



CFITES SERIES

How to Meet Requirements 3 of 7

Analysis

Design

Development

Conduct

Evaluation

Validation

The primary objective of the **Design Phase** is to conceive a Training Plan (TP) that will enable Canadian Armed Forces (CAF) members to achieve the Performance Objectives defined in the Analysis Phase, at optimum cost. CAF typically convenes a Training Plan Writing Board (TPWB) consisting of subject matter experts and instructional designers to design the Training Plan using the following 7 step process.

Step 1

Define Learner Characteristics



CFITES Requires

Identify the characteristics of the target audience & factors that contribute to or impede learning; such as prior training; current education, experience & abilities; annual throughput required; trainees' location & access to computers or other equipment.

ADVISOR Added Value

- ✓ Prompts users for key target audience characteristics including skillset, location, attitude, access to technology, compensation, throughput, etc., needed to identify viable training delivery media/methodology & support learner centric design
- ✓ Facilitates collaboration, sharing & reuse of data. Stores all data in a centralized database that can be leveraged by all courses targeted for those learners

Step 2

Perform Instructional Analysis



CFITES Requires

Use the following process to determine what needs to be taught to the learner in order to achieve the Performance Objective (PO):

1. Identify the major components & sub components of the tasks including Knowledge, Skills & Attitudes (KSAs) that make up the PO - often referred to as task deconstruction. Deconstruction stops when the sub component is equal to learner's entry level
2. Apply target population information to the components & sub components to determine what amount of training is required

ADVISOR Added Value

- ✓ Speeds data analysis. Tasks & Performance Objectives (POs) identified during training analysis can be deconstructed into Sub Tasks & assigned Knowledge, Skills & Attitudes (KSAs)
- ✓ Minimizes duplication by automatically creating a repository of Tasks & KSAs to facilitate the allocation of similar Tasks to multiple Jobs as well as similar KSAs to multiple Tasks. By tracking Tasks & KSAs common among multiple Jobs, ADVISOR facilitates the development of highly efficient curriculum

Step 2

Perform Instructional Analysis



CFITES Requires

3. Group & sequence the components & sub components into units suitable for learning - referred to as Enabling Objectives (EOs) & Teaching Points. EOs are equivalent to Lessons & Teaching Points to Learning Objectives (LOs)
4. Write EOs. An EO is a principle unit of learning & constitutes a major step towards achieving the PO. An EO contains three essential parts:
 - a. Performance Statement
 - b. Conditions Statement
 - c. Standard Statement
5. Develop a Scalar Diagram. A Scalar provides a graphical representation of the EO & Teaching Point hierarchy

ADVISOR Added Value

- ✓ Quickly reorganize Tasks & Sub Tasks as well as POs & EOs using drag & drop functions that preserve the relationships among Tasks, POs, EOs & KSAs
- ✓ Prompts users for standards & conditions (i.e., given, denied & environment) needed to generate EOs in line with CFITES requirements
- ✓ Quickly identifies the training requirements for each Job by comparing the Desired KSA Levels to trainees' Current/Entry Levels
- ✓ Generates scalar diagrams with the click of a button

Step 3

Prepare Learning Assessment Plan



CFITES Requires

Describe the concept for formative (EO) & summative (PO) assessment. Develop a plan that includes a pass/fail policy & test/retest policy.

ADVISOR Added Value

- ✓ Standardizes the generation of Enabling Checks (ECs) & Performance Checks (PCs) in Training Plans (TPs) & Qualification Standards and Plans (QSPs)

Step 4

Design Learning Assessment Instruments



CFITES Requires

Describe how each PO/EO will be assessed – including content & format.

ADVISOR Added Value

- ✓ Facilitates the development of Test items for each Learning Objective including Question Type (i.e., multiple choice, matching, etc.) & Assessment Type (i.e., formative or summative)

Step 5

Identify & Cost Instructional Strategies



CFITES Requires

Use the following process to select & assess the viability of alternate delivery options:

1. Identify Instructional Methods – i.e., lecture, self-study, on-job training, simulation, etc.
2. Identify Instructional Media – i.e., Computer, Texts, web conference, simulator, etc.
3. Consider the Learning Environment – i.e., centralized, distributed, combined, etc.
4. Combine Methods, Media & Environment to create the instructional strategy
5. Consider Development Options – i.e., in-house, contracted, off-the-shelf or combination
6. Calculate the costs of each strategy - preliminary estimate to determine efficiency

ADV!SOR Added Value

- ✓ Minimizes the analysis time while preserving integrity by leveraging taxonomy to automatically group teaching points with similar characteristics
- ✓ Minimizes costly errors by assessing the viability of 40+ delivery options through a rigorous decision matrix that maps instructional requirements to the capabilities of each media
- ✓ Provides comprehensive & configurable step by step methodology for forecasting & comparing the costs, personnel & resource requirements of viable delivery options
- ✓ Quickly forecasts & compares budget & resource requirements of viable delivery options while preserving quality control by storing common measures such as hourly rates of developers, instructors & support staff; per diem & travel costs; equipment start-up & operation cost, etc., in Templates
- ✓ Conduct multiple “what-if” scenarios in seconds. Assess the impact of an increase in throughput, changes to instructor/trainees ratios, use of alternate blends of delivery options, build versus buy, use of internal versus external personnel & so forth on budget, personnel & resources

Step 6

Select & Approve Instructional Strategies



CFITES Requires

Select the optimum strategy using the following process:

