STANDARD OPERATING PROCEDURES (SOP)

FOR

THE COAST GUARD'S TRAINING SYSTEM

RESIDENT INSTRUCTION

Office of Training, Workforce Performance & Development (CG-132)
Human Resources Directorate

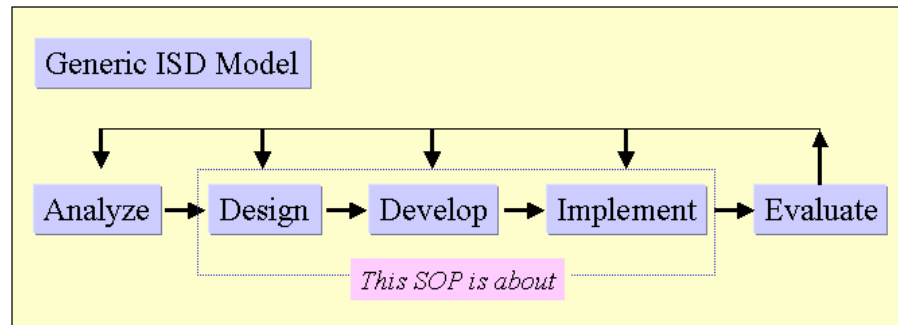Coast Guard Headquarters
Washington, D.C.
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Introduction

Overview

This SOP covers the Design, Development and Implementation of Resident Instruction, which are parts of the Instructional Systems Development (ISD) process. Analysis and Evaluation are addressed in separate SOPs.

Looking at the model above, you should see that the starting point for Design is the output from an Analysis – or – the results from an Evaluation. This is important because training is purpose-driven. That is, training is designed to close a gap identified during an analysis – or – modified as a result of evaluation data.

Requirements

The transition from a list of *requirements* to "students learning a new performance" involves a rigorous process. Simplified this is the process of developing training from a list of identified tasks.

The form and source of *requirements* varies in the Coast Guard (CG) – sometimes this is the output from a front-end analysis (FEA) or other type of analysis. Other examples include new Enlisted Performance Qualifications, a non-CG course that will be modified to serve CG purposes or evaluation data from an existing course.

Purpose

This SOP provides guidance for the design, development and implementation of Coast Guard resident instruction and provides two default methodologies for doing so, the Accomplishment-Based Curriculum Development (ABCD) method and the Course Design Course (CDC) method.

Numerous methodologies exist for developing training. However, many do not fit the Coast Guard's training needs. The two critical priorities are that any methodology must result in:
1) Valid training materials
2) Reliable training materials

Definition: Valid Training	Training materials direct the students' learning through activities that end in a high-level simulation of job performance, matching the behaviors, conditions, and standards for the task as the task is executed on the job. The focus of the training is on *"How to..."* and not *"Information about..."*

Definition: Reliable Training	Every instructor must follow the guidance in the training materials, evaluate a student's performance against the same clear standards, and come to the same conclusion whether the student's performance matches actual Coast Guard standards for performance on the job.

Two Methods	Two ISD methodologies are presented in this SOP. One or the other of these should be used when developing training. To be effective, both must produce demonstrably valid and reliable training materials.
	When the training requirement is a result of an ABCD Front-End Analysis, we can expect a report that lists "Major Accomplishments" and "Tasks." In these cases the primary vehicle for developing resident instruction is the ABCD method.
	There are occasions when a modification to an existing course is so minor or the resources so constrained that a new analysis is not feasible. In such a case, it may be desirable to design and develop curriculum using a different methodology. This is the second default methodology, which comes from the model used in the Coast Guard's Course Design Course. This SOP will simply refer to this as the CDC method.

How do I choose?	Use the ABCD model when any of the following apply:

- Analysis data came from an ABCD FEA.

- Modifying or updating a course developed via ABCD.

- Job performance being trained is procedural.

Use the CDC model when the following apply:

- Absence of an ABCD FEA.

- Modifying or updating a course developed via CDC.

- Instruction will be "knowledge-based," such as "Intro to CG history.

Prerequisites   This SOP assumes that designers and developers of resident instruction are graduates of ABCD or CDC or have a degree in ISD.

The guidance in this SOP is in accordance with the general guidance of the ABCD and CDC models.

Still Unsure?   If you are still unsure which model to use or have questions about the models, ask your supervisor, an ISD graduate, or a civilian instructional systems specialist.

Related Job Aids   For more detailed "how-to" information, this SOP will direct the designer and developer of resident instruction to various job aids, to include:

- ABCD Job Aid for Pre-Design Analysis

- ABCD Job Aid for Curriculum Design

- ABCD Job Aid for Course Design

- ABCD Job Aid for Module Design

- ABCD Job Aid for the Development of Job Aids

- ABCD Job Aid for Materials Development

- ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation

- USCG Job Aid for Writing a Terminal Performance Objective (TPO)

- USCG Job Aid for Writing a Performance Test for a TPO

- USCG Job Aid for Writing Lesson Plans

- USCG Curriculum Outline SOP

Translation Table

The CDC model uses different terms than the ABCD model. Use the table below to translate among the world of work (as described in ABCD), the ABCD model, and the CDC model.

World of Work	ABCD Model	CDC Model
Job/Specialty	Curriculum	Course/Curriculum
Major Accomplishment	Course*	Unit
Task*	Module	Terminal Performance Objective (TPO)
Step/Sub-Step	Unit	Enabling Objective (EO)

* Tasks characterized by high complexity may be taught in a single course with more than one module related to the task.

Part I: Design of Resident Instruction Using ABCD

Introduction   If you will be using the ABCD Methodology, then you will use the guidance outlined below. If you will be using the CDC process, then you will find guidance for that process starting on page 26.

The design part of this SOP is composed of sections that are to be completed in sequence. Each section and its associated tasks will direct instructional designers to a specific job aid for detailed guidance on how to perform the task. The next page shows an outline of this process.

Audit Trail   The ABCD job aids and this SOP will direct the designer to document the work in order to produce an ISD audit trail. The audit trail will consist of the appropriate ABCD summary sheets, as directed in the ABCD job aids.
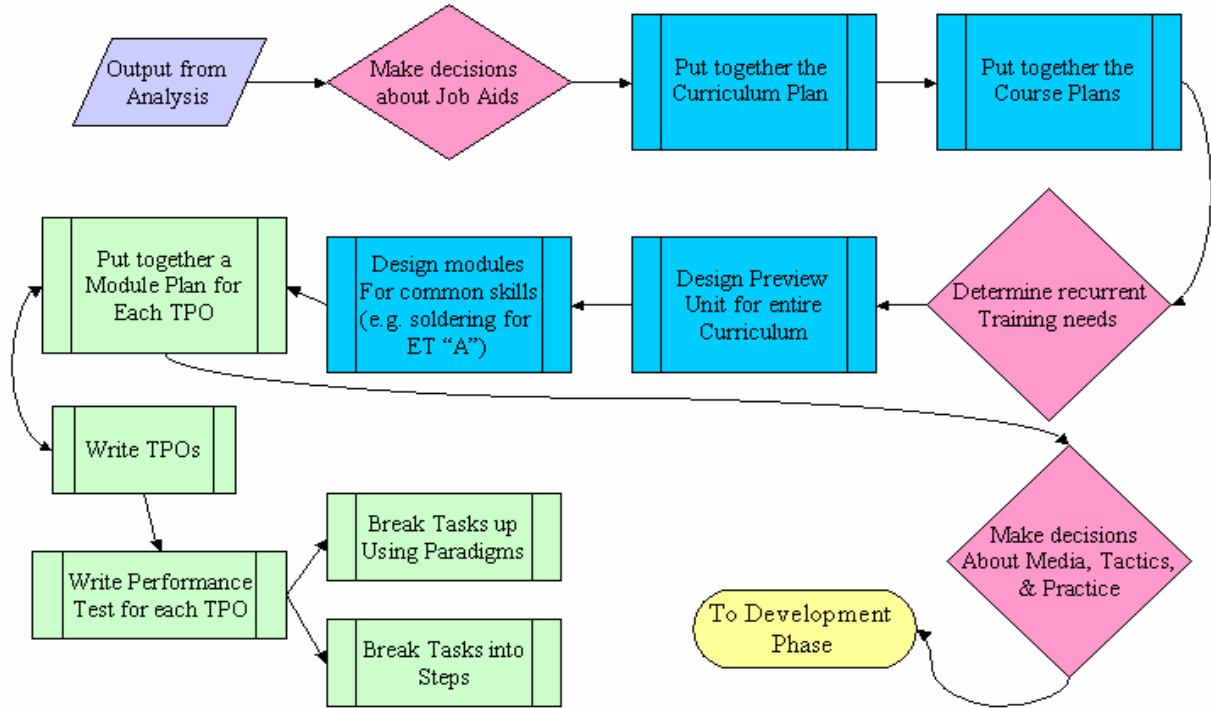
Sections   The Design Part of this SOP contains the following sections, with each section producing one or more outputs of the design phase of ABCD:

