

## Training Needs Analysis (TNA) Course Outline

### Day 1

Topics	Activity	Length	Time
Introductions	Discussion	15 mins	09:00 am 09:15 am
Workshop Objectives: Systematic approach for making training decisions.	Power Point Flowchart Key Decision Points	15 mins	09:15 am 09:30 am
Needs Assessment: (Critical Step) <ul style="list-style-type: none"> <li>➤ Confirm scope – i.e., the need for training</li> <li>➤ Determine measurable benefits (output, time, cost &amp; quality)</li> <li>➤ Consider other benefits (work habits, work climate, new skills, attitudes, advancements, initiatives)</li> <li>➤ Determine the need for TNA</li> <li>➤ Group Activity: Needs Assessment</li> </ul>	Power Point Examples Activities	70 mins	09:30 am 10:40 am
Break		20 mins	10:40 am 11:00 am
Training Needs Analysis (TNA) Overview: <ul style="list-style-type: none"> <li>➤ What is a TNA?</li> <li>➤ What is the purpose of a TNA?</li> <li>➤ Why does TNA matter? (blueprint for success)</li> <li>➤ Why TNAs succeed/fails?</li> <li>➤ What are TNAs Goals/Desired Outcomes?</li> </ul>	Power Point Participants Input: experience with training projects – what worked, what didn't and why? Instructor experience	40 mins	11:00 am 11:40 am
ADDIE Model: <ul style="list-style-type: none"> <li>➤ What it is?</li> <li>➤ Kirkpatrick Evaluation model.</li> <li>➤ How TNA fits within the ADDIE model</li> <li>➤ Group Activity: Evaluation</li> </ul>	Power Point Activities	50 mins	11:40 am 12:30 pm
Lunch		60 mins	12:30 pm 01:30 pm
How to conduct TNA: <ul style="list-style-type: none"> <li>➤ 1<sup>st</sup>: Systems Approach to Training (SAT)</li> <li>➤ 2<sup>nd</sup>: Instructional System Design (ISD)</li> <li>➤ How they differ?</li> <li>➤ How to choose?</li> </ul>	PowerPoint Flowcharts	15 mins	01:30 pm 01:45 pm

<ul style="list-style-type: none"> <li>➤ Organizational Analysis</li> <li>➤ Mission Analysis <ul style="list-style-type: none"> <li><input type="checkbox"/> Define Missions</li> <li><input type="checkbox"/> Decompose Missions</li> </ul> </li> <li>➤ Crew/Team Task Analysis <ul style="list-style-type: none"> <li><input type="checkbox"/> Define Task</li> <li><input type="checkbox"/> Activity: Good/Bad Tasks</li> </ul> </li> <li>➤ Job Analysis</li> <li>➤ Individual Task Analysis</li> <li>➤ Training Task Analysis <ul style="list-style-type: none"> <li><input type="checkbox"/> DIF Analysis</li> <li><input type="checkbox"/> Activity: DIF Analysis</li> <li><input type="checkbox"/> Identify KSAs</li> <li><input type="checkbox"/> Activity: Classify KSAs</li> </ul> </li> <li>➤ Outputs: <ul style="list-style-type: none"> <li><input type="checkbox"/> Master Task List</li> <li><input type="checkbox"/> Master Training Task List</li> <li><input type="checkbox"/> Job Task Analysis Report</li> <li><input type="checkbox"/> Training Requirements</li> </ul> </li> </ul>	PowerPoint Flowcharts Examples Activities	45 mins	01:45 pm 02:30 pm
Break		10 mins	02:30 pm 02:40 pm
<ul style="list-style-type: none"> <li>➤ Group Activity: Task Analysis</li> </ul>	Activity	80 mins	02:40 pm 04:00 pm
Break		10 mins	04:00 pm 04:10 pm
Learning Objectives Analysis: <ul style="list-style-type: none"> <li>➤ Performance/Enabling Objectives Analysis</li> <li>➤ Identify KSA Gaps</li> <li>➤ Derive Learning Objectives</li> </ul>	PowerPoint Flowcharts	50 mins	04:10 pm 05:00 pm

## Day 2

Topics	Activity	Length	Time
Day 1 Review	Discussion	15 mins	09:00 am 09:15 am
Structure Training Requirements in Courses/ Activities: ➤ Identify common training ➤ Identify individual training ➤ Identify collective (crew/team) training	Power Point Examples	15 mins	09:15 am 09:30 am
Media Analysis: ➤ Subdivide Course into Groups <input type="checkbox"/> Bloom's Taxonomy <input type="checkbox"/> Activity: KSA Classification ➤ Collect Data <input type="checkbox"/> Target Audience <input type="checkbox"/> Hardware <input type="checkbox"/> Content <input type="checkbox"/> Instructional Design <input type="checkbox"/> Fidelity <input type="checkbox"/> Environment <input type="checkbox"/> Evaluation <input type="checkbox"/> Safety <input type="checkbox"/> Time & Cost Limitations ➤ Eliminate Media (Delivery Options) ➤ Rate Media (Delivery Options) ➤ Output: Viable Delivery Options (Media) ➤ Group Activity: Media Selection	Power Point  Participants Input: experience with training media – what worked, what didn't and why?  Activities	90 mins	09:30 am 11:00 am
Break		20 mins	11:00 am 11:20 am
Cost Analysis: ➤ Costs Factors ➤ Estimate Startup costs: <input type="checkbox"/> Development ❖ Estimate Development Time <input type="checkbox"/> Hardware <input type="checkbox"/> Courseware ➤ Estimate Recurring costs: <input type="checkbox"/> Instructors <input type="checkbox"/> Facilities <input type="checkbox"/> Material <input type="checkbox"/> Trainees <input type="checkbox"/> Course Update <input type="checkbox"/> Support Staff <input type="checkbox"/> Administrative Staff <input type="checkbox"/> Management Staff	Power Point Activities	70 mins	11:20 am 12:30 pm

