

## InfoPro Worldwide's Approach to ILT Development

### Instructor Led Training: An Overview

In the highly competitive corporate environment today, people are opting for more and more of skill-specific and industry recognized trainings that can either establish or fast-track their careers and increase their finances. In order to keep their employees' knowledge updated with the latest industry trends and technologies, many organizations are investing in skill-enhancement training. A major chunk of this training is in the form of instructor training i.e. face to face sessions with instructors.

Despite the rising popularity of eLearning, instructor-led training continues to be the most widely deployed form of training. Instructor-led training is considered to be effective, as it facilitates real-time interaction, in-depth information sharing, and direct response to learner's questions.

ILT, the traditional form of training, is modelled on the classroom style of teaching and explicit, direct instruction. ILT requires a knowledgeable teacher to explain the concepts, usually with the aid of course material that usually comprises of a presentation and a student guide. The teacher would also demonstrate successful techniques for using products in a lab environment.

### ILT Development: Our Experience

InfoPro Worldwide, a dedicated training solutions development company with a devoted in-house team, has over 20 years of rich experience in developing instructor-led programs. We have proven expertise in developing successful instructor-led trainings according to the needs of our clients, integrating their strategies, challenges, and business opportunities. We use a highly interactive and customized approach for the development of instructor-led programs.

Our approach to ILTs includes bringing multimedia into the classroom for use in demonstrations, games, and scenarios. We include classroom simulations and simple role-playing exercises and scenarios in our ILTs to create realistic work environments.

We believe in bridging the classroom experience with the work experience. Towards this end and to maximize your trainers' delivery skills, we include engaging activities and materials that can be successfully adapted across your entire training team.

### InfoPro Worldwide's Approach to ILT Development

InfoPro Worldwide develops ILTs with **high quality, user-friendly, and interactive content**. Our ILTs are **self-sufficient**. They are designed in such a way that any competent instructor can conduct trainings after going through them. We have a well-defined process in place to develop such ILTs.

**Step I:** To start with, we arrange for a **face-to-face** meeting. In this meeting, we have a detailed discussion on the following points:

- **What is the end objective of the client?** (What does the client want to achieve by imparting this training?)
- **What all components does the client want to include in the ILT/s?**
- **What will be list of learning objectives that need to be taught during ILT/s?**
- **What will be the level of learning objectives?**
- **What will be the duration of the ILT/s?**

**Step II:** After this meeting, we prepare a detailed **analysis of the client's needs and requirements**.

We also do a **detailed audience and task analysis** and then prepare a comprehensive list of tasks that need to be carried out in the ILT execution. Depending on the complexity of the topic, we specify training methods or strategies. After completing the analysis, we obtain all the links and other documents that contain additional reference material from the client.

**Step III:** Once we acquire all the reference material, our proficient instructional designers prepare a **Table of Contents (TOC)** and a **detailed design document**. Based on this detailed document, our IDs create crisp, compact, and concise modules, ensuring that each module articulates a specific learning objective. We ensure that the trainings we deliver are tailored according to our clients' needs. We also hire skilled SMEs for preparing the best materials for the ILTs. At this stage, we simultaneously design and create templates for the instructor guide, student guide, instructor PPT, and if necessary lab guide.

**Step IV:** After the scripting of the modules is finalized, our IDs pen down a detailed script for the instructor i.e. an **Instructor Guide** is created. The instructor guide contains detailed instructions for the instructor, directing him/her on how to interact with the learners and how to make the learning effective. This is done by incorporating a game, exercise, role-play, group discussion, or a group quiz.

**Step V:** At this stage, we also design a **pre-assessment**, an ice-breaker exercise, and a **post-assessment** to measure the learner's knowledge as per the requirements of the content. The post-assessment can be paper-based or can also be created and administered online as per client requirements.

**Step VI:** We also create an instructor **PowerPoint Presentation** along with the Instructor guide to make the training more impactful. The PowerPoint presentation contains an outline of the ILT along with brief content. Our IDs incorporate attention grabber captions and graphics, if necessary, small animations and simulations, in the PPT to make the training more effective. The PPT also helps in retaining the learner's attention, which may get deviated due to any reason.