      A. Decisions About Job Aids

      B. Curriculum Plan

      C. Course Plans

      D. Module Plans

ABCD Methodology for Design

ABCD Methodology for Development
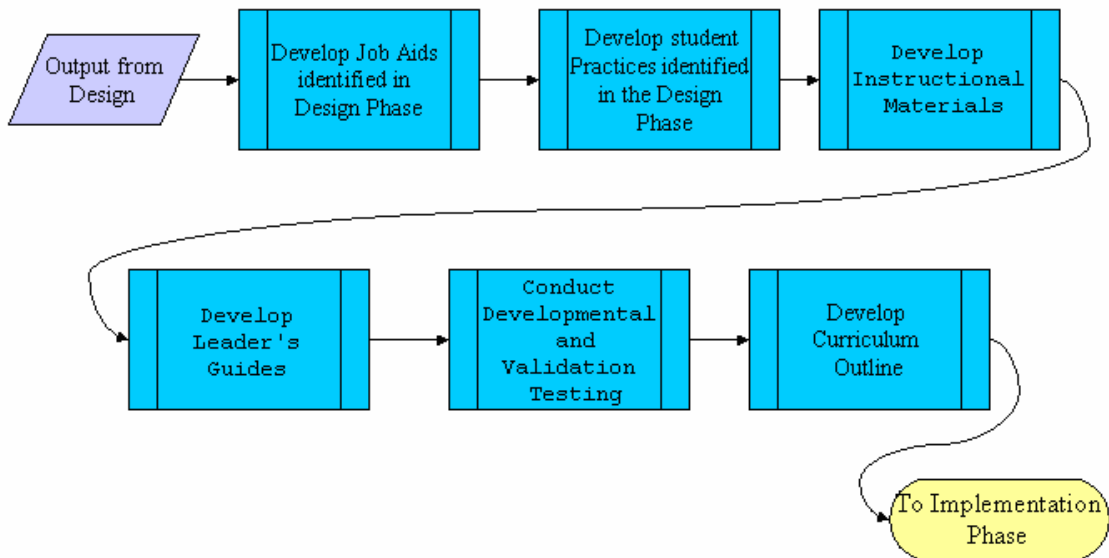
Part I, Section A: Decision About Job Aids

Introduction
Job aids are to be employed in resident instruction as much as possible, in accordance with the USCG SOP for Job Aids and the ABCD Job Aid for the Development of Job Aids. If, after reading the job aid, you are not sure a job aid is required, then develop and test one.

If the guidance from the job aid and SOP is	Then
Clear	Follow the guidance.
Not Clear	Ask your supervisor.

Task 1
For each task being considered for a possible job aid, **describe the task to the step level** in accordance with the ABCD Job Aid for Pre-Design Analysis.

Task 2
Decide between using a job aid or teaching to memory in accordance with the ABCD Job Aid for Pre-Design Analysis.

Task 3
If the decision is to use a job aid, then **decide the level of training support required for the job aid** in accordance with the ABCD Job Aid for Pre-Design Analysis.

SOP for Job Aids
For guidance on the development and use of job aids, refer to the Coast Guard SOP for Job Aids.

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Part I, Section B: Curriculum Plan

Introduction   The Curriculum Plan describes the activities and courses and their sequence for a given curriculum. The curriculum plan guides the development of the Mission and Scope Statements and the development of the Units of a Coast Guard Curriculum Outline.

Task 1   **Write the goal statement for the curriculum** in accordance with the ABCD Job Aid for Curriculum Design.

Task 2   **Form the courses** in accordance with the ABCD Job Aid for Curriculum Design.

Task 3   **Decide whether there must be an evaluation activity for the curriculum as a whole** in accordance with the ABCD Job Aid for Curriculum Design.

Task 4   **Decide whether there must be a curriculum practice activity** in accordance with the ABCD Job Aid for Curriculum Design.

Task 5   **Decide whether there must be a course which deals only with preview type of content for the curriculum as a whole** in accordance with the ABCD Job Aid for Curriculum Design.

Task 6   **Decide whether there must be any pre-requisite courses that must be completed before students receive training from the accomplishment-based courses** in accordance with the ABCD Job Aid for Curriculum Design.

Task 7	**Decide whether there must be any recurrent training for the curriculum** in accordance with the ABCD Job Aid for Curriculum Design.
Task 8	**Decide the overall pacing for the curriculum as a whole** in accordance with the ABCD Job Aid for Curriculum Design.
Task 9	**Decide the primary source of content during delivery** in accordance with the ABCD Job Aid for Curriculum Design.

Part 1, Section C: Course Plan for Accomplishment-based and Pre-Requisite Courses

Introduction
A course is a collection of two or more tasks that share in common a specific Major Accomplishment of the job title or specialty targeted by the curriculum and arising from the completed New Performance Planning Front-End Analysis (NPP FEA). This section focuses on the tasks for producing a course unit plan for "how to" instruction.

Task 1
Decide the modules to include in the course in accordance with the ABCD Job Aid for Course Design.

Task 2
Estimate the learning difficulty for each task in accordance with the ABCD Job Aid for Course Design.

Task 3
Decide whether there is any interactivity between the modules in accordance with the ABCD Job Aid for Course Design.

Task 4
Decide the first activity of the course in accordance with the ABCD Job Aid for Course Design.

Task 5
Decide the first how-to module of the course in accordance with the ABCD Job Aid for Course Design.

Task 6
Decide the second how-to module for the course in accordance with the ABCD Job Aid for Course Design.

Task 7
Decide whether there must be an integrated practice between the first two modules in accordance with the ABCD Job Aid for Course Design.

Task 8   **Decide the sequence of the rest of the modules and integrated practices** in accordance with the ABCD Job Aid for Course Design.

Task 9   **Decide the last activities of the course** in accordance the ABCD Job Aid for Course Design.

Task 10   For each module, **decide the primary source of content during delivery** in accordance with the ABCD Job Aid for Course Design.

Task 11   For each module, **decide the pacing** in accordance with the ABCD Job Aid for Course Design.

Task 12   For each module, **decide the last level of simulation** in accordance with the ABCD Job Aid for Course Design.

The last level of simulation should match as closely as practical the actual behavior, conditions, and standards of task performance expected on the job.

Task 13   **Decide the student-instructor ratio for each activity in the module** in accordance with the ABCD Job Aid for Course Design.

Part 1, Section D: Course Plan for Recurrent Training

Introduction   Recurrent training is the name for training activities given to personnel after the curriculum has been completed. The purpose of recurrent training is to keep critical, but seldom used skills, fluent. An example is cardiopulmonary resuscitation (CPR).

Task 1   **Review the need for recurrent training** in accordance with the ABCD Job Aid for Course Design.

Task 2   **Decide the purpose and objective of the recurrent training in** accordance with the ABCD Job Aid for Course Design.

Task 3   **Specify the activities of the recurrent training** in accordance with the ABCD Job Aid for Course Design.

Task 4   **Specify the site, the content source, the pacing, and the simulation level of the recurrent training** in accordance with the ABCD Job Aid for Course Design.

Part 1, Section E: Course Plan for a Preview Course

Introduction A preview course gives the big picture and organization of a job or specialty and an overview of the curriculum. It is sometimes, but not necessarily, found in a curriculum.

Task 1 **Reconsider the need for a preview course** in accordance with the ABCD Job Aid for Course Design.

