

## APPENDIX E

### Job Aids for Analysis Phase

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#### Table of Contents

These job aids are designed to work in concert with the Analysis phase worksheets presented in *Appendix F*. Use the following listing to access the job aid for the task you want to complete.

Job Aid Number	Title
<a href="#">JA – E.1</a>	Collect Task Details
<a href="#">JA – E.2</a>	How to Develop the Target Audience Profile
<a href="#">JA – E.3</a>	How to Determine Course Parameters and Constraints

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## JA– E.1: Collect Task Details

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**Purpose** This is a job aid to help you identify specific performance information that is required for each task. The purpose of this job aid is to assist in collecting and recording on all relevant information about how to perform a task correctly.

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**Who should use this JA** You should use this job aid if you are an instructional designer or course developer responsible for conducting the Analysis phase for a resident instructional program. Ideally, you are a graduate of the Coast Guard Course Designer Course (CDC) or the SABA Knowledge Service Peak Performance System workshops (previously known as Accomplishment-Based Curriculum Development (ABCD) workshops).

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**When you should use this JA** This job aid should be used after you have validated your source analysis.

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**Entering Assumptions** To ensure task performance accuracy, the best way to obtain task details and associated step data is through interviews and observations of APs and SMEs. Use of this job aid assumes:

- You have read Chapter 3, Section 3.2 Task Analysis, Collect Task Details
- You have access to the source analysis
- Access to either:
  - Accomplished Performers (APs) for interviews and to observe task performance, *or*
  - Subject Matter Experts (SMEs) or other designated technical reviewers for task data validation

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**Reference Source for JA** The primary sources for the following information are:

- Making Instruction Work, by Robert F. Mager, CEP Press, 2005
- USCG Training System SOP, Vol. 6, Curriculum Outline, Section: Units of Instructions, TPOs and EOs, pages 22 – 26 and Appendix A: Job Aid for Writing a TPO

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**How to use this JA** Using the validated task listing from your Source Analysis, you will use this job aid to collect the task details data and record the results of the data collection onto worksheet WS - F.1.

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## JA – E.1: Collect Task Details, Continued

**Format**

The worksheet below aligns with the steps of the job aid on the following pages.

WS-F.1		Task Analysis – Task Detailing	
Project	<u>Step 1</u>		
Designer	<u>Step 1</u>	Date	
Task	<u>Step 2</u>	Task Code	<u>Step 2</u>
Source Analysis	<u>Step 2</u>		
References		Equipment Required	
<u>Step 3</u>		<u>Step 3</u>	
General Performance Support Decision for Course	<input type="checkbox"/> Job Aid <input type="checkbox"/> Job Aid with Extensive Training <input type="checkbox"/> Job Aid with Introductory Training <input type="checkbox"/> Train to Memory,		
Steps (Enabling Objectives)		Prerequisite Knowledge	
<u>Step 6 - 7</u>		<u>Step 5</u>	

## JA – E.1: Collect Task Details, Continued

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### Instructions

Step	Action
1	<b>Enter</b> in the <b>Project</b> , the <b>Date</b> the worksheet is completed and the name of the instructional <b>Designer/Developer(s)</b> completing the worksheet.
2	<b>Copy Task Statement</b> and <b>Task Code</b> from the analysis. <b>Enter</b> the <b>name</b> of the analysis in the <b>Source Analysis</b> block.
3	<b>Ask the AP or SME to identify</b> the needed <b>Equipment / Tools</b> to perform the task, and the <b>References</b> required to complete the task. <b>Enter</b> responses into their corresponding blocks of data.
4	<b>Refer</b> to the Source Analysis for the <b>task recommendations</b> and <b>check</b> the corresponding block
5	<b>Ask</b> the AP to <b>identify any steps that are “at strength”</b> in the target population. That is, identify any steps that the performer must already know how to perform correctly in order to enter the training. <b>Enter</b> the results in the <b>Prerequisite Knowledge</b> data block on the worksheet.
6	<b>Ask the AP to list</b> the <b>Task Steps</b> in the order that they must be performed. <b>Enter</b> the results.
7	<b>Ask</b> the AP to <b>review</b> the steps with you from the start of the task to the output (completion of the task); <b>make</b> any needed adjustments.
8	<b>Repeat</b> this process (Step 1 through Step 10) for every task in the source analysis. Each task from the Source Analysis will have a completed WS-F1.
9	<b>Validate</b> the Task Details worksheet for accuracy and completeness by reviewing with AP(s) or with the designated technical reviewer(s) defined in the Project Plan / POAM.
10	<b>Review</b> with the project manager and/or your manager/supervisor.

