Effective Job Aids

INFORMATION LIFELINE

Tips, Tools, and Intelligence for Trainers

INSTRUCTIONAL SYSTEMS DEVELOPMENT
Effective Job Aids

Instructional Systems Development

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Create Effective Job Aids

How many times have you had to reset your VCR or reprogram your answering machine? How many times have you baked a cake from scratch? Chances are that you have performed at least one of these tasks at some point. When it comes to these common but infrequent tasks, most of us need a reminder of sorts to help us complete them. We usually pull out the reference guide that came with the VCR if we need to reset it or a cake recipe when we bake a cake from scratch. If we have to reprogram the answering machine, we usually look for a little sticker with the instructions taped to the back. These quick reference guides are all types of job aids. We can’t always be expected to remember the specific steps necessary to complete a task when the task is not performed frequently or is very complex; we need a reminder.

Organizations are asking employees to do more, to perform a variety of tasks. Some are simple. Some are complex. Some are performed on a routine basis. Some are performed infrequently. Sometimes, employees are asked to perform these tasks with little or no training. Job aids can fill an important gap in education and training. When people use machines or procedures infrequently, they often forget how to use them. Or, when they perform a complicated procedure as part of their routine, they may get careless and need a reminder to perform all of the necessary steps. In these situations a job aid is a useful tool to bridge the gap.

What is a Job Aid?

You may be thinking that anything that helps a person do his or her job is a job aid. Well, that’s not quite true. Although it is difficult to find a universally accepted definition, there are three primary components of a job aid:

1. A job aid stores information or instruction external to the user.
2. A job aid guides the user to perform the task correctly.
3. A job aid is used during the actual performance of the task when the user needs to know the information or procedure.

A job aid may be a sign, checklist, or chart placed in or near the work area to remind users of specific actions to take when performing a task. It may be a tent card, flowchart, poster, sticker, or small card. It can sit on a desk, be attached to a computer, stuck on a bulletin board, or taped to the overhang in a cubicle. A job aid is something that may be consulted quickly, when needed. It provides specific, concise information to the user.

It may be helpful at this point to define what is not a job aid. A job aid is not the tool used to perform the task. It is not the remote control used to reset the VCR, the answering machine itself, or the measuring cup or blender used to make the cake. Although these items are external to the user, they do not store information or instruction. They may be used during the actual performance but do not serve as a guide for the user while performing the task.

Advantages of Job Aids

There will always be a need for formal training, but job aids offer several benefits. Below are a few of the major advantages of using job aids.

- **Timeliness**
  Job aids are designed to be used when the need to know arises. They can be effective in increasing employee productivity and in reducing error rates. Employees can access a job aid in real time versus fumbling around for 15 minutes looking for information, giving up when they can’t find it, continuing with the task, and then making a mistake.

- **Cost-effectiveness**
  Job aids are less expensive to produce than formal training classes. They can also, in some instances, reduce the amount of time employees spend in training, which means less time away from the job. Therefore, job aids are a cost-effective intervention to help employees perform their jobs more effectively and efficiently.

- **Transferability**
  Job aids help employees transfer new skills and knowledge from a training class to their job. You have probably heard, “I know they told us how to do that in training, but I can’t recall what they said” or received a call from a trainee asking a
Sample Flowchart

This flowchart is an example of a job aid used when a performance problem is identified. Notice that the answer the user provides to the yes or no questions directs him or her to the correct path to follow in order to complete the task.

- **Maintenance**
  Job aids are easier to revise and update than training classes. This is not to say job aids are always easy to revise and update, but it is easier to update a job aid than a training course. Not only are more labor hours required to update a training class, but consider the training time required to update all of the former class participants.

- **Reduction in Recall**
  Job aids reduce the need for individuals to remember so much information. Memorizing tedious and complex processes and procedures takes time and practice. Relying on memorization may lead to costly errors because retention rates decrease as the period between learning and actual performance increases. Job aids are an efficient method to reduce problems associated with relying strictly on recall to perform in certain situations.