<ul style="list-style-type: none"> <li>➤ Overhead Costs</li> <li>➤ Direct and Indirect Costs</li> <li>➤ Group Activity: Cost Analysis</li> <li>➤ Key factors that drive costs</li> <li>➤ Output: Costs of Viable Delivery Options</li> </ul>			
Lunch		60 mins	12:30 pm 01:30 pm
Identify training budget, personnel and resource requirements: <ul style="list-style-type: none"> <li>➤ Compute utilization rates using throughput and trainees per class/activity</li> <li>➤ Output: Types and quantities to personnel &amp; resources needed</li> </ul>	PowerPoint  Participants Input: how to identify the most cost effective solution?	30 mins	01:30 pm 02:00 pm
Rate Viable Delivery Options (Media)  Risk Analysis: <ul style="list-style-type: none"> <li>➤ Assess current experience</li> <li>➤ Assess current infrastructure</li> <li>➤ Assess available resources</li> <li>➤ Assess target audience</li> <li>➤ Output: Hidden Costs</li> </ul>	PowerPoint  Participants Input: experience with new technology – what worked, what didn't and why?	30 mins	02:00 pm 02:30 pm
Break		10 mins	02:30 pm 02:40 pm
Fidelity Analysis: <ul style="list-style-type: none"> <li>➤ Define overall fidelity requirements for:             <ul style="list-style-type: none"> <li><input type="checkbox"/> Trainer/Simulator</li> <li><input type="checkbox"/> Components</li> <li><input type="checkbox"/> Virtual Environment (including elements)</li> </ul> </li> <li>➤ Where to draw the line</li> <li>➤ Output: Trainers/Simulators specifications</li> </ul>		60 mins	02:40 pm 03:40 pm
Break		10 mins	03:40 pm 03:50 pm
Group Activity: Fidelity Analysis	Activity	70 mins	03:50 pm 05:00 pm

## Day 3

Topics	Activity	Length	Time
Day 1 & 2 Review	Discussion	15 mins	09:00 am 09:15 am
Military Standards: <ul style="list-style-type: none"> <li>➤ US MIL-HDBK 29612: Instructional Systems Development / Systems Approach to Training and Education</li> <li>➤ Canadian Forces Individual Training and Education System (CFITES)</li> <li>➤ UK Defence Systems Approach to Training (DSAT)</li> </ul>	Power Point Flowcharts	30 mins	09:15 am 09:45 am
Case Studies from Canadian Armed Forces: <ul style="list-style-type: none"> <li>➤ Canadian Forces College: Staff &amp; Command Course</li> <li>➤ Canadian Army Land Vehicle Crew Training System</li> </ul>	Power Point Discussion	30 mins 45 mins	09:45 am 10:15 am 10:15 am 11:00 am
Break		20 mins	11:00 am 11:20 am
Case Studies from Singapore Armed Forces: <ul style="list-style-type: none"> <li>➤ Republic of Singapore Air Force: Project 1</li> <li>➤ Republic of Singapore Air Force: Project 2</li> </ul>	Power Point Discussion	35 mins 35 mins	11:20 am 11:55 am 11:55 am 12:30 pm
Lunch		60 mins	12:30 pm 01:30 pm
Case Studies from Royal Canadian Navy: <ul style="list-style-type: none"> <li>➤ Arctic Offshore Patrol Ships (AOPS)</li> </ul>	Power Point Discussion	15 mins	01:30 pm 01:45 pm
Case Studies from Royal Canadian Air Force: <ul style="list-style-type: none"> <li>➤ Future Pilot Training (FPT)</li> <li>➤ Air Force Technical Training Renewal (ATTR)</li> </ul>	Power Point Discussion	15 mins 15 mins	01:45 pm 02:00 pm 02:00 pm 02:15 pm
Case Studies from US Army: <ul style="list-style-type: none"> <li>➤ Live Fire Review</li> </ul>	Power Point Discussion	15 mins	02:15 pm 02:30 pm
Case Studies from US Air Force: <ul style="list-style-type: none"> <li>➤ US Air Force Space Command</li> </ul>	Power Point Discussion	15 mins	02:30 pm 02:45 pm
Break		10 mins	02:45 pm 02:55 pm
Group Activity: TNA	Activity	120 mins	02:55 pm 04:55 pm

Wrap-up	Power Point Discussion	5 mins	04:55 pm 05:00 pm
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