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## JA – E.2: How to Develop the Target Audience Profile

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<b>Purpose</b>	<p>This job aid provides the instructions to help you determine the <i>entering</i> key characteristic about the learner. The target audience profile should include every variable that might affect the learning outcome. These variables could include such items as: reading abilities, language skills, learning styles, educational levels, cultural influences, or relevant experience with the subject matter.</p> <p>The results from this assessment provides you with the needed data to design the training tailored to the needs of your audience by making the best use of particular instructional strategies that may be better suited to one target population over another.</p> <p>Remember, you goal is to gather information about the learner “as they are” not as you or someone else wants them to be. By doing so, the training can be molded to the entering characteristics of the learner (their aptitudes, attitudes, existing skills and knowledge, etc.), increasing the likelihood of a successful learning event.</p>
<b>Who should use this JA</b>	<p>You should use this job aid if you are an instructional designer or a course developer responsible for conducting the Analysis phase for a resident instruction program. Ideally you are a graduate of the Coast Guard Course Designer Course (CDC) or the SABA Knowledge Service Peak Performance System workshops (previously known as Accomplishment-Based Curriculum Development (ABCD) workshops).</p>
<b>When should you use this JA</b>	<p>This job aid should be used after task analysis has been completed (see JA-E.1).</p>
<b>Associated Worksheet</b>	<p>To help you use a standard and systematic way to capture the results of the target audience analysis process, a Target Audience Profile worksheet (WS – F.2) has been provided. An image of WS-F.2 can be found in <b>Appendix F</b> and a completed example of WS-F.2 is included in <b>Appendix G</b>.</p> <p>Refer to the <i>SOP Downloads</i> page on TRACEN Petaluma’s intranet web site for the most recent and usable copies of all worksheets and templates: <a href="http://cgweb.tcpet.uscg.mil/t_div/cdt/">http://cgweb.tcpet.uscg.mil/t_div/cdt/</a></p>

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## **JA – E.2: How to Develop the Target Audience Profile, Continued**

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### **How to use this JA**

To tailor your training to the needs of your target audience, you will need to collect data about specific abilities, attitudes and preferences. Use pages 1 through 4 on WS – F.2 to capture this type of essential information about your audience.

See Tip Sheet, TIP-H.5: Target Audience Characteristics - Design Factors found in *Appendix H* for more information regarding the relationship of each target population factor and the impact it could have to designing the resulting instructional program.

Interviews and observations of potential students are the most reliable sources of audience information. However access to potential students is not always possible. Consequently, you may need to have access to individuals performers, SMEs, supervisors, etc., who can accurately describe the current learner's characteristics and capabilities. Additionally, when updating existing courseware, the current instructors may also be a good source for target audience data.

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### **Entering Assumptions**

Use of this job aid assumes:

- You read Chapter 3, Section 3.3, Target Audience Profile.
  - Completion of the work defined in the previous job aid found in the Analysis phase: JA – E.1.
  - Access to conduct interviews and/or observations with the target population or alternate data source.
  - You are familiar with the data collection method of interviewing and can develop any specific interview questions to obtain the audience/learner data associated with your project that may not be pre-defined on WS – F.2, as needed. See *Appendix H – Analysis Tip Sheets, Tip – H.1: Data Collection Methodologies* for more information regarding using the interviewing method.
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# JA – E.2: How to Develop the Target Audience Profile, Continued

## Format

The worksheet below aligns with the steps of the job aid on the following pages (pages 1 and 2 of WS-F.2)