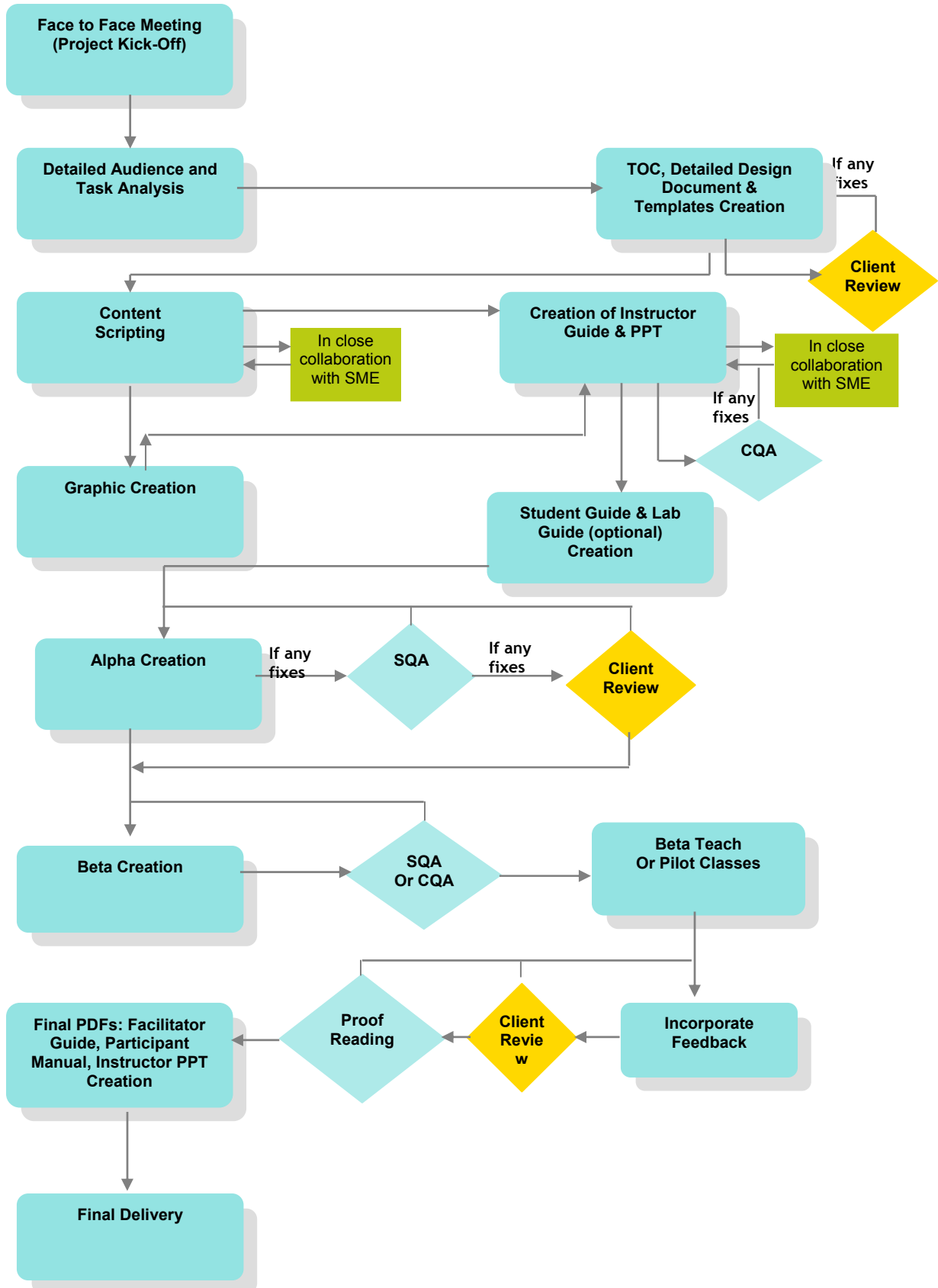
**Step VII:** The instructor notes are removed to prepare the **Student Guide**. The student guide acts as reference material for the learners.

**Step VIII:** After the course material development phase, we conduct **beta-teach or pilot classes** for a small closed group of learners with a background similar to the target audience. The course developer or SME will attend these classes as an observer. The observations and feedback obtained from these classes will be incorporated into the ILT material and the finalized version is delivered to the client.

