

---

# Job Aids: What They Are What is Known

---

## State of the Art

Tony Moore

Moore Performance Improvement, Inc

330-832-0903

# Assumptions About You

- ◆ You want to help performers produce accomplishments that are valuable to your organization's goals
- ◆ Part of your job is to find ways to influence and improve worker performance
- ◆ You want to find ways to minimize the costs associated with getting good performance

# Session Goals

- ◆ Define job aids
- ◆ List advantages and disadvantages of job aids
- ◆ Define the results of using job aids
- ◆ Discriminate between job aids and other performance influences
- ◆ Determine when job aids are needed

# Job Aid: Defined

- ◆ Is used on the job while performing the task at hand
- ◆ Tells when to take action
- ◆ Gives directions on what actions to take (and, frequently, *how* to do each action)
- ◆ Reduces the amount of recall necessary

# Types of Job Aids

- ◆ Cookbooks
- ◆ Checklists
- ◆ Worksheets
- ◆ Decision tables
- ◆ Algorithms (simplified flowcharts)
- ◆ Combinations

# Job Aid Example

## How to Suction a Tracheostomy

When you hear mucus sounds

- ◆ Remove catheter from alcohol and attach to suction outlet
- ◆ Turn wall suction to high
- ◆ Slip catheter into suction tubing
- ◆ Use gauze to lift out inner cannula
- ◆ Drop 1-2 cc normal saline into trach
- ◆ Insert catheter into trachea
- 7. Cover suction opening w/ thumb
- 8. Listen for sucking sounds and observe mucus return through tubing
- 9. When mucus flow slows, slowly remove catheter
  - ◆ If mucus sounds remain, repeat from step 5
  - ◆ Clean & replace inner cannula
  - ◆ Turn off wall suction and put catheter away

# Job Aids: Advantages

## Job aids:

- ◆ Tell people *how* to do each task
- ◆ Make it easier to perform complex tasks
- ◆ Are more reliable than memory (reducing errors)
- ◆ Make it easier to do tasks that are NOT done often
- ◆ Reduce training time (Reduces COST!)
- ◆ Can be prepared in less time than recall training (Less cost)
- ◆ Allow less experienced performers to perform as well as experienced performers (Less cost)
- ◆ Improves motivation/reduces turnover

# Job Aids: Disadvantages

## Job aids:

- ◆ Slow performance
- ◆ Cannot solve all performance problems
- ◆ Cannot be used in some situations
  - Physical constraints
  - Psycho-social barriers
- ◆ Require updating
- ◆ May NOT eliminate all training



# An AT&T Study

- ◆ Overall productivity improvement: 20-30%
- ◆ Novice performance nearly matching that of highly skilled experienced performer
- ◆ For paraprofessionals with NO experience:
  - Productivity increase: 34%
  - Error reduction: 50%
  - Task completion: +114%

# Hospital Example (1988)

- ◆ **Situation:** 47 *functional* IVACs returned to Central Service for repair in previous year
- ◆ **Intervention:** Developed and placed job aid in each IVAC unit storage area
- ◆ **Results:** 0 functional IVACs returned in following year.  
BONUS: Shortened in-service RN training (OJT)
- ◆ **Value:** Reduce repair charges and lower training costs
  - ◆ \$1034/yr saved in repair charges
  - ◆ \$1612/yr saved in training costs
  - ◆ Total = \$2,646.00/yr
  - ◆ Cost of job aid = \$300
  - ◆ Worth:  $\$2646 - \$300 = \$2346$
  - ◆ ROI = 782%

# Sample of Results found in US Army Study

- ◆ Equivalent performance; 60% training time
- ◆ 140% performance; 50% training time
- ◆ 3X more faults found; same training time
- ◆ 42% more malfunctions found in 41% less time
- ◆ 96% performance vs. 70% performance
- ◆ Tasks completed in 1/3 time with 1/5 the errors
- ◆ Ave. Dx time drops from 90 to 31 minutes
- ◆ Inexper. w/ JPAs 130% > exper. w/ manuals

# General Rules

- ◆ For each task that has a training need, seek first to create a job aid for it
- ◆ Do NOT create job aids when certain factors are present
- ◆ ALWAYS look for ways around barriers to using job aids (Train as a LAST resort)

# Underlying Philosophy

*Real time  
starts here*



Influences



Behaviors



Job  
Accomplishments



Organization's  
Goals



*We start  
here*

# Classes of Influences

- ◆ Information
- ◆ Environment
- ◆ Motivation and Incentives
- ◆ Worker capabilities

# Interventions are Determined by the Deficient Influence

Deficient Influence	Potential Interventions
Information	<ul style="list-style-type: none"><li>◆ Describe expectations</li><li>◆ Provide job aids and training</li><li>◆ Provide feedback</li></ul>
Environment	<ul style="list-style-type: none"><li>◆ Provide good tools</li><li>◆ Provide supportive environment</li><li>◆ Change policy/procedure</li></ul>
Motivation/incentive	<ul style="list-style-type: none"><li>◆ Provide adequate P/B \$ incentives</li><li>◆ Provide non-\$ incentives</li></ul>
Worker capability	<ul style="list-style-type: none"><li>◆ Select to match situation</li><li>◆ Provide prosthesis</li></ul>