**When Is a Job Aid Appropriate?**

Wouldn’t it be great if we could use a job aid to solve all performance problems? We could give employees a tool to use on the job that would reduce errors and improve productivity. This could reduce the time employees are away from their jobs for training and, therefore, reduce the cost of training. As the training industry moves toward improving performance using appropriate cost-effective interventions, clients are beginning to realize that formal training is not always the answer. Sometimes, the most appropriate and effective intervention will be a job aid.

Joe Harless, author of “Guiding Performance with Job Aids” in *Introduction to Performance Technology*, gave us cause to think when he wrote, “The relevant question is not ‘Can the task be job aided?’ but ‘Should the task be job aided?’” Consider the answers to the following questions when deciding if a job aid is appropriate.

- **How Frequently Is the Task Performed?**
  Job aids should be used when an employee does not perform the task frequently or on a regular basis. No one can be expected to remember how to do something that is done infrequently.
How Complex Is the Task?
Tasks with multiple steps or those with elaborate, lengthy decisions that are difficult to remember may lend themselves to job aids.

What Are the Consequences of Errors?
Here we are concerned with tasks that if not performed correctly cause high costs, may endanger life, or produce a similar negative effect. Examples of this may include tasks where errors may cause damage to costly equipment, harm the operator, or result in the loss of a major customer or contract.

How Frequently Does the Task Change?
Job aids are easier to update and revise than traditional training. If a task changes frequently, it probably is not cost-effective to revise the training curriculum and materials and retrain employees with each change. Also, asking employees to constantly learn new tasks is not only time consuming, but also can result in high task error rates.

Where Will the Task Be Performed?
Remember that job aids are external to the user and are accessed during the actual performance. This means we need to know something about the physical and social environment where the task is completed. You are not deciding on a form for the job aid yet, but determining if the environment will support the use of a job aid. Consider whether employees will be able to physically access a job aid or if there are any psychological reasons for not using the job aid. For example, do employees feel that their credibility will be compromised if they use a job aid when performing a task?

Each situation and each task should be considered on an individual basis when deciding if the job aid is an appropriate tool. Job aids can be used in situations that call for following detailed, linear, step-by-step procedures or those that involve complicated multi-faceted decision making.

Types of Job Aids
Job aids can be as small as a template on an answering machine or as large as a procedural manual. Allison Rossett and Jeannette Gautier-Downes, authors of *A Handbook of Job Aids*, maintain that job aids serve to provide information, support procedures, as well as coach perspectives, decisions, and self-evaluation. Most tasks entail either decision making, following procedures or linear sequences, or a combination of the two. Some of the more common job aid formats are listed on the next page and samples appear throughout this issue.

Sample Reference Job Aid
Reference job aids contain information users may need to perform a task. Below is an example that provides a listing of light bulbs for salespeople to refer to for part numbers, order numbers, and prices.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Order No.</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>100253-4</td>
<td>Incandescent 80 watt bulb</td>
<td>5002</td>
<td>Doz.</td>
<td>$27.50</td>
</tr>
<tr>
<td>100253-5</td>
<td>Incandescent 150 watt bulb</td>
<td>5003</td>
<td>Doz.</td>
<td>$56.45</td>
</tr>
<tr>
<td>100254-10</td>
<td>Soft brite 75 watt fluorescent bulb</td>
<td>5004</td>
<td>Each</td>
<td>$21.23</td>
</tr>
<tr>
<td>100254-22</td>
<td>Soft brite 95 watt fluorescent bulb</td>
<td>5005</td>
<td>Each</td>
<td>$35.97</td>
</tr>
</tbody>
</table>
### Steps
This format presents information and directions in a specific sequence. The step format is most appropriate when the user must complete a series of linear procedures in which detail and sequence are critical to completing the task (see page 8).

### Forms and Worksheets
Forms and worksheets are similar to the step format in that they guide the user through a process in a specific sequence. They require user participation, however, and include blanks or spaces for the user to record responses. Forms and worksheets are most appropriate when calculations must be performed or when information is stored for future reference (see page 195).