Task 2 **Specify the content of the context function** in accordance with the ABCD Job Aid for Course Design.

Task 3 **Specify the content of the verbal behavior function** in accordance with the ABCD Job Aid for Course Design.

Task 4 **Specify the events to serve as the macro-simulation function** in accordance with the ABCD Job Aid for Course Design.

Task 5 **Design modules for common skills** in accordance with the ABCD Job Aid for Course Design

Part I, Section F: Module Plan

Introduction This section of instructional design concerns the design of the instruction at the Coast Guard TPO level. The TPO is the foundation for establishing the training, testing, and transfer of skills and knowledge to the job for each Coast Guard task module trained in resident instruction. The tasks of this section will occupy the majority of the instructional designer's time, because the tasks will be performed for every TPO in the curriculum.

Task 1 **Write a TPO** in accordance with the USCG Job Aid for Writing a TPO. The job aid for writing a TPO is found in Appendix A of the Curriculum Outline SOP.

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Task 2 **Write the performance test for the TPO** in accordance with the USCG Job Aid for Writing a Performance Test for a TPO and the ABCD Job Aid for Developing Instructional Materials. The job aid for writing the performance test for a TPO is found in Appendix D of the Evaluation SOP.

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Although this task is actually a development task, having the TPO and its performance test already developed allows the instructional designer to know exactly where the learning should be aimed, that is, at the TPO via the performance test.

Task 3 **Decide the level of detail required to reveal the behavior characteristics to make module design decisions** in accordance with the ABCD Job Aid for Module Design. This will determine the final level of task analysis.

Task 4 **Sharpen the step-level description** in accordance with the ABCD Job Aid for Module Design.

Task 5

If	Then
Task 3 above calls for a paradigm	**Paradigm the behavior** IAW the ABCD Job Aid for Module Design
You're in doubt	
Clearly NO paradigm is called for	Go to Task 6

Paradigming is the most precise form of task analysis, and it is the single most effective way to determine any learning problems for a TPO. *When in doubt, paradigm the behavior.*

Task 6　　**Determine any special learning problems** in accordance with the ABCD Job Aid for Module Design.

Task 7

If	Then
The TPO has special learning problems	**Determine any implications for the forming of module units** IAW the ABCD Job Aid for Module Design
NO special learning problems are identified	Go to Task 8

Task 8　　**Decide the number of operants for each module** in accordance with the ABCD Job Aid for Module Design.

Task 9　　**Assign a designated name to each module unit** in accordance with the ABCD Job Aid for Module Design.

Task 10　　**Decide the order of the module units** in accordance with the ABCD Job Aid for Module Design.

Task 11   **Specify the delivery method** in accordance with the ABCD Job Aid for
                     Module Design.

Task 12

If the TPO has	Then
Special learning problems	**Determine the appropriate special tactics** IAW the ABCD Job Aid for Module Design
No special learning problems	Go to Task 13

Task 13   **Decide the simulation tactics** in accordance with the ABCD Job Aid for
                     Module Design.

Task 14   **Select the appropriate media** in accordance with the ABCD Job Aid for
                     Module Design.

Task 15   **Describe the preview activity** in accordance with the ABCD Job Aid for
                     Module Design.

Task 16   **Describe the preparation activity** in accordance with the ABCD Job Aid
                     for Module Design.

Task 17   **Plan the sequence of instruction** in accordance with the ABCD Job Aid
                     for Module Design.

Task 18   **Decide if isolated practice is required** in accordance with the ABCD Job
                     Aid for Module Design.

Task 19   **Review the requirements for integrated practice** in accordance with the
                     ABCD Job Aid for Module Design.

Task 20   **Reconsider the need for a pre-requisite module** in accordance with the ABCD Job Aid for Module Design.

Task 21

If	Then
A pre-requisite module is still needed	**Plan the pre-requisite module** IAW the ABCD Job Aid for Module Design
NO pre-requisite module is needed	Go to Task 22

Task 22   **Plan the preview and preparation activities** in accordance with the ABCD Job Aid for Module Design.

Task 23   **Plan the practice activities** in accordance with the ABCD Job Aid for Module Design.

Part II: Development of Resident Instruction Using ABCD

Introduction
The Development Part of this SOP is composed of sections that are to be completed in sequence. Each section and its associated tasks will direct instructional developers to a specific job aid for detailed guidance on how to perform the task.

Audit Trail
Usually the job aid, but sometimes this SOP, will direct the developer on the documentation of the work in order to produce an ISD audit trail. The audit trail will consist of the appropriate ABCD summary sheets, as directed in the ABCD job aids.

Sections
The Development Part of this SOP contains the following sections, with each section producing one or more outputs of the development phase:

A. Instructional Materials

B. Developmental and Validation Testing

C. Curriculum Outline

Part II, Section A: Instructional Materials

Introduction   This section provides guidance on the development of materials to support activities common to resident instruction.

This section is primarily used to produce materials in support of instruction to memory. However, **job aids (Task 2), practices (Task 4) and primes (Task 5) are applicable to resident instruction via, and in support of, job aids, as well as instruction to memory**. The referenced ABCD job aids will guide the developer in the production of the appropriate materials for either case.

Task 1   **Specify the materials to be developed** in accordance with the ABCD Job Aid for Materials Development.

Task 2

If	Then
The design plans call for job aids	**Write job aids** IAW the ABCD Job Aid for the Development of Job Aids and the Coast Guard SOP for Job Aids.
NO job aids are called for	Go to Task 3

Task 3

If	Then
The curriculum plan calls for a final evaluation	**Write a performance test** IAW the USCG Job Aid for Writing a Performance Test for a TPO and ABCD Job Aid for Materials Development
A course calls for a final evaluation	
NO curriculum or course final evaluations are called for	Go to Task 3

Task 4   **Develop practices** in accordance with the ABCD Job Aid for Materials Development.

Task 5   **Develop primes** in accordance with the ABCD Job Aid for Materials Development.

Task 6   **Develop prompts** in accordance with the ABCD Job Aid for Materials Development.

Task 7   **Develop performs** in accordance with the ABCD Job Aid for Materials Development.

Task 8   **Develop previews for modules** in accordance with the ABCD Job Aid for Materials Development.

Task 9   **Develop preparation activities for modules** in accordance with the ABCD Job Aid for Materials Development.

Task 10   **Develop preview and preparation activities for courses** in accordance with the ABCD Job Aid for Materials Development.

Task 11

If	Then
The curriculum plan calls for a preview course	**Develop a preview course** IAW the ABCD Job Aid for the Materials Development
NO preview course is called for	Go to Task 12

Task 12

If	Then
The curriculum plan calls for a pre-requisite course	**Develop a pre-requisite course** IAW the ABCD Job Aid for Materials Development
NO pre-requisite course is called for	Go to Task 13

Task 13   **Develop a leader's guide** in accordance with the ABCD Job Aid for
                     Materials Development and the USCG Job Aid for Writing Lesson Plans

Part II, Section B: Developmental and Validation Testing

Introduction   Developmental and validation testing (also called formative evaluation), as described in the referenced job aids below, is to be performed when the draft instructional activities have been produced. For additional guidance see the SOP for Evaluation.

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Task 1   **Prepare for developmental testing** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 2   **Conduct developmental tests** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 3   **Troubleshoot the modules** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 4   **Make revisions to the modules** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 5   **Prepare for validation testing** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 6   **Conduct validation tests** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 7   **Analyze the results of the validation testing** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation.

Task 8   **Make final revisions** in accordance with the ABCD Job Aid for Developmental Testing, Validation Testing, and Follow-Up Evaluation

Curriculum Outline

Upon completion of the validation testing, write the curriculum outline in accordance with the Coast Guard Curriculum Outline SOP. The curriculum outline will account for data not only from the ABCD process, but also from applicable quals and input from the program manager and rating force master chief. In the case of ABCD, the ABCD FEA produces the task list and is approved by the program manager.

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Part III: Level III Evaluation, the External Training Survey

Introduction   While the performance tests validate student performance proficiency for each and every TPO and serve as the foundation for validity and reliability, it is important to determine the overall effectiveness of the training through the appropriate use of summative evaluation. The training provider should coordinate Level III evaluation (the external training survey) with their Training Officer, an Instructional Systems Specialist (ISS), or an Instructional Technology (IT) graduate after the Training Officer signs the curriculum.