WS-F.2 Target Audience Profile	
Project _____	
Designer _____	Date _____
Primary Audience Relevant or Key Characteristics _____	
Data Sources(s) _____	
Job _____	Job Specialty _____
<b>Step 1</b>	
Section 1 - Aptitudes / Abilities	
Current knowledge of tasks/work or subject matter area	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
Relevant background and experience	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
<b>Step 2</b>	
Section 2 - Tools and Prerequisite Skills	
Specific tool(s) or prerequisite skills abilities _____	
Specific tool(s) or prerequisite skills deficiencies _____	

WS-F.2 – Target Audience Profile

WS-F.2 Target Audience Profile	
Project _____	
Designer _____	Date _____
Primary Audience Relevant or Key Characteristics _____	
Other deficiencies that may require special attention _____	
<b>Step 3</b>	
Section 3 - Learning and Language Preferences	
Vocabulary or terminology understanding - Technical	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
Vocabulary or terminology understanding – Non-Technical	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
Overall language skill level (mastery of spoken and written language)	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
Overall reading skill level	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____
Overall math skill level	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>
	Additional Details _____

WS-F.2 – Target Audience Profile

## JA-E.2:– How to Develop the Target Audience Profile, Continued

Format,  
Continued

The worksheet below aligns with the steps of the job aid on the following pages (*pages 3 and 4 of WS-F.2*).

WS-F.2		Target Audience Profile	
Project			
Designer		Date	
Primary Audience Relevant or Key Characteristics			
Overall computer literacy level	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>	Additional Details	
Overall verbal communication and interpersonal skill level	High <input type="checkbox"/> Average <input type="checkbox"/> Limited <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/>	Additional Details	
Learning preferences or learning styles (if known) <i>(i.e. information or techniques that may cause a negative reaction)</i>			
<b>Step 4</b>			
Section 4 – Learner Attitude / Motivation			
Attitude to organization	Eager <input type="checkbox"/> Neutral <input type="checkbox"/> Resistant <input type="checkbox"/> Unknown <input type="checkbox"/>	Additional Details	
Attitude to job	Eager <input type="checkbox"/> Neutral <input type="checkbox"/> Resistant <input type="checkbox"/> Unknown <input type="checkbox"/>	Additional Details	
Attitude to training <i>(i.e. willingness to accept the content of the training)</i>	Eager <input type="checkbox"/> Neutral <input type="checkbox"/> Resistant <input type="checkbox"/> Unknown <input type="checkbox"/>	Additional Details	
<b>Step 5</b>			
Section 5 – Additional Audience Details			
Overall length of time with the organization	New <input type="checkbox"/> 2-3 Years <input type="checkbox"/> 4+ Years <input type="checkbox"/> Mixed <input type="checkbox"/>	Other cultural or heri	

WS-F.2 – Target Audience Profile

WS-F.2		Target Audience Profile	
Project			
Designer		Date	
Primary Audience Relevant or Key Characteristics			
Majority age range of audience	18-24 <input type="checkbox"/>	In general, gender distribution	% Male <input type="checkbox"/>
	25-30 <input type="checkbox"/>		% Female <input type="checkbox"/>
	31-35 <input type="checkbox"/>	In general, distribution between types of units	% Afloat <input type="checkbox"/>
	36+ <input type="checkbox"/>		% Ashore <input type="checkbox"/>
Mixed <input type="checkbox"/>	In general, distribution of students attending directly from boot camp		<input type="checkbox"/>
Other additional details			

<b>Step 6</b>	
Primary Audience Population Description	
Section 6 – Summary of relevant or key characteristic for consideration during design & development	
<b>Step 7</b>	
Optional - Secondary Audience Population Description	
Section 7: Summary of relevant or key characteristic for consideration during design & development	

WS-F.2 – Target Audience Profile

## JA-E.2:– How to Develop the Target Audience Profile, Continued

### Procedures

Follow the steps in the order provided to collect the data about your learner. Record the results in the space provided in the Target Audience Profile worksheet (WS – F.2).

