad weld not only costs the company, but can affect their performance ratings.</li><li>• If time is available, the instructor will guide the participants in a discussion of which weld defects they can reduce through their actions on the job and how.</li></ul>			
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**Total course estimated time = \_\_ minutes**

## DETAILED INSTRUCTIONAL PLAN: TEAM TAG

### Course name: Trailer Hitch Sales Training

#### Course Information

Performance Gap(s)		Business Goal(s)
<p><b>Desired Performance:</b> What we want the RVMart sales staff to do is close customer sales without seeking out guidance from Subject Matter Experts 80% of the time.</p> <p><b>Actual Performance:</b> What the RVMart sales staff is doing now is relying on Subject Matter Experts to close customer hitch sales 50% of the time.</p>		<ul style="list-style-type: none"> <li>To increase profitability through a reduction of lost sales and increased up-sells by providing customers with the “good, better, and best” hitch options that match their needs.</li> <li>Retain customers by providing a high level of customer service.</li> </ul>
Sources of the Gap	Summary of Relevant Evidence	Responsibility
Information	<ul style="list-style-type: none"> <li>Reps receive no guidance describing what constitutes exemplary, adequate, and unacceptable performance.</li> <li>There is extensive parts manual and Word documents for each manufacturer that the Parts Dept. stocks. These manuals are lengthy and difficult to decipher. They do not always provide the same information or support comparison shopping. Using these guides increases the time to sell hitch customers.</li> <li>Interview comment: “Time of Sale (hitch information sheets) sheets are hard to use and part #s don’t match what is in the application charts in the parts catalog.”</li> <li>Interview comment: “If you are using a parts catalog to try to find information for a customer, you may spend a lot of time finding information on one hitch, and then after you find that information the customer asks what you have in a different hitch manufacturer instead, and you have to start all over again. Current job aids do not provide comparison information.”</li> <li>Reps do not always trust or rely on current job aids to provide the knowledge/information necessary to close hitch sales.</li> <li>Management provides no feedback about hitch closing sales. Reps don’t know they are not performing to established standards for closing hitch sales.</li> </ul>	Team TAG – RVMart Management
Resources	<ul style="list-style-type: none"> <li>Reps have no materials or tools to help them close hitch sales.</li> <li>Only Assistant Manager Mike knows the process for matching hitches to the customers’ vehicles and RVs.</li> <li>The existing manuals are organized by topic, rather than the process for selecting hitches and upselling using good, better, best options.</li> </ul>	Team TAG
Incentives	<ul style="list-style-type: none"> <li>There is not currently a monetary incentive plan in place, but one is being developed for future implementation.</li> <li>Layoffs are an incentive for employees to work hard to protect their current job status, especially in the current down economy.</li> <li>There are no consequences when reps sell the wrong hitch to the customer.</li> </ul>	RVMart Management

	<ul style="list-style-type: none"> <li>• There is not currently a non-monetary incentive plan in place, but one is being developed for future implementation.</li> <li>• Morale is low due to a 2<sup>nd</sup> round of layoffs and cut-backs in recent weeks. This has contributed to a lack of career development opportunities.</li> </ul>	
Knowledge	<ul style="list-style-type: none"> <li>• 75% of those surveyed cited that they cannot independently complete a hitch sale without the assistance of a SME or other more knowledgeable staff members.</li> <li>• 75% of those surveyed also did not feel that they have received enough training to assist customers on their own.</li> <li>• Interview comment: “Reps have never selected appropriate hitches or discussed good, better, best hitch options on their own.”</li> <li>• Interview comment: “Reps consistently fail to perform to standards.”</li> </ul>	Team TAG

Mode of Delivery	Rationale
√ Instructor-led	The expected performance requires real-time communication and interaction. An instructor-led class is the best method to provide individual feedback and “hands-on” guidance for sales representatives. Self-paced instruction would not allow for “role play” or “hands-on” guidance from SMEs. Instructor-led instruction presents opportunities for SMEs to conduct live demonstrations and the autonomy to answer any questions from the learner <u>during</u> a sale. “Role play” activities that simulate actual on-the-job scenarios and situations will enhance learner ability and confidence to provide effective customer service on the job.