Guidance on summative evaluation is contained in the SOP for Evaluation.

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Part IV: Development of Resident Instruction ISD ADDIE Model

Introduction   This portion of the SOP is an overview of CDC methodology. Though this model is less prescriptive than ABCD, it does have a sequence of events that need to be followed. Completion of the templates provides a foundation for the Audit Trail.

Analysis	Design	Develop	Implement	Evaluate
Task Analysis	Objectives	Criterion Test		
Task Detailing	Skill Hierarchy	Relevant Practice		
Job Aid vs. Training	Target Population	Content Derivation	Tryout	Evaluate
	Course Prerequisites	Module Drafting		

Audit Trail   Document decisions and complete all forms to produce the Instructional Systems Design (ISD) audit trail.

Sections   This section of the SOP contains an overview of the ISD ADDIE process for course and curriculum development. It is broken down into the following phases and covers:

    A. Selection/Verification of Tasks to be Training

    B. Analysis

    C. Design

    D. Development

    E. Implementation

    F. Evaluation

Part IV, Phase A: Selection/Verification of Tasks to be Trained

Task Selection

The Program Manager will provide task listings or task data obtained through a Front-End Analysis or Occupational Analysis (FEA/OA) for the particular job or rating specialty. All tasks listed in the analysis must be validated. Typically, the FEA/OA team will complete tasks 1 through 3, and course developers will finish tasks 4 and 5 during the ADDIE process.

1. Validating Task Data
2. Identifying Target Population
3. Selecting Tasks to be trained
4. Conduct Job Aid Analysis
5. Perform Task Analysis

Task 1 – Validating Task Data

Use the following table for ideas on validating task data:

Method	Explanation
Jury of Experts	A group of people who have particular expertise and extensive experience in the job or rating. They are brought together to review and confirm the tasks that make up a job.
Equipment Analysis	A systematic method of identifying tasks performed on a specific piece of equipment.
Survey Method	Using questionnaires, phone surveys and interviews to generate a list of tasks.

Task 2 – Identify Target Population

Use the following job aid to determine your target population:

If	Then
Entry level course and target population information is provided.	Go to next section.
Entry level course and **no** target population information are provided.	Target population will be non-rated personnel.
Advanced course and target population information is provided.	Go to next section.
Advanced course and target population information is **not** provided.	Target population will be rated personnel.

Note: See page 40 for further discussion of Target Audience.

Task 3 – Tasks to Be Trained

Not all of the validated tasks provided by the analysis need to be trained. Use the following job aid to determine which tasks should be trained.

If	Then
Task is easy to learn.	No training required.
Task is easy to perform.	No training required.
Task is rarely performed.	No training required.
Task is critical to successful job performance.	Training is required.
Task is performed frequently.	Training is required.
Task is complex in nature.	Training is required.

Task 4 – Conduct Job Aid Analysis

Every task identified as requiring training does not need to be taught through formal instruction. Use the Coast Guard SOP for Job Aids to determine when to develop a job aid and when to train to memory. This step is completed during the ADDIE process.

Task 5 – Perform Task Analysis

Break each task down to the step level along with the skills and knowledge required to perform each step. Task Analysis can be something as simple as listing the step to flow-charting the tasks. "Making Instruction Work" by Robert F. Mager provides information on both methods. This step is completed during the ADDIE process.

Making Instruction Work, copyright © 1997 by The Center for Effective Performance, Inc. (Second Edition)
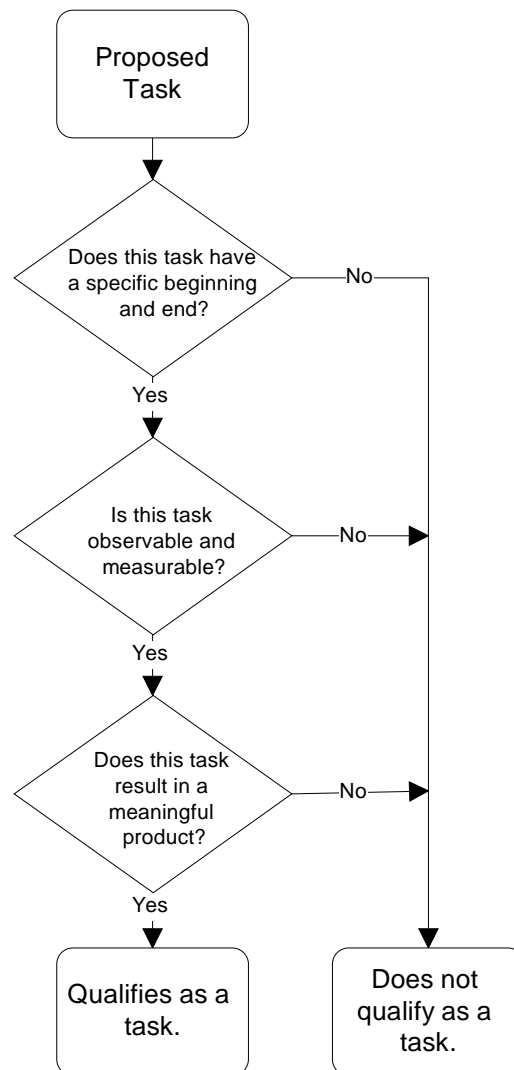
Part IV, Phase B: Resident Instruction ADDIE Model - Analysis

Introduction   The analysis phase is a way to visualize the steps and decisions involved
in the performance of a task or job. The analysis will (1) determine the
components of performance; (2) identify and clarify the equipment and
other resources needed for performance; (3) establish the minimum
standard required for performance; and (4) determine if a job aid is
needed.

Task List   The standard definition of a task is a series of steps leading to a
meaningful outcome. The first step is to list all the tasks required to
perform the various duties required on the job. Use a flowchart if the task
requires several decisions. A task has the following requirements:

```
                    ┌─────────────┐
                    │  Proposed   │
                    │    Task     │
                    └──────┬──────┘
                           │
                           ▼
                     ◇ Does this task have
                       a specific beginning ◇──No──┐
                     ◇ and end?            ◇        │
                           │                        │
                          Yes                       │
                           ▼                        │
                     ◇ Is this task      ◇          │
                     ◇ observable and    ◇──No──►   │
                     ◇ measurable?       ◇          │
                           │                        │
                          Yes                       │
                           ▼                        │
                     ◇ Does this task    ◇          │
                     ◇ result in a       ◇──No──►   │
                     ◇ meaningful        ◇          │
                     ◇ product?          ◇          ▼
                           │                        │
                          Yes                       │
                           ▼                        ▼
                    ┌─────────────┐         ┌─────────────┐
                    │ Qualifies   │         │ Does not    │
                    │ as a task.  │         │ qualify as  │
                    │             │         │ a task.     │
                    └─────────────┘         └─────────────┘
```

The task list should become part of the Audit Trail.

Task Detailing   Once the tasks have been determined and a task list developed, the next phase requires listing the steps and decisions involved in performing each task. Remember to include the following with each task:

- What initiates the task?

- What steps are performed and what decisions are made in completion of the task?

- How would you know the task has been completed?

One way to make the components of a task visual is to simply list the steps as the task is performed.

Example #1 - List: Make coffee. (Remember to list what initiates the task.)

- Fill the coffee pot with water.

- Pour the water into the coffeemaker.

- Put filter into the filter basket.

- Add grounds to the filter

...and so on.

Another way to call out the steps is through flowcharting. A flowchart will show the alternatives when decisions are required in completion of the task.

Two symbols are needed when flowcharting a task.

Step in the task.   Decision
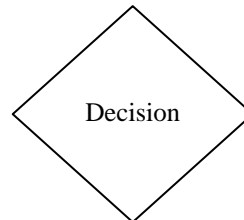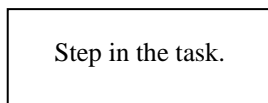
Task Detailing
continued

Additional symbols are often used when flowcharting but for our purposes the rectangle and diamond are sufficient.

> **Example #2 - Flowchart:** Make coffee. (Remember to list what initiates the task.)