### Checklists
Checklists are groups of items to be considered when planning or evaluating. They present guidelines for completing a task and are most commonly used to ensure consistency. Items are presented in a logical order but are not necessarily followed in that order by the user (see page 197).

### Decision Tables
Decision tables allow the user to make decisions and complete tasks based on a set of conditions. They are usually comprised of “if-then” statements that guide users to appropriate decisions. Decision tables are most appropriate when tasks or decisions are dependent on conditions that may vary (see below and page 199).

### Flowcharts
Flowchart job aids are similar to decision tables in that completing the task or deciding on a course of action is dependent on conditions that may vary. Unlike the decision table, however, questions in a flowchart can be answered with a “yes” or “no.” Each answer the user provides leads to another decision point, which again is answered by a “yes” or “no.” The user follows the flowchart until enough questions have been answered for an accurate decision to be made or until a task is completed (see page 2).

---

### What Type Of Job Aid Should You Use?

<table>
<thead>
<tr>
<th>If...</th>
<th>Then Consider A...</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The task consists of steps that must be completed in a specific sequence</td>
<td>Step-by-Step Job Aid</td>
</tr>
<tr>
<td>• The user does not need to make decisions regarding the task</td>
<td></td>
</tr>
<tr>
<td>• The task or procedure is linear and there is only one path for the user to follow</td>
<td></td>
</tr>
<tr>
<td>• The task consists of steps that must be completed in a specific sequence</td>
<td>Form or Worksheet Job Aid</td>
</tr>
<tr>
<td>• The user needs to document information to be used to complete the task</td>
<td></td>
</tr>
<tr>
<td>• The task consists of performing calculations</td>
<td></td>
</tr>
<tr>
<td>• Information that is used to complete the task will be referenced at a later time</td>
<td></td>
</tr>
<tr>
<td>• The task does not consist of steps that must be completed in a specific sequence</td>
<td>Checklist Job Aid</td>
</tr>
<tr>
<td>• The task involves inspecting, observing, or planning</td>
<td></td>
</tr>
<tr>
<td>• Consistency is an important factor</td>
<td></td>
</tr>
<tr>
<td>• The task does not consist of steps that must be completed in a specific sequence</td>
<td>Decision Table Job Aid</td>
</tr>
<tr>
<td>• Several conditions or variables may exist</td>
<td></td>
</tr>
<tr>
<td>• There are limited options associated with each decision variable</td>
<td></td>
</tr>
<tr>
<td>• There are several yes or no decisions that must be made</td>
<td>Flow Chart Job Aid</td>
</tr>
<tr>
<td>• The decisions must be made in a specific order</td>
<td></td>
</tr>
<tr>
<td>• Completion of the task is dependent on the answer given at each decision point</td>
<td></td>
</tr>
<tr>
<td>• The task does not consist of steps that must be completed in a specific sequence</td>
<td>Reference Source Job Aid</td>
</tr>
<tr>
<td>• The task requires reference to data versus performing a process or procedure</td>
<td></td>
</tr>
</tbody>
</table>
Sample Worksheet Format

The worksheet format below includes space for the user to record information about the instructional strategy used for each lesson objective in a training course. The user can refer back to this information as the project progresses.

Instructional Strategy Form

The instructional strategy form should document the instructional strategy plan to be used for each objective. The strategy used should be determined by the lesson objective.

I. Overall Course Description

Course Title: ___________________________________________________________________

Course Description:________________________________________________________________

Terminal Objective(s):____________________________________________________________
________________________________________________________________________________

Team Information:

• sponsor_______________________________________________________________________

• subject matter experts__________________________________________________________

• other individual(s) involved in the ISD process _____________________________________

II. Instructional Plan Description

The instructional plan description should be completed for each course objective.

Objective #1 _____________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

Lesson Objective:________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

Description of instructional method(s) to be used: ___________________________________
________________________________________________________________________________

Include conventional lecture, demonstration, individual study, programmed instructions, case studies, simulations, team teaching, etc.