Depending on the client's budget, duration of training, and size and location of the audience, we will try and incorporate some **audio and visual aids** such as:

- **Blackboard**
- **Whiteboard**
- **Flip chart**
- **Transparencies**
- **Handouts**

## Process Chart for ILT Development



## Sample Design Approach

The sample given below explains how we divide a training topic into manageable modules. The original topic was **Process Deposit Accounts**, which has been divided into **three modules**: open deposit accounts, change deposit accounts, and close deposit accounts.

<b>TRAINING CURRICULUM</b>					
<b>Type of Training:</b> Transition to the New System - Process Deposit Accounts					
<b>#</b>	<b>Module</b>	<b>Description</b>	<b>Objectives</b>	<b>Length</b>	<b>Method/Medium</b>
1	Open Deposit Accounts	Explain procedures for opening deposit accounts, such as savings, checking, or money market accounts.	To ensure trainees can open a deposit account on the new system and accurately reflect the information applicable to the customer and the account.	1.5 hours	Classroom training or in-person lecture and on-line exercises.
2	Change Deposit Accounts	Explain procedures for changing deposit accounts.	To ensure trainees can make necessary changes to account information and accurately reflect any changes to customer or account information.	2 hours	Classroom training or in-person lecture and on-line exercises.
3	Close Deposit Accounts	Explain procedures for closing deposit accounts.	To ensure trainees can close deposit accounts correctly.	1.5 hours	Classroom training or in-person lecture and on-line entry.

## Sample Case Study

### The Client

Our client is a world leader in simulation and modelling technologies and integrated training solutions for the civil aviation industry and defence forces around the globe.

### Requirement

The client was desirous of engaging InfoPro Worldwide's capabilities to develop a set of ILTs on aircraft systems for their technicians.

### Solutions & Approach

**Analysis Phase:** To start with, InfoPro Worldwide's Instructional Design Team had organized a face-to-face meeting with the client to conduct the needs, audience, and task analysis.

In this meeting, our team conducted a preliminary analysis of the client requirements and identified the business need of the client for the development of the training. After an internal analysis, the client found that the existing on-the-job training provided to the aircraft technicians was inconsistent. The client required a training solution that would facilitate their technicians to enhance their levels of knowledge of aircraft systems.

Our team found that the purpose of the ILTs was:

- To familiarize the client’s technicians with the aircraft systems
- Provide an overview of all the components of the aircraft systems and their placement within the aircraft system,
- Provide a detailed explanation of the functionality of each of the components

As a next step, our team had a detailed discussion on the background and skill set of the target audience. Our team used a custom-designed “**Preliminary Analysis Questionnaire**” to conduct a **skill-gap analysis**. The purpose of the analysis was to identify current level of expertise of the target audience and the expected level of expertise to be achieved at the end of the training.

Our team also tried to analyze the expectations of the target audience. This analysis helped us identify the learning objectives of the project.

Based on these objectives, our team had also identified the success factors that would measure the effectiveness of the training. Based on these factors, the learner feedback form would be designed. Some of the factors would also be measured as a part of a post-training on-the-job process of measuring training effectiveness. At this stage, our team also procured all the reference material (technical and non-technical) required to prepare the ILT.

Since the training material was for the client’s aircraft technicians, we met their technical team to understand their general thought processes, problem areas, and working style. At this stage, we also identified a subject matter expert, in coordination with the client, to help us with technical reference during the development phase.

**Design Phase:** Our team translated their understanding into the preparation of a set of learning objectives, keeping in mind the trainer’s perspective .i.e. “**What skill set does the client wants to develop within its employees**” and the learner’s perspective – “**what’s in it for me?**”. Our focus was to develop a complete and comprehensive solution that benefits the organization as well as the learner.

Based on the reference material and learning objectives identified, our instructional designers drafted a detailed **Table of Contents (TOC)** and a **Design Document**. The TOC was broadly divided into modules. Each module was further divided into lessons and topics. A part of the TOC is given below:

<b>Module 1</b>	
<b>Lesson</b>	<b>Topics</b>
Chapter 1	Electrical Power—Introduction
Chapter 2	Electrical Power—Power and control— General
	Electrical Power—Distribution— General Description
<b>Module 2</b>	
<b>Lesson</b>	<b>Topics</b>
Chapter 3	Electrical Power—Airplane—

	Component Locations
Chapter 4	Electrical Power—Electrical Meter, Battery and Galley Power Module

A detailed layout of the training was prepared in the Design Document. It included the learning objectives for each topic, a description of the content to be covered under each topic, the strategies to be used to present the content of each topic, and any graphics to be used in the course.