Step	Action
1	<b>Complete Section 1</b> - Focus interview questions to gather data on <b>specific abilities and aptitudes</b> for your project; <b>check</b> the box that best represents the potential students for your course; <b>record</b> any additional details in the space provided.
2	<b>Complete Section 2</b> - Focus interview questions to gather data on <b>specific tools and prerequisite skills</b> for your project; <b>check</b> the box that best represents the potential students for your course; <b>record</b> any additional details in the space provided.
3	<b>Complete Section 3</b> - Focus interview questions to gather data on <b>specific learning and language preferences</b> for your project; <b>check</b> the box that best represents the potential students for your course; <b>record</b> any additional details in the space provided.
4	<b>Complete Section 4</b> - Focus interview questions to gather data on the <b>specific learner's attitude/motivation</b> for your project; <b>check</b> the box that best represents the potential students for your course; <b>record</b> any additional details in the space provided.
5	<b>Complete Section 5</b> – Focus interview questions to gather data of the <b>specific additional details</b> about the learners for your project; <b>check</b> the box that best represents the potential students for your course; <b>record</b> any additional details in the space provided.

*Continued on the next page*

## JA – E.2: How to Develop the Target Audience Profile, Continued

**Procedures,  
Continued**

Step	Action						
6	<p><b>Complete section 6</b> – review all of the data collected in <b>Steps 1 – 5</b>; in the space provided <b>summarize</b> your findings regarding the relevant or key characteristics that may need to be considered in order to adapt your training to meet the needs of the intended audience. See <i>Appendix H – Analysis Tip Sheets, H5</i> for additional information regarding target population factors and design considerations.</p> <p>Your summary should high-light the design considerations (i.e. amount of required practice, detail of content, transition strategies, needed equipment, etc) when answering the following types of questions* about the target population.</p> <ol style="list-style-type: none"> <li>1. What is their proficiency?</li> <li>2. What types of attitudes do they have?</li> <li>3. What is the work environment they are accustomed to?</li> <li>4. How are they used to doing things?</li> <li>5. What shared or different points of view must be reflected and respected in the course?</li> </ol> <p>* Source: Elengold, J. Linda, Teach SMEs to Deign Training, Instructional Systems Development, An INFOLINE Collection, Issue 0106, pg. 183., ASTD Press</p>						
7	<p><b>Complete Section 7 only if a secondary population</b> has been identified and the project plan indicates that their unique performance needs will also be addressed by the training.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">If...</th> <th style="background-color: #cccccc;">Then...</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Secondary population</td> <td><b>Identify</b> any specific learner differences or unique key characteristics that you may need to consider during the design or development phases; in the space provided, <b>summarize</b> the specific differences or unique characteristics for this population.</td> </tr> <tr> <td style="text-align: center;">No additional populations</td> <td>Go to <b>Step 8</b>.</td> </tr> </tbody> </table>	If...	Then...	Secondary population	<b>Identify</b> any specific learner differences or unique key characteristics that you may need to consider during the design or development phases; in the space provided, <b>summarize</b> the specific differences or unique characteristics for this population.	No additional populations	Go to <b>Step 8</b> .
If...	Then...						
Secondary population	<b>Identify</b> any specific learner differences or unique key characteristics that you may need to consider during the design or development phases; in the space provided, <b>summarize</b> the specific differences or unique characteristics for this population.						
No additional populations	Go to <b>Step 8</b> .						
8	<p><b>Review</b> the completed worksheet, adjust and finalize; confer with your manager/supervisor or an experienced instructional designer to ensure completeness and accuracy; adjust data content if needed.</p>						