Description of media devices to be used: _____________________________________________

Include audiovisual aids, television, computers, etc.
Reference Sources

Reference sources primarily provide information required for completing a task. Unlike the other types of job aids, they do not provide information to be followed in a step-by-step manner nor do they coach the user in a decision-making process. Examples of reference sources include telephone books and parts catalogs containing detailed information such as product and price data (see page 3).

A job aid can also be a combination of two or more of the formats listed above. The type of job aid that is designed should be contingent on the type of task being performed. For example, using a decision table job aid when the task entails completing specific steps without decision dependencies would not be the most effective type of job aid, just as using a step format job aid would not support a highly complex decision-making task.

Job Aid Mediums

Usually, people think of paper-based job aids: posters hung at eye level in an assembly line, laminated cards perched atop PCs, or flowchart diagrams stuck to cubicle walls. Job aids are not always paper-based, however. They can be audio, visual, a combination of the two, or even in an electronic format as electronic performance support systems (EPSS), which can be quite elaborate. For more information on EPSS, see Info-lines No. 9412, “The Basics of EPSS,” and No. 9501, “Making EPSS Work for Your Organization.”

For example, many restaurants employ several types of job aid mediums. There may be a poster hanging in the kitchen reminding employees of acceptable hygiene practices and posters hanging above the food preparation area with a picture of each main dish. The chef may even have a display that will run a short video providing instructions on how to prepare a dish, just in case that special secret ingredient slipped his or her mind.

Putting Together a Job Aid

Another benefit of job aids is that almost anyone can create an effective one without extensive training. This does not mean, however, that a systematic process shouldn’t be followed when creating a job aid. Following a systematic process ensures the following:

- appropriate content is included in the job aid
- an appropriate format is used
- an appropriate medium is used
- the effectiveness of the job aid is measured

Below are steps to follow when creating a job aid. These steps follow an Instructional Systems Development (ISD) approach. You may find another process that works equally well for your situation but following an ISD approach helps ensure that the job aid is based on a real performance need and includes observable, measurable elements. For additional information on ISD, see Info-line No. 9706, “Basics of Instructional Systems Development.”

Analyzing a Job Aid’s Function

The first step in the analysis phase is to determine if the job aid is an appropriate intervention by answering the questions on pages 2 and 3. Remember that it is not can the task be job aided, but should the task be job aided. Assuming that you have already determined that a job aid is an appropriate intervention, you need to gather specific data on the three Ws: the work, the worker, and the workplace. Use observations and interviews to collect your data.

The Work

When possible, observe both novice and expert individuals perform the task. This will allow you to determine differences in the way the task is performed at various levels of expertise. As you observe each individual, take explicit notes and document every step the individual takes and any references or external materials the individual uses to perform the task.

Observe the task being performed from start to finish and collect enough information so you can break the task or decision-making process down into small “chunks” of information. Consider the following questions as you gather information about the work itself:
Sample Checklist

The checklist below includes guidelines for developing a training course. Though the checklist format is frequently used when step-by-step procedures are not required, this particular example does dictate the order of the guidelines. For example, the user would not develop a course before an analysis was complete.

### Instructional Systems Development (ISD) Checklist

**Project Name:**

<table>
<thead>
<tr>
<th><strong>Analysis</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete TNA Proposal</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
<tr>
<td>Conduct needs assessment</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Design</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a topic list and topic map</td>
</tr>
<tr>
<td>Complete course syllabus</td>
</tr>
<tr>
<td>Complete instructional strategy form</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
<tr>
<td>Create assessment items</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Development</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop instructor guide</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
<tr>
<td>Develop participant guide</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
<tr>
<td>Develop media</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
<tr>
<td>Develop pre- and post-tests</td>
</tr>
<tr>
<td>Receive sign off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Implementation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Select and prepare appropriate facility</td>
</tr>
<tr>
<td>Prepare and gather materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Evaluation</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect and summarize level one and level two data</td>
</tr>
<tr>
<td>Distribute level three action plans</td>
</tr>
</tbody>
</table>
What is typically done to complete the task?

