

S6000T Series

How to Meet Requirements 3 of 3

Training Analysis

Training Design

The primary objective of the **Training Design Phase** is to develop a training plan that will enable individuals to achieve the performance objectives defined in the Training Analysis Phase. The following 10 step process is recommended in S6000T.

Step 1

Target Audience Description

S6000T Requires

Analyze & reduce trainees characteristics to a single set of general traits. Identifies the most important traits for the group & the Knowledge, Skill, Attitude (KSA) that are relevant to the instructional situation. The process unfolds as follows:

- Confirm target audience
- Describe target audience characteristics
- Identify occupational background & qualifications
- Identify trainees' current aptitudes/KSA
- Identify learning preferences
- Define trainee prerequisites
- Describe the target audience

ADVISOR Added Value

- ✓ Prompt users for key target audience characteristics including skillset, location, attitude, access to technology, compensation, throughput, etc. - data needed to identify viable delivery media/methods & support learner centric design.
- ✓ Identify relevant knowledge/skill gaps & learning objectives by comparing current knowledge/skill levels of each job to desired level.
- ✓ Facilitates collaboration, & reuse of data. Stores all data in a centralized database that can be leveraged by all courses targeted to same learners.

Step 2

Learning Gaps

S6000T Requires

Identify learning gaps by comparing KSAs required for tasks to be performed versus the current KSAs of target audience. The differences between the requirements of the task & the background, credentials & experiences of the trainees, form the basis for identifying required learning objectives. To maximize the use of resources in identifying & resolving performance deficiencies, the following process is proposed:

- Identify learning gaps
- Review and verify learning gaps
- Define learning gaps
- Group learning gaps

ADVISOR Added Value

- ✓ Identify relevant knowledge/skill gaps & learning objectives by comparing current knowledge/skill levels of each job to desired level.
- ✓ Minimize duplication by automatically creating a repository of KSAs to facilitate the allocation of similar KSAs to multiple Tasks. By tracking KSAs common among multiple Jobs, ADVISOR facilitates the development of highly efficient curriculum.
- ✓ Automatically group Learning Objectives with similar characteristics. The groups are based on Bloom's Taxonomy to speed the analysis without compromising its integrity.

Step 3

Learning Objectives

S6000T Requires

Generate Learning Objectives (LOs). LOs are precise statements of training outcomes, including behaviour to be demonstrated, conditions which behaviour is performed, & degree of measurement based on performance standard. The process unfolds as follows:

- Review learning gaps output
- Define LO behaviour
- Define LO condition(s)
- Define LO standard(s)
- Write LO statements for learning gaps
- Write supporting LO statements
- Identify key learning points for LO statements
- Cross-reference LO statements to task performance objectives
- Produce LO statement list

ADVISOR Added Value

- ✓ Automatically generate a Learning Objective statement once Knowledge/Skill/Attitude Gap has been identified. The statement is constructed from KSA title, and the corresponding standards & conditions of its corresponding PO/EO.
- ✓ Generate audit trail with one mouse click to identify how each Learning Objective was derived. In other words, it the corresponding tasks, sub task, performance & enabling objectives, KSAs and gaps that LO supports.
- ✓ Verify that all training requirements & gaps have been addressed by aligning tasks with Learning Objectives.

Step 4

Assessment Strategy

S6000T Requires

Define components required for testing LO statements. Different testing types, instruments & methods can be considered when designing assessment strategy. The selection of components will be influenced by learning domain (i.e., knowledge, skill, or attitude), the proficiency level of each LO, & the target audience's characteristics. Assessment strategy is created as follows:

- Determine LO assessment criticality
- Analyze LO characteristics
- Define testing requirements
- Design assessment strategy
- Validate assessment strategy

ADVISOR Added Value

- ✓ Define the assessment strategy for each PO, EO & LO. This includes format of assessment (theory or practical), type (formative or summative), activities, duration, pass fail criteria, as well as any resources, hardware or facilities required.
- ✓ Develop the assessments for each Learning Objective. This includes activity/question, response, activity/question Type, distractors & type of assessment (progress or post).
- ✓ Generate Assessment Specification Report in a single click.

Step 5

Instructional Strategy

S6000T Requires

Determine how trainees achieve the outcomes defined by LOs. Identifies the training method(s), i.e., the type of activity used to impart required KSA for each LO. The process unfolds as follows:

- Review LO statement list & assessment strategy
- Review target audience description
- Review training project requirements & constraints
- Review training efficiency requirements
- Select/Approve training methods

ADVISOR Added Value

- ✓ Define the instructional strategy of each Learning Objective. Several factors can be considered in training method. These Include learning outcome (knowledge, skill & attitude), learning level, assessment strategy and so forth.