## JA – E.3: How to Determine Course Parameters and Constraints

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<b>Purpose</b>	<p>This job aid provides the instructions to help you identify any parameter or constraint that will have some type of limiting factor that defines the boundaries you must operate within for the for the design, development, delivery or testing of the resident training program (i.e. the course). As a reminder, the factors of constraints and parameters are defined as:</p> <ul style="list-style-type: none"> <li>• <b>Constraint</b> – any limitation on the availability of time, money, methods, equipment, or human resources affecting a project</li> <li>• <b>Parameter</b> - A given or a constraint which cannot changed</li> </ul>
<b>Who should use this JA</b>	<p>You should use this job aid if you are a course designer / course developer responsible for conducting the Analysis phase for a resident instruction program. Ideally you are a graduate of the Coast Guard Course Designer Course (CDC) or the SABA Knowledge Service Peak Performance System workshops (previously known as Accomplishment-Based Curriculum Development (ABCD) workshops).</p>
<b>When should you use this JA</b>	<p>This job aid can be used after the validation of the Task Analysis data and the completion of the target audience and instructor profiles. It should build off of any course parameters and constraints indentified during project alignment and documented in the project plan for this resident instruction project.</p>
<b>Associated Worksheets</b>	<p>An image of WS-F.3 can be found in <i>Appendix F</i> and a completed example of WS-F.3 is included in <i>Appendix G</i>.</p> <p>Refer to the <i>SOP Downloads</i> page on TRACEN Petaluma’s intranet web site for the most recent and usable copies of all worksheets and templates: <a href="http://cgweb.tcpet.uscg.mil/t_div/cdt/">http://cgweb.tcpet.uscg.mil/t_div/cdt/</a></p>

## JA – E.3: How to Determine Course Parameters and Constraints, Continued

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### Entering Assumptions

Use of this job aid assumes:

- You read Chapter 3, Section 3.4, Course Parameters and Constraints.
- Results from the work defined in the previous job aids found in the Analysis Phase: JA – E.1 and JA – E.2.
- Access to conduct interviews with a data source.
- Access to Schoolhouse management who will be responsible for the delivery of your instructional product
- You are familiar with the data collection method of interviewing and can develop any specific interview questions to obtain the data associated with your project that may not be pre-defined on WS – F.3 Parts A through D, as needed. See *Appendix H – Analysis Tip Sheets, Tip – H.1: Data Collection Methodologies* for more information regarding using the interviewing method.

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### How to use this JA

Follow the steps as they are presented in the job aid. Use the corresponding worksheet (worksheet numbered WS – F.3.A through WS – F.3.D) for recording the results from this analysis task.

To aid in the future use of the resulting data, Course parameters and constraints are grouped into the following categories:

- Part A – General parameters and constraints
  - Part B – Delivery parameters and constraints
  - Part C – Design/development parameters and constraints
  - Part D – Testing/evaluating parameters and constraints
-

## JA – E.3: How to Determine Course Parameters and Constraints, Continued

### Procedures

Follow the steps in the order provided. The job aid is designed to be used with the associated worksheets Part A through Part D.

Capturing course parameters and constraints, is considered a “working” document meaning that any of these conditions could change as the project evolves throughout the ADDIE process. Be sure to document any changes to maintain an accurate audit trail.

Step	Action
1	<b>Gather</b> all input documents and other project resources such as contact information for individuals you may need to interview. (see “Directions” section for a list of input sources)
2	<b>Review</b> all completed analysis worksheets, project management plan and any additional notes on the ISD project; <b>look</b> for any given restrictions or limitations that can or will influence the design, development, delivery or testing/evaluating of the resident training program.
3	Using WS-F.3 Course Parameters and Constraints worksheet, <b>document</b> the results of your review into the appropriate category (general, delivery, design/development or testing/evaluating); be use to include any details or additional questions you may have for the particular parameter or constraint. You will need to validate this concern later in this process.
4	<b>Identify</b> data that may be missing or needs additional detail; i.e. validation for accuracy and completeness.
5	Based on the results from step 3, <b>determine</b> who needs to be interviews to provide the missing or incomplete data.
6	<b>Arrange for and conduct</b> the data collections <b>interview session(s)</b> to collect missing or incomplete data and to confirm/validate all identified parameters and constraints to date. <b>Note:</b> <i>You may need different reviewers for each category or there may be someone who can confirm the accuracy of all of the data. If you are not certain who these individual are, your project manager, manager and/or client/sponsor should be able to help.</i>
7	Evaluative the implications or impact to your project.
8	Review implications or impact with ISD project manager, gain concurrence in impact before moving to the Design phase.
9	For audit trail purposes, be sure to document any results from step 8 (for all categories) including any specific strategies for dealing with any identified course parameters and constraints.

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