What is the order of steps, process, or decision making?

What tools are used to perform the task?

Are the same steps followed in the same order each time the task is performed?

Are there times when the task is performed in a different order?

**The Worker**

After you observe individuals performing the task, ask them about their thought processes while performing the task. It is important to identify any unobserved processes that the individual performs. This is especially critical when developing a job aid for decision making or coaching. In many cases, these thought processes would not be observable.

Keep in mind who will be using the job aid as you proceed with your analysis. Consider the following questions:

- What is the user’s experience level? If the user is new or has limited experience, you will need to include more detail in the job aid.
- What is the user’s experience with job aids? Are they commonplace? Will a job aid be a new tool for the users?
- What is the demographic make up of the user audience? What is its primary language? What is its reading level? What is its education level?

**The Workplace**

Collecting accurate information on the work environment during the analysis phase is key to selecting an appropriate medium to use during the design phase. As you conduct your analysis, be sure to collect any information regarding the physical surroundings where the task is performed.

Ask yourself where the job aid will be used. Is the task performed at an employee’s desk, on a shop floor, or on the top of a telephone pole? Consider psychological factors in the workplace as well. Does the employee perform the task in view of a supervisor, peers, or customers? Will the individual be likely to consult the job aid only when others are not around? These issues are important to note as they dictate the type of medium used and how to effectively implement the job aid in the environment.

Conducting a needs analysis for a job aid is just like conducting a needs analysis for a training class. Without performing a complete analysis up front, you run the risk of creating a job aid that will not produce the desired results. If observations are not possible, use a more in-depth interview process. Have the users talk you through the process in an unstructured format, then follow up with more direct questions, just as you would after an observation.

---

**Step-by-Step Sample Job Aid**

The step-by-step format is used when the task must be completed in a specific sequence. This example provides additional information under some steps for the benefit of more novice users, making the job aid appropriate for employees of various skill levels.

1. Use the TNA Proposal template to plan your analysis.
   - identify sponsor
   - determine the information to be gathered
   - determine the sources of data
   - access the TNA Proposal template
   - complete items 1 through 7 on the template
   - obtain signoff from the instructional designer

2. Gather the data.

3. Analyze the data to identify needs.

4. Use the TNA Summary template to report your findings.
   - complete items 8 through 10 on the template

5. Obtain signoff from the instructional designer.

6. Save the report in the project directory.
Designing a Job Aid

Once you have completed the needs and task analysis, you should have a complete representation of the user and the task. You are now ready to map out the structure and background of the job aid.

- **Determine the Job Aid Format**
  Decide what part of the task is being supported by the job aid. Will it provide the step-by-step procedures, guidelines to follow, or reference information? Visualize how the job aid will be consulted and how it should be structured. Consider the characteristics of the task and the user as you select the format to use. See the samples of various job aid formats included throughout this issue.

- **Determine the Medium**
  Design the job aid for use where and when the task is completed. Now is the time to consult all of that data you collected about the workplace. Decide how best to convey the information. You can develop the most complete job aid ever, but if the medium used is not conducive to the actual work environment, it will not be effective.

- **Cost**
  Stay within resource allocation. Cost is an important factor to consider when determining which medium to use. For example, paper-based job aids are less costly to produce and maintain than electronic job aids. Black and white drawings are cheaper to reproduce than color photographs. As you design the job aid, factor in the resources that are available to produce, distribute, and maintain it.

- **Storyboard the Job Aid**
  Graphically lay out the job aid. Diagram the steps to complete the task. Indicate where visual elements and words will be placed.

In “How I Created the Award-Winning Job Aid,” author Susan Zagorski explained some of her own techniques for designing a job aid:

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**Sample Decision Table**

This decision table for customer service representatives covers several variables or conditions that may exist when a representative answers a call. In this example, there are actually nine possible conditions that have been identified. Each probable condition is listed so representatives need only identify the condition and follow the chart to find the appropriate action.

