

End-user Training: Guidelines for Design and Development

Overview

This document provides an overview of considerations regarding training support for systems projects from three perspectives:

- Training's contribution to implementation success
- Information to support a successful training initiative
- Training requirements mapped to the project development lifecycle

Training's Contribution to Implementation Success

System development is a large corporate undertaking... and success requires commitment and thoughtful execution.

Systems projects are often characterized by:

- Resources that are “tied up” with all the associated expenses that implies
- Procedural and process changes based on corporate goals, such as improved customer satisfaction and loyalty
- Changes in the way business is conducted, i.e., what it people do on a day-to-day basis



The ***effectiveness of the training is often the largest factor in the overall success of the project***, and, more specifically, it is often the largest factor in:

- The users' acceptance and understanding of the new tools and associated procedural changes
- The determination of whether the corporation received expected "value" from the expenses incurred
- Customer satisfaction and loyalty
- Whether or not employees are able to do their job
- Whether the appropriate foundation has been built for associated cultural changes within the organization

Information to Support a Successful Training Initiative

To provide a solid foundation for training development, it's wise to begin by establishing a strong foundation regarding the current business and strategic direction.

Specifically, we'd like to begin with an understanding of:

- What is changing?
- Who will be affected by the change?
- What is the nature of the change?
 - » New systems?
 - » New processes?
 - » Redefined job responsibilities?
- What are the desired outcomes of the training program?



- What is the technical environment?
 - » Hardware
 - » Software
 - » Network infrastructure
- What is the cultural environment?
 - » Resistance to change?
 - » What other things are happening that may affect the enthusiastic acceptance of this change?
- What are the content areas to be addressed?
 - » What are the most high volume activities to be addressed in training?
 - » What are the most difficult areas?
 - » What are the core activities that must be covered in training?
- Are there any corporate standards that have an impact on this training initiative?
 - » Software?
 - » Hardware?
 - » Instructional models?
 - » Development tools?
 - » Testing criteria?
 - » Look and feel?

Training Requirements Mapped to the Project Development Lifecycle

The table on the following page maps each phase in the systems development lifecycle to the corresponding phase of the training development process. Then, for each phase, we have identified what kind of access is required to client staff resources and information resources.



Systems Development Phase	Related Training Activity	Client Resources	Information Required
Project Charter	<p>Communication of available project information to the training team:</p> <ul style="list-style-type: none"> ▪ Define a rough schedule (start date, review dates, completion date) ▪ Document initial training objectives (corporate and learner specific) ▪ Identify the number of distinct learner groups (audiences) and number of learners ▪ Discuss required and feasible delivery means (instructor led, web-based, blended solution) and impact on development 	<p>Project champions Team meetings</p>	<p>Project charter Project plan Initial objective development</p>
Preliminary Design/ Prototyping	<p>Analysis of learner</p> <ul style="list-style-type: none"> ▪ Current knowledge/capabilities ▪ Desired knowledge/capabilities ▪ Prior learner experiences (feedback from previous training initiatives) <p>Analysis of technical environment</p> <ul style="list-style-type: none"> ▪ Hardware and software ▪ Connectivity ▪ Development requirements (e.g. MS Office only) <p>Initial content gathering and establishing of relationships</p> <ul style="list-style-type: none"> ▪ Collect materials currently available (i.e. existing systems or documentation) ▪ Ensure training developers are in the communication loop for future materials ▪ Define project SME's and establish relationship 	<p>Interviews with representative users, subset of project team members (from I.T. and business), key stakeholders and corporate training people</p>	<p>Corporate training standards, if any Job descriptions Org charts for affected depts Technical environment (hardware and software) System and workflow design documents List of business events or processes</p>



Systems Development Phase	Related Training Activity	Client Resources	Information Required
	Confirmation of existing knowledge <ul style="list-style-type: none"> ▪ Schedule ▪ Objectives ▪ Training delivery options and the effect on development tools 		
Development	Develop Design Document <ul style="list-style-type: none"> ▪ Design segment-by segment learning objectives ▪ Develop content outline, instructional strategies and associated learning activities ▪ Describe each assessment and exercise ▪ Detail all job aids and reference materials ▪ Provide technical design specifications ▪ Plan strategies for post implementation evaluation Client review process and design document sign off Development of Training Materials <ul style="list-style-type: none"> ▪ As per the agreed to Design Document ▪ Internal review and alpha testing ▪ Client review and beta testing 	Access to development version of system Access to test database for representative data for training scenarios SMEs to review drafts	“To be” process maps/ flow diagrams (as available) Project library (as available) Screen maps
Unit Testing	Development of Training Materials, <i>continued</i>	(same as above) If WBT or other technology-based solution, access to IT people to ensure technical compliance	(same as above)



Systems Development Phase	Related Training Activity	Client Resources	Information Required
Integration Testing	Prepare for pilot training with representative subset of users and/or employees who are piloting the system.	Representative subset of users	
User Acceptance Testing	<p>Pilot training</p> <ul style="list-style-type: none">▪ Deliver training to representative subset of learning environment▪ Review and review <p>Reproduce materials. If e-training, convert to production environment and test</p>	Facility for face-to-face pilot (even if technology-based solution)	
Go Live	Implementation and Evaluation		