As a next step, we prepared Word templates for the **Instructor Guide** and **Student Guide**, and PPT template for the **Instructor PPT**. The designs of all the above templates were prepared and submitted for client's approval.

**Development Phase:** Next, we developed the content for the ILT modules in consultation with the SME identified earlier. We prepared a script that provides not only the course content but also describes **how the trainer should conduct the training**. The entire training was divided into small chunks, each chunk covering a few lessons and topics under a learning objective. To ensure that each concept is well understood by the learners, we incorporated conceptual graphics and graphics of the aircraft systems. To build upon the knowledge of the learners, we prepared job aids and flowcharts that explain certain concepts and technical procedures.

We incorporated instructor notes or training tips to help the instructor conduct the training better and small notes at strategic places providing additional information for the learners. Apart from the detailed instructions for the instructor, we also included a number of exercises in the form of games, role-plays, group discussions, or a group quiz that would enhance the interactivity level of the class. To make the task of the instructor easier, our graphic artists created icons of two types - one set of icons for the instructor notes and another for the student references.

After creating a major part of the ILT, we transferred the content into the instructor guide and student guide templates.

**Instructor Guide**

You use the electrical meters, battery, and galley power module to monitor the operation of the battery charger. The battery charger is in the charge mode when you see a positive DC AMPS indication while the DC meter selector is in the BAT position.

The battery charger cannot go into the charge mode during any of the following conditions:

- Fueling station door open
- APU start
- Standby power switch (PS-5) to the BAT position
- Standby power switch (PS-5) to the AUTO position, battery switch ON, and DC BUS 1 and AC TRANSFER BUS 1 do not have power.
- Battery overheat

**Status Lights**

- Both status lights are usually on when the battery charger has input power. A malfunction with any of these components extinguishes one or both status lights:
  - Battery charger
  - Battery
  - Connection wiring
- Both the status lights are extinguished if any of these conditions are true:
  - Input power to battery charger stops.
  - OR
  - Input voltage to battery charger goes below 94 volts ac for more than .5 seconds.
- The battery charger status light remains on and the battery status light is extinguished if any of these conditions are true:
  - Battery charger sees a loss of connection to battery
  - Battery overheat
  - Battery temperature sensor open or shorted
  - Battery not charged in time limits
  - Battery voltage below lower limits
- The battery charger status light is extinguished and the battery status light stays when internal battery charger failure occurs. The battery charger fail maintenance message also shows on PS-13 BITE.

**Battery**

These are the functions of the battery:

- Give power to critical airplane systems (AC and DC standby buses) if the normal power sources are not available.
- Backup power supply for the AC system control and protection.
- Supply Power for APU start.

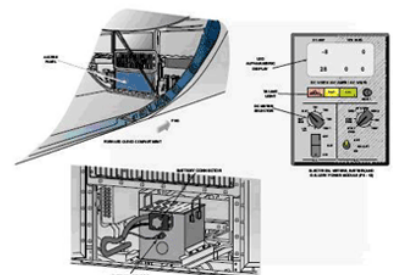


Figure 4  
Battery and the PS Module

Along with the guides, we prepared the **Instructor PowerPoint Presentation** to further help the instructor in conducting effective training. We also included speaker notes or instructor notes in the instructor PPT. Considering the technical background of the learners, we integrated **virtual-world simulations** of the aircraft systems into the instructor PPT.

### **Delivery Phase:**

**Beta Teach:** After completing the development of the ILT, we organized for beta teach or pilot classes at the client's site. Our team identified a group of learners from among the client's staff with the client's help. We also selected a trainer from our internal panel of trainers and appointed an observer from the instructional design team. The trainer conducted the classes at client's end and the observer recorded the pain points. In addition, they also collected the feedback from the learners.

**Final delivery:** The feedback collected from the learners and the observations recorded were used to incorporate modifications into the ILT material and the finalized ILT was delivered to the client.

### **Summary**

After the completion of trainings, InfoPro Worldwide uses various devices to measure customer satisfaction and improve their ILT development methodology. Despite the best of preparation, the actual success of ILT depends on the richness of learner's experience in the class and InfoPro Worldwide does its best to deliver this experience.