Initiated – coffee is required for breakfast.

```
        ┌─────────────┐
        │  Get Water  │
        └─────────────┘
               │
               ▼
            ◇ How much          ┌──────────────────┐
           coffee is    ◄──────►│ A full pot = 10  │
            needed? ◇           │      cups.       │
               │                └──────────────────┘
               ▼
        ┌─────────────┐
        │ Add water to the │
        │  coffeemaker.    │
        └─────────────┘
               │
               ▼
        ┌─────────────┐
        │ Place coffee │
        │ filter in the filter │
        │    basket.   │
        └─────────────┘
               │
               ▼
            ◇ How many          ┌──────────────────┐
           scoops of    ◄──────►│ 1 scoop per 2    │
            grounds? ◇          │ cups of water.   │
               │                └──────────────────┘
               ▼
        ┌─────────────┐
        │ Add grounds to │
        │ the filter basket. │
        └─────────────┘
```
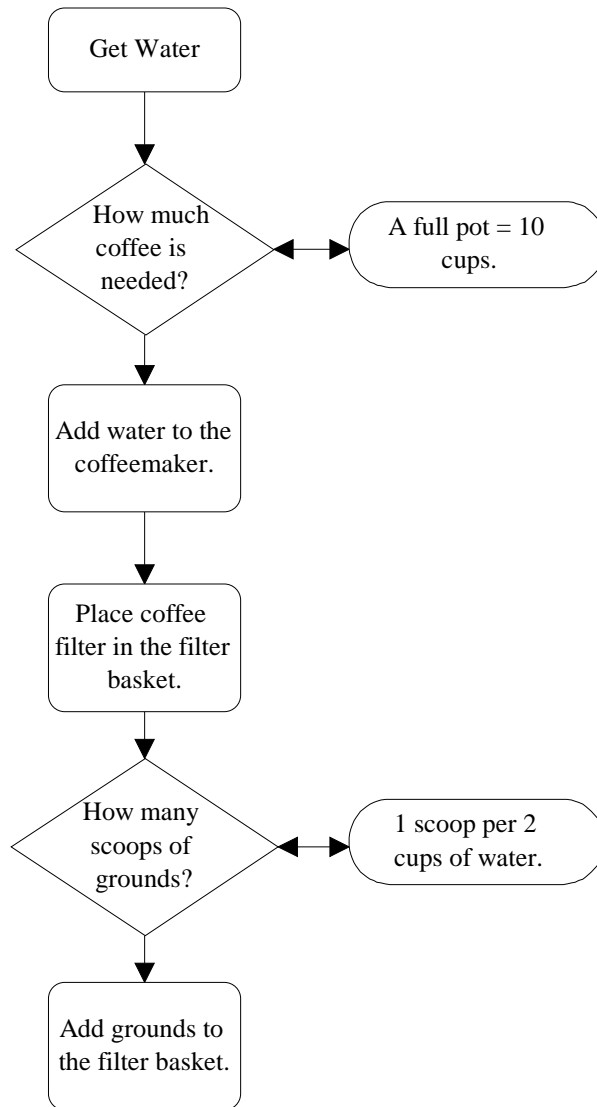
...and so on.

Detailed tasks become part of the Audit Trail.

Job Aid vs. Training

As a course designer, it will be up to you to determine whether you should consider developing job aids for a particular job, or whether you should develop job aids to enhance your training program, or just to train the task to memory.

At this point the designer should have a list of tasks that are important and relatively difficult to do. The Job Aid vs. Training matrix uses different variable to help determine if a Job Aid is needed or required when presenting information on how to perform a task.

Definition of a Job Aid

According to Allison Rossett & Jeannett Gautier-Downes in their book *"A Handbook of Job Aids"*, a job aid is "a repository for information, processes or perspectives that is external to the individual and that supports work and activity by directing, guiding, and enlightening performance."

A Handbook for Job Aids, copyright © 1991 by John Wiley & Sons, Inc.

Variables to Consider

Below is a list of variables that will be considered using the Job Aid vs. Training matrix.

- Is a job aid required by policy or other regulations?
- How fast (speed) must the task be performed?
- Are there environmental barriers to job aid use?
- Are there social barriers to job aid use?
- What are the consequences of error?
- What is the probability of change? (Changes in procedures on how to perform the task.)

Job Aid vs. Training Matrix

The Job Aid versus Training worksheet shown below is a job aid used by course designers to determine whether the task should be trained to memory, job aided or a combination of both.

Task #	Task			Is Job Aid Required by Policy or Reg?		Speed at which Task is performed			Are there physical barriers?		Are there social barriers?		Frequency is a:		Consequences of error:				Is the task likely to change?		Decision		
	Importance	Difficulty	Frequency	Yes	No	Critical	Important	Not Important	Yes	No	Yes	No	High 6,5,4	Low 3,2,1	Devastating	High	Moderate	Low	Yes	No	Training	Job Aid	JA and Training
1.																							
2.																							
3.																							
4.																							
5.																							
6.																							

Task # and Task Codes

The Task # provides a space to transfer the tasks from the task list.

Task Code provides space to transfer the values assigned for the IMPORTANCE, DIFFICULTY and FREQUENCY.

Importance	Difficulty	Frequency
6. Critical to primary job	6. Most difficult	6. Hourly
5. Important to primary job	5. Very difficult	5. Daily
4. Needs to be done	4. Moderately difficult	4. Weekly
3. Moderate value to job	3. Minimally difficult	3. Monthly
2. Minimal value to job	2. Relatively easy	2. Occasionally
1. No value to job	1. Easy	1. Infrequently

Is a Job Aid Required by Policy or Regulation?

Many Job Aids are used in the Coast Guard. Some are required by policy or regulation. Below are some examples:

Job	**Job Aid**
Curriculum Outline	Curriculum Outline SOP (Job Aid)
Aircraft Maintenance	ACMS Cards
Shipboard Maintenance	PMS Cards

Coast Guard Training Systems SOPs

Speed at which the Task is Performed

When the speed is critical, the performer needs instant recall from memory. A job aid would slow down performance.

For many tasks, speed is not critical and using a job aid increases the effectiveness of the performance. The examples below show both types of tasks:

Speed is Critical	Speed is Not Critical
Abort and aircraft takeoff.	Aircraft checks prior to takeoff.
Shut down a runaway engine.	Routine engine adjustments.
Stop bleeding of a major artery.	Restock the EMT kit.

Are there Physical Barriers?

The environment often stands in the way of using a job aid. An adverse environment could be anything from foul weather to the physical location where the task is being performed. Below are a list of examples where using a job aid would be difficult.

- A person taxiing an aircraft at night.
- A person hanging over the side of a ship painting.
- A deployed Rescue Swimmer saving a life.

Are there Social Barriers?

Social barriers between people may exist which may cause the use of job aids to be an embarrassment. In some cases a supervisor may not allow their people to use job aids due the misconception that "job aids waste time and they don't work" or that "anyone can follow a job aid, but it takes a real technician to fix the problem".

Many social barriers can be overcome completely or minimized to allow the use of a job aid.

Frequency

Given a period of time between the time that someone has learned to perform a task and the actual time they are allowed to perform on the job, is something to consider when deciding whether to develop a job aid or not.

Case in point: The best training in the world could be developed for someone to fill out his or her taxes. If the training was delivered hours before they were required to perform, chances are the tax forms would be filled out correctly. However, if the training was delivered six months before they actually performed the task, they may have forgotten how to complete the tax forms.

Low Frequency	**High Frequency**
1. Performed infrequently	4. Performed weekly
2. Performed occasionally	5. Performed daily
3. Performed monthly	6. Performed hourly

Consequences of Error

This may be the most important variable to consider for using a job aid. When a task is performed improperly, what are the consequences? Consider the impact on the performer, other people involved, equipment, tools, time to correct, etc. Below is a list of questions to consider:

- Will the negative consequences result in loss of life or injury?

- Will the negative consequences cause severe damage or loss of expensive equipment/tools?

- Will the consequences cause considerable economic loss resulting in some type of expensive correction?

Is the Task Likely to Change?

The Coast Guard is no different from other services or civilian business. Equipment and procedures are changing every day. Tasks that are trained to recall may be vulnerable to these changes.