1. Measure the potential effectiveness of each option in meeting the performance requirement
2. Review development & operating costs for affordability & compare the efficiency of each option to identify the strategy that meets the requirements at the lowest cost
3. Consider the risks & organizational impact of each option
4. Develop a business case if resource implications are substantial

ADV!SOR Added Value

- ✓ Automatically assesses & rates the effectiveness of each delivery option based on instructional requirements. Eliminates instructional strategies that do not meet a critical requirement
- ✓ Forecasts & compares start-up & recurring costs of viable delivery options over program’s life cycle
- ✓ Computes & compares the cost effectiveness ratios of viable delivery options to identify the option that best meets training needs at lowest cost
- ✓ Assesses the risk of each delivery option based on organization experience & readiness
- ✓ Generates comprehensive business case report to support recommendations with a single click

Step 7

Specify Course Content and Lesson Guidance



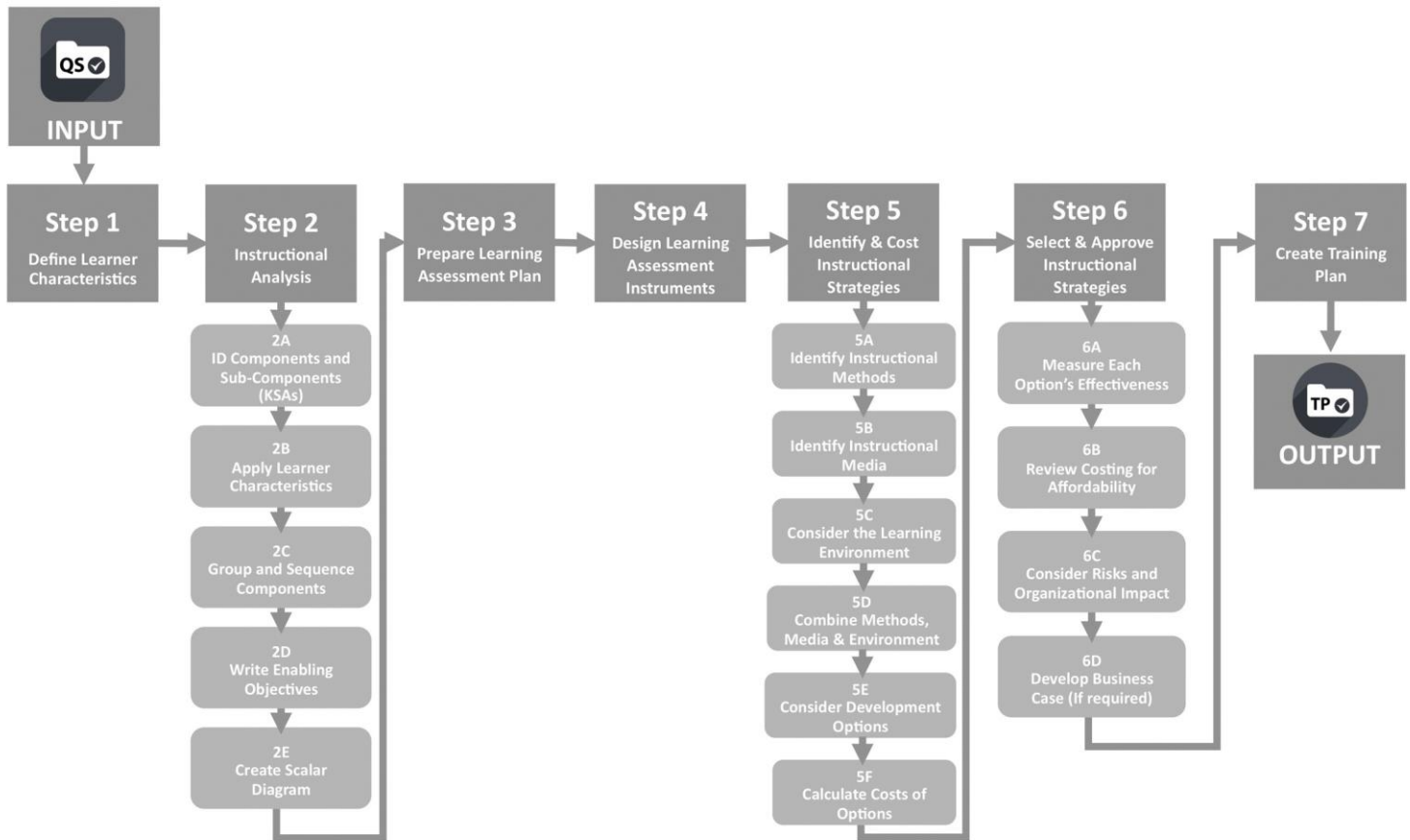
CFITES Requires

Compile the results from steps 1 to 6 into one formalized document referred to as the Training Plan (TP). The TP generally specifies:

- Course content
- Instructional strategy
- Assessment plan
- Resource requirements
- Lesson specifications

ADVISOR Added Value

- ✓ Generates TP documents that meet the requirements of all training authorities (Army, Navy, Air Force, Canadian Defence Academy) in a single click. In addition to minimizing the time needed to generate, ADVISOR preserves quality control
- ✓ Maintains multiple versions of a training plan through version control. Stored versions can be viewed & recovered at any time



Contact us today to find out how we can assist you in meeting CFITES requirements and drive training efficiency.