<table>
<thead>
<tr>
<th>If</th>
<th>And</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>The caller is employed</td>
<td>The employer has an account with us</td>
<td>Refer the caller to customer service employer accounts at ext. 5641</td>
</tr>
<tr>
<td>The caller is employed</td>
<td>The employer does not have an account with us</td>
<td>Refer the caller to broker sales at ext. 5487</td>
</tr>
<tr>
<td>The caller is self employed</td>
<td>Has an account with us</td>
<td>Refer the caller to customer service small groups at ext. 8745</td>
</tr>
<tr>
<td>The caller is self employed</td>
<td>Does not have an account with us</td>
<td>Refer the caller to small group sales at 8692</td>
</tr>
<tr>
<td>The caller is not employed</td>
<td>Has an account with us</td>
<td>Refer the caller to customer service individual accounts at ext. 9632</td>
</tr>
<tr>
<td>The caller is not employed</td>
<td>Does not have an account with us</td>
<td>Refer the caller to individual accounts sales at ext. 9832</td>
</tr>
</tbody>
</table>
Effective Job Aids

Eight Ways To Foil Job Aids

Jeffery J. Nelson listed “eight time tested techniques...to sabotage the use of job aids” in his article of this title in Performance & Instruction Journal:

1. When preparing a job aid for a person’s job, emphasize to him or her how the job aid will capture his or her twenty years of job experience— in only two pages!

2. Be sure that the job aid does not reflect how the task is actually done on the job. In fact, the more creative and bizarre you can make the job aid, the sillier the person will look when using it.

3. Don’t include any instruction in the actual job jargon, theory, or background. This will make the user sound totally naïve about the job. It will also stifle communications among the user, his or her peers, and the supervisor and make the user sound like he or she just beamed down to earth.

4. Be sure to job aid everything. The best technique is to turn even simple prose statements into decision tables and algorithms. The more complex, the better.

5. Make people memorize all job aids. Acknowledge and reward those employees who have all the information in their heads. Also, practice scowling at anyone who has to use props such as job aids. Tell them that if they really knew the job, they’d have it memorized.

6. The most insidious and perhaps delightful technique is to build errors into the job aid. You’ve got an advantage because the user probably thinks the thing will really work and won’t expect errors. But, just in case, camouflage the errors in the most complex part of the job aid.

7. Refer the user to another page or to a job aid that doesn’t exist. I’ve seen this work and it’s really fun.

8. Don’t brief supervisors or peers about job aids. Tell them that those “funny little books” are only for people who don’t know their jobs. Again, combining this technique with all of those previously mentioned will insure the elimination of all job aids from the workplace.


When I sit down to actually, physically design the job aid, I make a rough sketch that includes everything—all the facts and minute details I might possibly want to include. I can always throw something out later, but I might forget a detail that is not in the original rough draft.

This is an unusual method. Putting everything down on paper, barely legible, pages taped together, arrows and marginal notes everywhere. But this method works very well when I have no clear beginning or end in mind, just the stuff that goes somewhere in the middle. It allows me to naturally discover the best sequence and flow of information.

She then does three or four rough drafts, eliminating extra words, combining ideas and eliminating some, working toward “a niftier arrangement.”

Developing a Job Aid

During the development phase you will actually produce the job aid. Consider the following as you work on your job aid:

Content
Include only the necessary steps or information required by the user. Ask yourself if the step or content is relevant to the task at hand.

Keep the information as simple and concise as possible. Present the information in small pieces. Write short sentences and use short words to describe or list the steps, processes, calculations, or decisions that need to be made.

Leave out “nice-to-know” tidbits of information, they only serve to clutter the job aid. Remember that the job aid should be a quick reference for the user. Place critical information in the first and last parts of sentences or sections of the job aid.

Language
Use language that the user will understand. Avoid long, unfamiliar words and jargon unless appropriate to the task and the user. Use verbs and actions words at the beginning of sentences wherever possible.
Visual Elements
Use drawings or graphics when appropriate to clarify information or provide more detail than words would allow. Graphics and illustrations should be clear and simple. Be consistent in the type of visual that is used. If you use a drawing in one step, use one in any subsequent steps.