If	**And**	**Then**
If a task changes	People have been trained to recall	Retrain people to a greater expense
	People are using a job aid	Change the job aid at a minimum expense

Part IV, Phase C: Resident Instruction ADDIE Model - Design

Introduction
The design phase continues the systematic development of a training program. This phase involves the design of instruction based on the data from the Analysis phase.

Objectives (TPO)
Tasks selected for training are converted into Terminal Performance Objectives (TPO). Objectives are used to clarify the intended result or outcome of the instruction. They describe what Performance (P) the student will be able to do upon completion of training; the Conditions (C) under which the performance will be conducted; and the Standard (S) to which the performance will be held. Objectives **do not** describe the instructional process. The job aid for writing a TPO is incorporated into the Curriculum Outline SOP.

Coast Guard Training Systems SOPs

Performance
The performance must be written using "action" verbs. In other words, the students must do something that is observable. Even objectives for soft skills can be written to allow for observable student behavior. See USCG Curriculum Outline SOP, Appendix B for the Standard Verb list. Examples of action verbs used in describing performance are:

- Write, drive, repair, complete, circle, underline or state.

Condition
The condition portion of the objective sets the boundaries or conditions under which the performance will be done. Strive to make the conditions as close as possible to those on the job. If it's not possible to simulate actual job conditions, then they should be as close as possible within the training environment. Conditions not only include environmental issues (outside, in the dark, etc.) but tools and equipment as well.

Standard
Standards are how well the performance must be done and should be the same as those used on the job. In many cases, the standard will be in the form of a manual, instruction, publication, public law, etc. Students and instructors should be able to go to the reference and find the standard.

Enabling Objectives (EO)
Many tasks will have embedded steps. These steps are Enabling Objectives (EO). With each EO, there should be a performance, condition and standard as with the TPO.

Sample Objective

Given any instructional objective *(Condition),* be able to identify (circle) the performance, condition and standard *(Performance)*, in accordance with Mager's <u>Making Instruction Work, Chapter 7</u> *(Standard).*
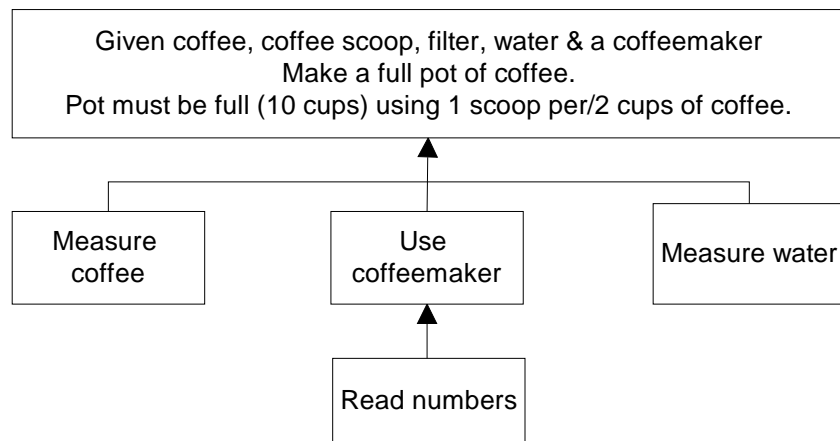
Skill Hierarchy   A skill hierarchy is a design step used to determine program sequence and structure. The hierarchy is a picture that shows the prerequisite relationships between skills needed in performance of a task. Proper sequencing also helps to avoid inconsistencies in the content of instruction.

A flowchart describes a process while a hierarchy describes relationships. A hierarchy is much like an organization chart except that it shows relationships between skills instead of between people. Make sure the boxes in the hierarchy describe skills rather than content.

Example   Below is an example of a simple skill hierarchy. The lowest set of skills must be learned before the next level can be accomplished.

```
┌─────────────────────────────────────────────────────────┐
│   Given coffee, coffee scoop, filter, water & a coffeemaker │
│                  Make a full pot of coffee.                 │
│  Pot must be full (10 cups) using 1 scoop per/2 cups of coffee. │
└─────────────────────────────────────────────────────────┘

┌──────────────┐     ┌──────────────┐     ┌──────────────┐
│   Measure    │     │     Use      │     │ Measure water│
│    coffee    │     │ coffeemaker  │     │              │
└──────────────┘     └──────────────┘     └──────────────┘

                     ┌──────────────┐
                     │ Read numbers │
                     └──────────────┘
```

Target Population

The characteristics of the intended audience are an important factor in designing instruction. Training takes individuals from "what they can do" to "what they need to be able to do". The target population is a working document that helps determine the characteristics of the intended audience and decide their entry point in the instructional process.

Target Population Considerations

Think about the students that will be entering the course. Consider the following areas:

- Student age range, gender split, families, attitudes and biases, physical characteristics.

- Previous experience, skills, knowledge and use of tools and equipment.

- Prior training and education experience, reasons for taking the course.

- Additional responsibilities, living conditions while attending training.

Remember, the target population is a working document that describes people as they are, what they can actually do, and what they bring with them to training.
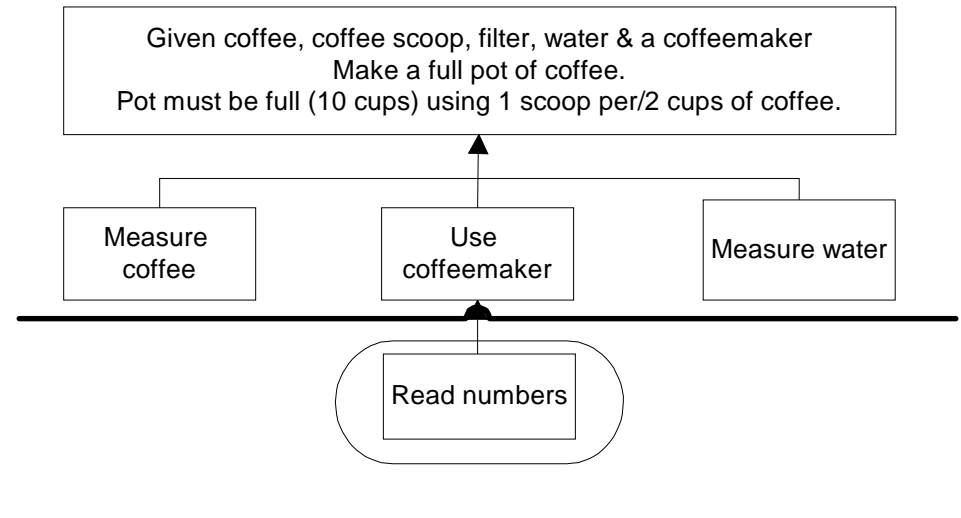
Course Prerequisites

It is not necessary to develop instruction for skills the students already possess. Review the skill hierarchy and ask yourself if it would be reasonable to assume that students entering the course would be able to perform each skill. Do the following:

- Circle the skills they can perform.

- Draw a line between the skills they can perform and the ones they can't.

- The ones below the line are the prerequisites.

- Ones above the line will be addressed during training.

Course Prerequisites Example

Below is an example of determining course prerequisites from the skill hierarchy developed for making coffee. The skills above the line will be trained while the skill below the line is a prerequisite.

Given coffee, coffee scoop, filter, water & a coffeemaker
Make a full pot of coffee.
Pot must be full (10 cups) using 1 scoop per/2 cups of coffee.

Measure coffee

Use coffeemaker

Measure water

Read numbers

Part IV, Phase D: Resident Instruction ADDIE Model - Develop

Introduction   This phase builds on the Learning Objective developed during the Design phase. Tests and performance practices are designed, content is refined and lesson plans are developed. The end result is a list of necessary activities that assist the participant in reaching the objective.

Criterion Test   A performance assessment is designed to evaluate the skill that has been learned as a result of training. The performance required in the objective should be the same performance required during the test. The standard or criterion used for assessment is also listed in the objective. Remember: Performance (do what), Condition (with what), Standard (how well). A criterion test should be developed for each objective whose accomplishment you want to measure.

One additional note, test items should focus on outcomes to be measured, not the instructional process.

For additional information on assessment, review the Evaluation SOP.