Step 6

Media Selection

S6000T Requires

Determine the most efficient & effective ways to deliver learning content to trainees. The primary aim of this step is to select the media & define level of fidelity required to enable training methods that facilitate the learning process. Although training methods & media are discussed as individual processes, they should be considered interdependently & can be performed simultaneously. The media selection process unfolds as follows:

- Define media pool
- Review LO requirements
- Choose/Develop media selection model
- Determine initial media selection
- Perform fidelity analysis
- Review program constraints
- Approve media selection results

ADVISOR Added Value

- ✓ Minimize media analysis time while preserving the integrity of the analysis process by leveraging taxonomy to automatically group teaching points with similar characteristics.
- ✓ Minimize costly errors by assessing the viability of 40+ delivery media through a rigorous decision matrix that maps instructional requirements to the capabilities of each media. Rate media from most to least favourable; & automatically present the reasoning behind the recommendations.
- ✓ Identify visual, tactical, olfactory, affective & auditory sensory cues needed to practice tasks, within realistic environments, under pre-set conditions to attain desired level of competency.

Step 7

Learning Objective Sequencing

S6000T Requires

Generate the chronological progression of Learning Objectives for training. Identify the LO groupings & ordering for a course & its component course elements, i.e., training modules & lessons. Organize LOs into an optimal sequence for training & define a comprehensive training curriculum for the target audience. The process unfolds as follows:

- Group & order LO statements
- Optimize LO sequence
- Review project requirements & constraints
- Approve LO sequence

ADVISOR Added Value

- ✓ Quickly set-up lessons. Allocate & sequence lessons as well as LOs within each lesson using a drag & drop function.
- ✓ Generate Training Plan Report with the click of a button.

Step 8

Training System Alternatives

S6000T Requires

Define optimal ways to enable training system's design based on program constraints. Considers the resources (i.e., Equipment, Infrastructure, Facilities, Personnel, Documents, Training Aids), necessary for various options; identified training methods & media; & LO sequencing. Results in alternatives for achieving training outcomes in cases where resources are a concern to successful training development & delivery. Constraints can either be short term or long-term - throughout product life cycle. The process unfolds as follows:

- Identify concerns & risks
- Identify alternatives
- Identify trade-offs
- Define training system alternative solution

ADVISOR Added Value

- ✓ Provide comprehensive & configurable step by step methodology for forecasting & comparing costs as well as personnel & resource requirements of viable delivery options (media) over product life cycle.
- ✓ Identify potential bottlenecks by comparing personnel & resource requirements for each time period to available personnel & resources.
- ✓ Uncover cost drivers by decomposing & presenting % of cost for equipment purchase & operation, infrastructure, development, instructors, support, admin & management staff.
- ✓ Recommend venues for minimizing risk & improving training effectiveness & efficiency.

Step 9

Training System Requirements

S6000T Requires

Describe all resource requirements for the development & delivery of course & course elements. Identify what is needed for project (e.g., schedule, budget, & logistical) & the technical specifications for each resource. Results in description of training system requirements to the level of detail needed for planning & acquiring resources; & communicating requirements for training development & delivery. The process unfolds as follows:

- Identify curriculum outline requirements
- Refine curriculum outline requirements
- Finalize training system requirements

ADVISOR Added Value

- ✓ Facilitate planning & resource acquisition by quickly forecasting budget, type & number of personnel & resources needed for one or multiple courses/activities for any time-period.
- ✓ Conduct what-if scenarios in seconds to assess the impact of an increase in throughput, changes to instructor/trainee ratio, use of alternate media, build versus buy, use of internal versus external personnel & so forth on budget, personnel & resources.
- ✓ Generate detailed training system requirements with few mouse clicks.

Step 10

Curriculum Outline Approval & Release

S6000T Requires

Provide guidance for finalizing curriculum outline content, structure, & associated requirements. Focuses on the approval of curriculum outline design in parallel with project (i.e., schedule, budget, logistics) & functional requirements for training development & delivery. Approval of curriculum outline & resources is reached by reviewing the instructional soundness & feasibility of the technical approach. The curriculum outline is then placed under version control. The following process is proposed:

- Verify instructional soundness
- Verify technical approach feasibility
- Obtain customer approval
- Release curriculum outline for development

ADVISOR Added Value

- ✓ Multiple reports can be quickly generated by ADVISOR to verify the instructional soundness & feasibility of technical approach. These include:
 - Training plans
 - Align tasks with learning objectives
 - Identify training creep
 - Forecast budget, personnel/resource requirements for alternate media
 - Identify/mitigate bottlenecks
 - Potential Impact of alternate media
- ✓ Generate realistic project plan based on course length, start and end dates, dependencies, constraints, & available personnel/resources.
- ✓ Assign each analysis/course a version #. Earlier versions can be archived, reviewed & restored at any time. Changes made by each team member are automatically tracked.

Business Objects

S6000T Requires

Defines the most important business objects & data elements captured during the training design process. Business objects define something that exists in the real world or are placeholders for information that belong together from a logical standpoint. Data elements define the type of data that can be captured for the respective business object.

ADVISOR Added Value

- ✓ ADVISOR captures S6000T Business Objects along with corresponding Data Elements.

Contact us today to find out how we can assist you in meeting S6000T requirements and drive training efficiency.