Highlight critical points or steps by using bold or italicized text. Colors can also be used to highlight and code items or sections of the task. For example, suppose you are developing a paper-based job aid to be used by sales associates at a local insurance company. You may use color codes to differentiate the tasks that are job aided. A blue card may be used for the steps to open a customer account and a red card for the steps to close a customer account. This way associates can easily locate the appropriate job aid by color.

Accessibility and Usability
Be sure the job aid is accessible and convenient to use. Employees are not likely to search for a job aid while in the middle of performing a task. Size and shape of the job aid play a critical role in how effective the job aid will be. For example, if a task requires an individual to use both hands, reaching for a bulky manual or flimsy paper job aid is not possible. A laminated card or poster hung where it can be consulted quickly may be a better choice.

Implementing Job Aids
During the implementation phase you will present the job aid to users in the workplace; preferably before final production and distribution take place. In A Handbook of Job Aids, Rossett and Gautier-Downes provide a comprehensive checklist to use when piloting a job aid.

Ask users:

☐ Do you have any questions?
☐ Were you unsure of what to do at any time?
☐ Which steps were hardest to follow?
☐ Was the job aid difficult to use?
☐ Were the instructions clear?

Measuring the Effectiveness of Job Aids
One of the advantages of job aids is that the results of their use can be measured or evaluated. Below are examples of two types of measurement.

Non Dollar Value

Situation:
The central air conditioning unit of the plant is only started two or three times per year. Similarly, it is turned off only at the end of the season or in an emergency. The plan operations director knows how to do the job. But since the unit is turned on or off infrequently, employees forget how to do the job. In an emergency, someone has to call the operations director in to turn the unit on or off, no matter what the hour.

Intervention:
A job aid was developed and placed at the air conditioner control. At an on-site staff meeting, the problem and its solution was explained to all employees.

Result:
Dollar and cents were not measured. However, there were no more emergency calls.

Value:
No measure of dollar and cents value; no further emergency calls were reported. Personal satisfaction reported.

Dollar Value Estimated

Situation:
New time card machines were to be installed. Executives did not feel the need for training until they tested a unit in the remote data processing building. The supervisor there spent a great deal of time correcting employees’ mistakes with the new machine. She made a list of the problems, and called the training department.

Intervention:
A job aid was placed over each time card machine.

Result:
Fifteen minutes training time saved per employee. 15 minutes x 2,000 employees x $8.00 per hour = $4,000 saved.

Value:
Training time saved. Cost of training reduced.
Once you have piloted the job aid and made any necessary revisions, you are ready to fully implement it in the workplace. Job aids are independent and, although they generally need no formal introduction to the user, there are some circumstances that may warrant an introduction:

- Users may be unfamiliar with the concept of job aids.
- Users may be intent on some form of training.

A formal presentation should follow this sequence:

1. Explain the performance problem, its impact on the organization, and how the job aid addresses the problem.
2. Explain how the job aid will make the users’ job easier.
3. Show how to use the job aid by talking users through the steps.
4. Have an influential performer demonstrate the job aid, followed by as many performers as possible.
5. Conclude by telling the users when the job aid will be put into use, how you will monitor its use, and when and how you will report the results back to them.
6. Tell users how it will be maintained.

**Evaluating Job Aids**

Similar to developing an instructor-led class, computer-based training course, or any type of performance improvement intervention, job aids should be evaluated at each phase of the process including implementation. A plan for final evaluation should include maintenance of the job aid and a system for measuring its effectiveness. For further information on evaluation, see *Info-line* No. 9705, “Essentials for Evaluation.”

Job aids, just like policy manuals, training classes, and organizational charts need to be updated and revised. They will lose their effectiveness if not revised to reflect changes in the job itself, changes in the work environment, and changes in the employee profile. Consider buying a new personal computer and then noticing a newer one on the market just three months later. Job tasks also change, although thankfully not usually as quickly as PCs, but we need to be prepared to revise job aids to reflect any changes that do take place.