Coast Guard Training Systems SOPs

Criterion Test Items   Test items tell whether the objective has been mastered and they should match the performance and standard as stated in the objective.

- The performance called for during the test is the same as stated in the objective.
- The conditions are the same as stated in the objective. If not, match the conditions as closely as possible.

How to Do It   The following guidelines will assist you in test development.

1. Identify the performance in each objective.
2. Draft a criterion test item telling the student the performance required.
3. Identify the conditions under which the performance should occur.
4. Add the conditions to the test instructions. If they cannot be emulated, match them as closely as possible.

Tip   For multiple, related performances under the same conditions, a checklist can be used identifying the performance required on the assessment.

Relevant Practice

Before drafting course books and lesson plans, designers need to know what it will take to provide relevant practice for the student. Relevant practice should be derived for each performance stated in the objective. When completed, the performance identified in the objective, the practice, and the test should be look the same.

How to Do It

Below are the steps on how to determine what to practice.

- Performance – write out what the participant would be doing when practicing the performance in the objective.

- Additional items – write down what additional items are needed in order to make the practice happen. These items are usually the conditions (tools, equipment, etc.) required in the performance of the skill.

- Feedback – write down how the feedback to the performance will be given. Feedback should be adequate, diagnostic, corrective, and focused on the performance.

Practice helps the students develop the skills required to perform the objective and is a key component to making instruction work.

Content Derivation

Content derivation bridges the gap between what the students already know and what they need to know or do before being able to practice the objective. A decision needs to be made on what content needs to be delivered before the practice begins.

How to Do It

The following steps will assist in deriving content.

- Review the objective.

- Review the test and relevant practice description.

- Review the skill hierarchy and target population description, note what the students can already do.

- List the reason(s) why the students cannot begin practicing the objective right now.

- Determine the delivery system by selecting a delivery system that is economical and provide features that allow you to meet the objective.

Module Drafting   Module drafting is about building a floor plan that takes the students from what they know to what they need to know. The floor plan sequences the instruction and provides a map to follow. Below are some guidelines for the drafting a module:

- Lesson Title

- Purpose – the purpose of the instructional block.

- References – list the references used for the module or lesson.

- Equipment and materials – list the equipment and materials required.

- Lesson length – approximate lesson length in minutes.

- Test length – test length in minutes.

- Lesson objectives – TPOs and EOs.

- 9 Event Lesson Plan

    1. Gain Attention: Relates the value or benefit of the lesson to the student in a way that obtains or maintains their interest. The value of the instruction to the trainee.

    2. Stating the Objective: Tells the student what they will be required to do, how well, and under what circumstances it must be done.

    3. Recalling the Prerequisites: Reminds the students of previously learned material.

    4. Present the Information: Present the material in an interesting and understanding way. Present content points and demonstrate success.

    5. Provide Learning Guidance: Provide examples to illustrate learning points.

    6. Practice: Student practice the objective using whatever tools and job aids needed until success is reached. Ample time must be provided.

    7. Feedback: Feedback should be timely, specific and non-punishing, corrective, and focused on the performance.

    8. Assess Performance: Assess the learner's ability to perform the objective to the established standard.

    9. Enhance Retention and Transfer: Reinforce the original value statement, why and how this training will benefit them and be used in the field.

Structured Writing	This section is designed to familiarize you with the process of changing traditional paragraph-style text to structured writing-style text.
Grouping Text Into Blocks	All information is grouped into small, manageable "blocks", each of which covers one main point or idea.
Identifying Each Block	Separate text into blocks of similar information. Identify each block by writing a short description that indicates the type of information it contains. This reduces the duplication of groupings and will assist you in quickly sequencing the blocks in a more appropriate order later.
Re-sequencing Blocks	Once the information is grouped into blocks, the blocks need to be sequenced into an order that more effectively facilitates instruction, i.e. introductory material first, procedure second, examples third, etc.
Determine Relevant Content	Only information necessary to accomplish the objective should be included in instructional text. Determining relevant content assists in comprehension and saves reading time because the "nice-to-know" or unnecessary information is not present.
Relevant Content Criteria	Determine relevant content based on answers to the following questions. • Does the student need the information to accomplish the stated objective? • Is the information necessary to understand the main idea of the block? • Is the information misplaced, i.e., would the information be more effective in support of another idea in a different block? • Is the target student likely to already have the information? • Is there information missing that is necessary to getting the point of the objective across?
Rewriting Blocks	Once the information is grouped into blocks, unnecessary information deleted, and essential information added, it may require rewriting to improve the flow.

Lines Between Blocks

Placing lines between blocks distinguishes one block, and the idea it contains, from other nearby blocks.

Labeling

Related information organized into manageable blocks is then labeled. The labels should meet the following criteria:

- Brief, usually two lines or less in length.
- Identify the main idea of the block.
- Typed in bold-face print.
- Consistent with other labels for similar blocks.
- Should not be a substitute for text.
- Must not be in all capitol letters.

Creating Lists

Lists should be created any time a block contains a group of items that are important to the main intent of the block.

- Display all lists vertically.
- Begin each new item with a number or bullet.

Formatting Tips

Space sentences out in a complex block. A block of a few short paragraphs is easier to read than a block that is one long paragraph.

Do not split blocks between pages. Write "Continued on next page." under the block. Repeat the block label on the second page and add "(Cont.)" in parenthesis.

Writing Tips

The following tips can be applied to help students read through material quickly and effectively:

- Do not underline the punctuation following underlined words.
- Do not indiscriminately capitalize words for emphasis.
- Do not overuse emphasis techniques. (Bold-faced, italics, etc.)
- Keep the use of parenthesis to a minimum.
- Spell out or explain acronyms.
- Keep hyphenation to a minimum.

Tryout

Modules have been developed; it's now time to see how they work. The purpose if the "Tryout" is to get feedback on how to improve the course. Have a colleague review the modules and lesson plans, asking the following questions:

- Will the students be shown the modules in terms they will understand?

- Will the importance of the module be explained or demonstrated?

- Is practice of the objective offered? Will feedback be given?

- Does there appear to be the right amount of content to reach the objective?

- Will students be doing something other than listening to the instructor for more than 30% of the time?

Each module or lesson plan should be tried out at least once and revised on the basis of the information collected. When that is completed, sequence the individual lesson into the course.

Part IV, Phase F: Resident Instruction ADDIE Model – Evaluation

Evaluation   Guidance for conducting evaluations is contained in the Standard
              Operating Procedure (SOP) for Evaluation. The SOP can be found at the
              Training Center Yorktown website.

              Coast Guard Training Systems SOPs

Appendix A: Gagne – Harless Events

Lesson Plan Comparison Table

The table below compares the Gagne 9 Event Lesson plan with the Harless ABCD (6 P) lesson plan.

CDC (9 Events Lesson Plan)	ABCD (6 "P" Lesson Plan)	
1. Gaining Attention – gain the students attention, value placement, how the material can benefit them.	Preview – the value of the learning behavior in the module and any special instructions for the module. Communicate the objective to the student.	
2. Objective – what the student will able to perform at the completion of training. (Performance Based Objective)		
3. Recall Pre-requisite Learning (information) – retrieval of prior learning to working memory as it associates with the current objective.	Preparation – a review of any prerequisite knowledge applicable to the module being presented.	
4. Present the Stimulus Material (Present Information) – present need-to-know information in a way that gets the students involved in the learning process.	Prime – demonstrate behaviors in small increments or train the job aid.	Prime
5. Provide Learning Guidance – provide memory cues and ways for information retrieval.	Prompt – students exhibit behavior by giving cues or hints. (Only used if training to memory.)	Prompt
6. Eliciting the Performance – participants practice the performance stated in the objective.	Perform – to perform behaviors without cues. (Only used if training to memory.)	Perform / Practice
7. Provide Feedback – provide feedback about the correctness of the performance.	Feedback – provide feedback about the correctness of the performance.	
8. Assessing Performance – evaluate the performance according to the standards stated in the objective.	Testing – evaluate the performance according to the standard stated in the objective.	
9. Enhancing Retention & Transfer – provide cues and strategies for retention and transfer back to the job. (Close the lesson.)	Prime, Prompt, Perform, Practice	

Appendix B: Generic 9 Event Lesson Plan

Introduction   The following pages include a copy of the 9 Event Lesson Plan template.