# Rules to Live By

- ◆ The missing, weak, or inappropriate influence **ALWAYS** determines the intervention
- ◆ Select job aids **ONLY** when appropriate
- ◆ **ALWAYS** be sure the other influences have been addressed, too



# The Key S/K Questions

- Have they EVER performed the task correctly?
- Could they do it if their life depended upon it?
- Have they ever received training?
  - Time between training and on-the-job application?
  - Quality of the training?
- Investigate job aids, if any
  - Tells when and how to do the steps of the task
  - Is up to date and detailed enough to minimize error
  - Is used by performers

# For each S/K deficient task, decide if a job aid is needed:

IF	AND	THEN
Job aids are mandated	⇒	Write a job aid for this task
<ul style="list-style-type: none"> <li>◆ Severe consequences</li> <li>◆ NOT done frequently</li> <li>◆ MORE than six steps</li> <li>◆ Complex decisions</li> <li>◆ Budget/time limited</li> <li>◆ Likely to change</li> </ul>	There is time to refer to a job aid when doing the task	
<ul style="list-style-type: none"> <li>◆ Simple</li> <li>◆ Other reasons to NOT job aid</li> </ul>	⇒	Do NOT write a job aid for this task-make a note to train this task to recall
		There is NO time to refer to a job aid (MUST do the task from memory)

# Practice 1

Prepare injector for use (Done once a day)

- ◆ Open case and plug in power cord
- ◆ Insert 50 cc vial of inoculate into gun
- ◆ Clear gun of air by firing twice

# For each task, decide if a job aid is needed:

IF	AND	THEN
Job aids are mandated	⇒	Write a job aid for this task
<ul style="list-style-type: none"> <li>◆ Severe consequences</li> <li>◆ NOT done frequently</li> <li>◆ MORE than six steps</li> <li>◆ Complex decisions</li> <li>◆ Budget/time limited</li> <li>◆ Likely to change</li> </ul>	There is time to refer to a job aid when doing the task	
		Do NOT write a job aid for this task-make a note to train this task to recall
<ul style="list-style-type: none"> <li>◆ Simple</li> <li>◆ Other reasons to NOT job aid</li> </ul>	⇒	

# Practice 2

## Task 2: Give injections (Up to 1,000 per day)

- ◆ Cock gun by turning lever down
- ◆ Classify patient's arm
- ◆ Bunch skinny arms, stretch fat and muscular arms, “in-between” for normal arms
- ◆ While “bunching” or “stretching with one hand, seat nozzle firmly at 90 degree angle on patient's arm with other hand
- ◆ Pull trigger. Hold for 2 seconds. Remove
- ◆ Uncock gun
- ◆ Repeat steps 1-6 for each patient (50 shots/vial)

# For each task, decide if a job aid is needed:

IF	AND	THEN
Job aids are mandated	⇒	Write a job aid for this task
<ul style="list-style-type: none"> <li>◆ Severe consequences</li> <li>◆ NOT done frequently</li> <li>◆ MORE than six steps</li> <li>◆ Complex decisions</li> <li>◆ Budget/time limited</li> <li>◆ Likely to change</li> </ul>	There is time to refer to a job aid when doing the task	
<ul style="list-style-type: none"> <li>◆ Simple</li> <li>◆ Other reasons to NOT job aid</li> </ul>	⇒	Do NOT write a job aid for this task-make a note to train this task to recall
		There is NO time to refer to a job aid (MUST do the task from memory)

# Practice 3

## Task 5: Perform daily maintenance (After clinic closes)

- ◆ Disassemble head into 14 parts
- ◆ Inspect each part for wear/damage
- ◆ Replace worn or damaged parts
- ◆ Wash each part in soap and water
- ◆ Lubricate parts A, B, D, P, and R (It is critical that parts C and E NOT be lubed!)
- ◆ Reassemble 14 parts

# For each task, decide if a job aid is needed:

IF	AND	THEN
Job aids are mandated	⇒	Write a job aid for this task
<ul style="list-style-type: none"> <li>◆ Severe consequences</li> <li>◆ NOT done frequently</li> <li>◆ MORE than six steps</li> <li>◆ Complex decisions</li> <li>◆ Budget/time limited</li> <li>◆ Likely to change</li> </ul>	There is time to refer to a job aid when doing the task	
<ul style="list-style-type: none"> <li>◆ Simple</li> <li>◆ Other reasons to NOT job aid</li> </ul>	⇒	Do NOT write a job aid for this task-make a note to train this task to recall
		There is NO time to refer to a job aid (MUST do the task from memory)





# Q & A