## Unit 1: Good, Better, and Best Hitches

Behavior	Conditions	Criteria
Explain each of the options/features of “Good, Better, & Best” hitches	<ul style="list-style-type: none"> <li>• While with the customer at the FW hitch display</li> <li>• Given a FW hitch match flow chart</li> <li>• Given an options/features job aid</li> </ul>	Options & features based on the customer’s hitch match(s) including: <ol style="list-style-type: none"> <li>1. Hitch weight rating</li> <li>2. Quality of hitch</li> <li>3. Hitch convenience &amp; benefits</li> </ol>
	<ul style="list-style-type: none"> <li>• While with the customer at the TT hitch display</li> <li>• Given a TT hitch match flow chart</li> <li>• Given an options/features job aid</li> </ul>	Options & features based on the customer’s hitch match(s) including: <ol style="list-style-type: none"> <li>1. Hitch weight rating</li> <li>2. Quality of hitch</li> <li>3. Hitch convenience &amp; benefits</li> </ol>

Course Element	Description / Explanation	Resources	Graphics	Estimated Time
Transition from preceding unit (if applicable)				
Unit Objective(s)	See above			
Activation	<ul style="list-style-type: none"> <li>• Explain the definition &amp; categories of “good”, “better”, and “best” hitches,</li> </ul>	Both travel		7 min

	<p>followed by providing example(s) to the class that explains the importance of providing a hitch sale customer with their “good, better, best” hitch options.</p> <ul style="list-style-type: none"> <li>• Ask the class to provide examples where explaining the “good, better, best” hitch options to their customer would have improved a past sale or their sale’s outcome.</li> <li>• Follow-up with a quick, “think-out-loud” recall activity by asking participants to answer questions regarding the TT &amp; FW hitch option/features of a few hitches the instructor calls out as a way to demonstrate the vast amount of hitch knowledge required to close a hitch sale. Briefly explain how the use of the job aids will reduce this need to memorize all hitch options/features.</li> <li>• Describe how their prior knowledge of hitch options &amp; features will make using new hitch features job aids easier by putting all relevant hitch features information in one place at each individual’s fingertips to help them close hitch sales on their own.</li> </ul>	trailer (TT) & fifth wheel (FW) hitch features booklets		
Demonstration	<ol style="list-style-type: none"> <li>1. Hand out the FW &amp; TT hitch match flowcharts and FW &amp; TT hitch features booklet job aids.</li> <li>2. Provide detailed instructions on how to use the two FW job aid. Explain how the TT job aids are comparable and are designed/utilized in the same way. <ol style="list-style-type: none"> <li>a. Show participants how to use the job aids to properly match a FW hitch to the customer’s needs, and a TT hitch to the customer’s needs. (Using two scripted examples)</li> <li>b. During the demonstrations, the instructor emphasizes key points, cautions, and best practices in using the job aid.</li> </ol> </li> <li>3. Show the FW &amp; TT “Hitch Sale Demo” video performed by SMEs. In the video, one SME acts as the sales representative who uses the job aids to properly explain the various hitch features to match the customer’s needs. (The customer is played by another SME.)</li> </ol>	FW & TT Hitch Match Flow Charts  FW & TT Hitch booklets TT & FW Hitch Sale Demo Video		
Application	Number of practices: Number of assessments:  Practice 1 –  Assessment –  <i>Practice Consistency: Corollary</i>  <i>Diminishing Coaching</i>  <i>Varied Problems Corollary</i>			
Integration	In a group setting the instructor will start a discussion on the benefits of using			

	<p>the job aids on the job and ask participants to reflect on how they will be applied in their work setting.</p> <p>Instructor will explain how SME's will follow-up in the weeks following the training by observing participants during hitch sales. After observing the sale, the SME will discuss with them if/how using the new job aids are working for them.</p>			
Estimated total time				

Course Element	Description / Explanation	Resources	Graphics	Estimated Time
Course summary	<p>The instructor shall conclude the training by initiating a reflective discussion on what was learned today:</p> <ul style="list-style-type: none"> <li>• Reflect on the importance for RVMart staff to understand the features of “good, better, and best” hitches and how specific hitches meet their customer's individual needs.</li> </ul> <p>Conclude training by expressing gratitude for their hard work. Explain to participants that skills acquired in today's training will:</p> <ul style="list-style-type: none"> <li>• Enhance their professionalism by improving their customer service skill</li> <li>• Improved customer service will ultimately lead to sustainable business for RVMart..</li> </ul>			

**Total course estimated time = \_\_ minutes**

# Resources

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