Lesson Plan

for

Your Lesson Title

Insert a graphic

Prepared by
Instructional Systems School
US Coast Guard Training Center
Petaluma, CA 94952

For
Instructor Development Course Staff
US Coast Guard Training Center
Petaluma, California 94952

Lesson Title

Table of Contents

This document contains the following topics:

Topic	Page

Lesson Title

Security Security concerns with this lesson.

Lesson Title

Safety Authority   This notice promulgates safety precautions to the staff and trainees of (*insert your course name*) in accordance with responsibilities assigned by the Chief of (*your school*).

Situational Awareness   Instructors are responsible for maintaining situational awareness and shall remain alert to signs of trainee panic, fear, extreme fatigue or exhaustion, or lack of confidence that may impair safe completion of the training exercise, and shall immediately stop the training, identify the problem, and make a determination to continue or discontinue the training.

Applicability   The safety precautions contained in this course are applicable to all personnel. They are basic and general in nature.

Personnel who operate or maintain equipment in support of *(insert your course name)* must be thoroughly familiar with all aspects of personnel safety, and strictly adhere to every general as well as specific safety precautions contained in operating and emergency procedures, and in applicable governing directives.

Compliance   Special emphasis must be placed on strict compliance with published safety precautions and on personal awareness of potentially hazardous conditions peculiar to *(insert course or job field).*

Lesson Title

Importance

This is the big picture view of the lesson. Shows where the students are in the larger scheme of the course.

Purpose

The purpose of this block of instruction is to:

-
-
-

References

The following references were used to develop this lesson.

-
-
-

Equipment and Materials

The following items are required for this lesson.

-
-
-

Lesson Length

The approximate length of the lesson in minutes.

Test Length

Test length if applicable.

Lesson Title

Terminal Performance Objective(s)	Lesson objectives: • • •
Enabling Objective(s)	EOs • • •

Lesson Title

Creating Your Lesson Plan

It will be helpful to fill in the lesson plan in the following order:

1. Write in your objectives – event #2.

2. Transfer in your relevant practice project – Event #6.

3. Transfer in the feedback plan for event #6 – Event #7.

4. Add the criterion test – Event #8.

5. Add a lesson summary – Event #9.

6. Add a value statement (motivation) – Event #1.

7. Add the recall *if necessary* – Event #3.

8. Add content based on the needs of the students – Event #4.

9. Plan to walk the students through the procedure before they try it on their own – Event #5.

The Nine Events

Instructor Activity	Student Activity	Notes
1. Gain Attention – Place the reason why (value or motivation) the students need to learn the material.	What the students should be doing.	This area can be used for handwritten notes when an instructor "personalizes" a lesson plan.
2. State the Objective – State your objective here in terms the student can understand. Use examples as needed.		
3. Recall Prerequisite Information – Recall any previous material learned prior to this block.		
4. Present the Information – Demonstrate or model the desired performance. Pass the information needed for the students to practice. Cover what the students need to know in order to accomplish the objective.		

Lesson Title

The Nine Events continued

Instructor Activity	Student Activity	Notes
5. Provide Learning Guidance – Associate the new information to information they already know using common examples.		
6. Provide Opportunity to Practice – Place your relevant practice description here. Give the participants an opportunity to practice the desired performance.		
7. Give Feedback – Give feedback on the performance. Feedback can come from the instructor, or by a student using a checklist.		
8. Assessment (Test) – Describe your test here. The total test development process can be placed at the back of this document.		
9. Enhance Retention and Transfer (back to the job) – Restate the value or benefit and how it will be used in the field or on the job. Summarize the lesson if needed. Student should walk away with a feeling of accomplishment. Link to the next lesson if needed.		

Appendix C: Generic 6P Lesson Plan

Introduction   The following pages include a copy of the ABCD 6P lesson plan template.

YOUR UNIT NAME HERE

TEAM NAME

LESSON PLAN NAME

Your Unit logo here if
desired

Master Lesson Plan

<u>Command:</u>

<u>Course:</u>   *COURSE NAME*

<u>Lesson Title:</u>   *LESSON PLAN TITLE*

<u>Revision Date:</u>

<u>Next Revision:</u>

Written By**:**

                     AUTHORS NAME

Edited By**:**

Reviewed By**:**

Approved By:

(Major Accomplishment)

(MODULE TITLE)

Instructor Preparation

A Leader Guide (Instructor Guide) is a job aid; therefore, consider the rules for writing job aids listed in Development JOB AID 6, TASK C

Review Material.

Review Assigned Student Material.

Instructor References

1.

2.

Length of Lesson
(EXAMPLE)

Total:	(2 Hours,30 minutes)
Introduction	(15 minutes)
Discussion	(15 minutes)
Performance Exam	(30 minutes)
Discussion on PE	(15 minutes)
Case Study	(30 minutes)
Discussion on CS	(15 minutes)
Video	(15 minutes)
Lesson Debrief	(15 minutes)

Find MODULE PLAN Design Worksheet 3A, pages 1 & 2 ; Worksheet 3B Worksheet 4. **Follow the MODULE PLAN exactly**

PowerPoint Slides

List the name and number of each PowerPoint transparency that the instructor should have in the module.

Materials/ Equipment Required

Performance Exams
Knowledge Exam
Handouts
Job Aids
Equipment

Review MODULE PLAN Design Worksheet 4, block E.

Introduction

Instructor Introduction

Displayed Module Title for students.

Introduction to students

- Provide background information about yourself to establish credibility with students.
- For successive lessons, stating or displaying name is sufficient.

Preview

NOTE:
A module of a course designed to store the behaviors in the MEMORY of students is made up of these activities:
5. Preview
6. Preparation
7. Prime-Prompt-Perform
8. Isolated Practice

Give an overview (big picture) of the module content/activities (roadmap):

- List the Module **OBJECTIVE** (TPO) to be communicated to the student.
- List overall **STEPS** (EOs) to be learned.
- The **VALUE** of learning the module. Instructor should give a motivational statement explaining the importance of material not only to the course but to the students' jobs in the fleet.
- Introduce topic to provide a clear linking of learning points between previous module and   current module.
- Any special instructions for the module such as: pacing method, use of a job aid, or briefly explain a hands on exercise.

Preparation

NOTE:
A module for extensive training support designed to enable the student to use a JOB AID consist of these activities:
1. Preview
2. Preparation
3. Prime
4. Isolated Practice

- Instructor should define unfamiliar terms which are used in the module.
- Review prerequisites skills/knowledge applicable to the module.
- Were to find references, tools, or job aids.
- **SAFETY PRECAUTIONS**
- Relevant background or subject-matter.

Module Content

Prime

Demonstrate to the students the behaviors to be exhibited.

- Provide the signal(s) to the student.
- Provide the response(s) to the student.
- Provide signal(s) again and ask the students to give the response(s).
- Provide feedback (i.e. "Here is the correct way and why").

Prompts

NOTE:
Prompts are NOT needed for training supported by a job aid.

Prompt means that the student exhibits the behaviors WITH cues.

- Present the signal(s) from the prime.
- Present the student with the MINIMUM CUE for the response(s). Give just enough help that the correct response will be made.
- If the behavior is discrimination, call for discrimination.
- If the behavior is generalization, call for generalization.
- If the behavior is sequence, call for sequence.

Perform

NOTE:
Perform is NOT needed for training supported by a job aid.

Performs means that the student will exhibit the behavior(s) WITHOUT cues after the behaviors have at least been primed.

- Laid out so student sees/hears/reads the signal(s) first.
- Have the student response at the highest level of simulation the student can handle and practical.
- NO cues given on how to make responses that will not be present on-the-job.
- Provide feedback.

Module Content

Practice	Decide if ISOLATED PRACTICE of all units (EOs) together is needed.
Assess Performance	Evaluate students on their performance/knowledge of the topic.
Lesson Debrief	Re-stated/paraphrased enabling objectives. Discussed with students the relationship of enabling objectives to lesson material.
Homework	(Identify reading assignments or type None.) (Identify assignment sheets or type None.)
Transition to Next Lesson	Provide a clear connection between current lesson and the next lesson or activity.