



Best Practices for Designing And Developing Training

Standard Curriculum Toolkit, Section 2.2

Optional Element

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CTIP Program Management Office

Best Practices for Designing and Developing Training

This section outlines best practices for designing and developing training material. