Purpose

The purpose of this document is to provide guidance on the practice of **Training Planning** and to describe the practice overview, requirements, best practices, activities, and key terms related to these requirements. In addition, templates relevant to this practice are provided at the end of this guide.

Practice Overview

The Department of Health and Human Services (HHS) Enterprise Performance Life Cycle (EPLC) Framework defines a training plan as the overall goals, learning objectives, and activities that are to be performed to develop, conduct, control, and evaluate instructions that are to be provided to users, operators, administrators, and support staff who will use, operate, and/or otherwise support the solution. Training materials are any resources created to support the plan including the documentation associated with the deployment of the business product. This includes, but is not limited to, instructor and student guides, audio-visual aids, and computer-based or other media used to disseminate information about the final product to the target audience that is in need of the instruction.

Training planning is one component of a much broader knowledge transfer process. Transferring knowledge is necessary to facilitate the transition of the project's product from the project stage into operations and its integration into the client's environment. Effective training planning is a practice that is executed throughout the project life cycle. Identification and gathering of training requirements should begin early during the design phase with the initial identification of business, technical, user, and maintenance procedures. Initial outlines and associated training plans and materials are created. These artifacts are finalized later in the project's life cycle and validated during the testing phase. If necessary, adjustments are made to finalize these materials before implementation. Training for using, operating, and maintaining the project's product, and its supporting components, is performed before transitioning into the operation and maintenance phase.

A Training Plan is a document that communicates to management and stakeholders details of the proposed training program. An approved training plan authorizes the project team to expend resources for the development, implementation, and execution of the proposed training program. The document outlines critical information regarding the training program's objectives, schedule, strategies for designing and developing curriculums and supporting training materials, methods for implementation, campaigns for continuous improvement, and helps to ensure that stakeholders are properly trained for their specific job function. The training plan outlines information pertaining to items such as:

- Training requirements
- Training strategy
- Training schedule
- Training resources
- Training environment
- Training materials

The process of actually developing a training program, supporting training materials, and its associated training plan, typically utilizes a five phased Instructional System Design (ISD) approach:

- *Analysis* – identifies existing knowledge and skills, and clarifies thing such as the instructional problems, goals, objectives, learning environment, audience type, constraints, and delivery options.
- *Design* – identifies learning objectives, assessment instruments, exercises, content, subject matter, lesson plans, media and approach for presentation of such materials.
- *Development* – creates and assembles training content assets conceptualized during the design phase, items such as storyboards,
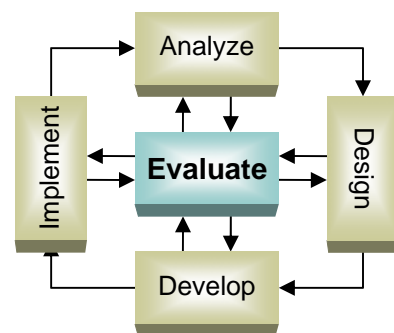
written content, presentations, graphics, e-learning, etc.
- *Implementation* – ensures stakeholders are prepared and includes the training of facilitators and/or instructors, validation of expected learning outcomes, execution of planned delivery methods, testing and continuous improvement of procedures and approaches, and utilization of available tools.
- *Evaluation* – provides opportunity for users, instructors, and other stakeholder to evaluate and comment on the training program, supporting artifacts, instructors, and approaches. Effective training measures are vital in determining if, and how much, training has supported organizational goals. This is often done using a four-level evaluation model. Successive levels build on the information provided by lower levels to measure performance by analyzing:
  1. *Reactions* – How participants reacted to the training program. Did they like it? Was it relevant to their job function?
  2. *Learning* – Assess the extent students have advanced their knowledge, skills, and attitudes towards what is being communicated in the training program.
  3. *Knowledge Transfer* – Measure the change in behavior due to the training program. Are the knowledge and skills gained during the training program being used by the trainee?
  4. *Results* – Measures the success of the program in terms that management and executives can understand (increased productivity, improved quality, decreased cost, etc).