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**Tips For Measuring Job Aids Results**

- **Results Don’t Always Have To Be Measured in Dollars**
  Increased user satisfaction is important and can become a basis for developing new clients and increasing the training department’s impact.

- **Don’t Make Up Dollar Figures**
  If you’re estimating, say so, and show how you reached your estimated. Making up numbers can breed skepticism.

- **Find Organizational Problems**
  Then fix them and report the results.
Consider the following as you plan for maintaining a job aid:

- Who will be responsible for making sure new employees have access to existing job aids?
- Who will be responsible for making revisions to existing job aids?
- How frequently will job aids be revised?
- How will changes in the job aid be communicated to the employees?
- How will you ensure that employees are using the most up-to-date version of the job aid?
- How will outdated job aids be collected?

The second component in the evaluation phase is measuring the effectiveness of the job aid after it has been implemented. Effectiveness can be measured in terms of dollars saved, reduced error rates, and increased productivity. Or, there may be other specific criteria your organization uses to evaluate the benefits derived from using a job aid. The criteria used to evaluate the job aid should be tied to the original performance problem that the job aid was developed to correct. See “Measuring the Effectiveness of Job Aids” on page 11 and “Tips for Measuring Job Aid Results” on page 12 for more information on evaluating job aids.

Systematic Job Aid Creation

Job aids have been around for many years. Recently, we have seen them evolve to play an important part in filling the gap between training and on-the-job performance. People are asking, “Is formal training the answer?” The next time you find yourself considering interventions to a performance problem, ask yourself if the task or process should be job aided.

If the answer is yes, then follow a systematic approach to creating the job aid. Ensure that the job aid is task or process focused and consider the medium as well. Measure the effectiveness of the job aid. Create a job aid when it is appropriate for the situation at hand, making sure to conduct an analysis first. By following these steps, you can correct many performance problems without resorting to more expensive forms of training and still ensure employees will perform at their peak.
References & Resources

Articles


Books


Info-lines


———. “EPSS.” No. 9806.

Checklist for Creating Effective Job Aids

Use this checklist as a guide as you design job aids. The set of questions will help you plan, develop, and evaluate job aids.

1. **Determine If the Task Should Be Job Aided.**
   - □ Is the task performed infrequently?
   - □ What are the repercussions for error?
   - □ How complex is the task?
   - □ How frequently does the task change?
   - □ What are the characteristics of the user?
   - □ What is the environment like where the task is performed?
   - □ Are the instructions clearly and correctly sequenced?
   - □ Are examples used when appropriate?
   - □ Does the job aid avoid confusing terms or jargon?
   - □ Are words and sentences short?
   - □ Does the job aid use visuals well?
   - □ Are critical words highlighted?

2. **Design the Job Aid.**
   - □ What part of the task will the job aid support?
   - □ What format will you use?
   - □ Will the job aid support step-by-step procedures or decision-making tasks?
   - □ Will the job aid be used to reference information only?
   - □ What medium will the job aid take?
   - □ In what type of environment is the task completed?
   - □ What resources are available to develop the job aid?
   - □ Is the medium easy to use while performing the task?
   - □ Should the job aid be audio, visual, or electronic?
   - □ Who will introduce the job aid?
   - □ Is the job aid’s importance evident to the user?
   - □ Who will demonstrate how to use the job aid?

3. **Develop the Job Aid.**
   - □ Is the job aid clear and understandable?
   - □ Are the instructions free of unnecessary detail?
   - □ Are examples used when appropriate?
   - □ Does the job aid avoid confusing terms or jargon?
   - □ Are words and sentences short?
   - □ Does the job aid use visuals well?
   - □ Are critical words highlighted?

4. **Implement the Job Aid.**
   - □ Who will maintain the job aid?
   - □ How will revisions be distributed?
   - □ What type of results will be measured; dollar value or nondollar value?
   - □ How will the results be reported?
   - □ Who will receive reports of the results?
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