Results

Transfer

Learning

Reactions
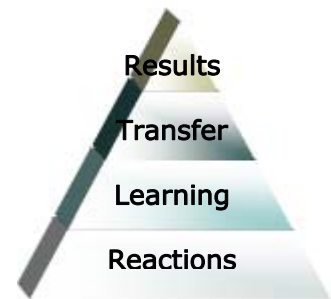
The type of training approach used will vary from project-to-project. Course developers must understand how people learn and be familiar with different teaching styles, tools, and materials, as well as the organization's culture and the training's audience type. Consideration must also be made to ensure compliance with Federal regulations, policies, and standards as they relate to items such as Section 508 compliance, records management, privacy, and security. Training materials may include items such as:
- Seminars
- Presentations
- Workbooks
- Self-Study tutorials
- Training instructor guides
- Student training materials
- Audio and visual aids
- User Manual
- Computer-based and other media

After identifying objectives and defining the most appropriate approach for training delivery (classroom, online, workshop, multi-media), decide on an appropriate duration for the training. It may be necessary to plan, develop, and execute a series of courses to achieve the training objectives. Consider what staffing and skill requirements are necessary to develop and implement the planned training curriculum. Utilize the training plan to document the requirements and how such requirements will be met. Course developers should work with system analysts, testers, and other stakeholders to develop training curriculums and associated support materials.

If necessary, outsourcing course development and training to a specialized external training developer is one possible option. However, capitalizing on domain knowledge gained throughout the project's life cycle, while leveraging associated skills and courseware development experience, often produces the best results.

Development of training materials should begin with the creation of a training content outline followed by the development of the most appropriate training curriculum and materials for the audience type being trained. This can be accomplished by identifying the most likely job functions of the typical course

attendee, and what prerequisite skills/training may be required. If developing classroom style training, training materials may include:
- Presentation materials
- Training manuals
- Illustrative handouts
- Reprints of reference materials
- Exercises, tutorials, and exams
- Overhead slides for classroom teaching

If developing distributed training, training materials may also include:
- Instructor's guides, guidelines, and how-to instructions
- Samples exercises and example
- Textbooks and tutorials
- Electronic learning programs

Once the project's product is operational, it's important to ensure that users are always trained on current and new processes. This is accomplished by establishing a supporting course curriculum that remains relevant through initial training as well as recurring refresher training. Maintain training program metrics. Leverage such metrics to continually improve the training curriculum and its supporting materials. Some metrics to consider may include information related to:
- End-user assessments
- Attendance details
- Attendance metrics
- Evaluation summaries
- Future training recommendations
- Number of courses developed, available, and maintained
- Course topics, curriculum, duration, and popularity
- Number of attendees, their contact information, and the course they've attended

Eventually systems may be dispositioned for any number of reasons. This action may require the planning of additional training to facilitate knowledge transfer to those responsible for any new or replacement products or management of product archives.

Best Practices
The following best practices are recommended for **Training Planning** development:
- **Plan** – Create a training plan approved by management and executive stakeholder
- **Align** – Align training program learning objectives to achieve overarching training program goals
- **Educate** – Train stakeholders and staff, and continually reinforce training topics
- **Evaluate** – Allow trainees to comment, track progress of training programs, monitor associated metrics
- **Improve** – Continuously update training programs, approaches, and materials to reflect
- **Lessons** – Review lessons learned from previous training programs and Discuss them with key personnel involved in past training programs

Practice Activities
- Analyze training needs
- Design training program
- Develop training courses, curriculums, and supporting materials
- Implement training program
- Evaluate training results
- Improve training programs, courses, and materials based on outputs from course evaluations

Practice Attributes

This section provides a list of practice attributes to help project teams determine the extent to which **Training Planning** impacts their project.

Practice Owner	CDC Unified Process Project Office (http://www.cdc.gov/cdcup/)
Criteria	EPLC requires that a training plan and associated training materials be developed prior to the project exiting the Development phase of the life cycle
Estimated Level of Effort	Significant
Prerequisites	Requirements gathering
Practice Dependencies	NA
Practice Timing in Project Life Cycle	Training planning should begin in the Design Phases of the project life cycle and if necessary, related requirements built into the development of the project's product. Training plans should be treated as living documents and updated as influencing variables change. Education of stakeholders and related project staff should continue throughout the life of the project.
Templates/Tools	• CDC UP Training Planning Practices Guide • CDC UP Training Plan Template • CDC UP Training Planning Checklist
Additional Information	• American Society for Training & Development http://www.astd.org/ • International Society for Performance Improvement http://www.ispi.org/ • Society for Technical Communication http://www.stc.org/

Key Terms

Follow the link below to for definitions of project management terms and acronyms used in this document.
http://www2.cdc.gov/cdcup/library/other/help.htm

Related Templates/Tools

Below is a list of template(s) related to this practice. Follow the link below to download the document(s).
http://www2.cdc.gov/cdcup/library/matrix/default.htm
  • CDC UP Training Planning Template
  • CDC UP Training Planning Checklist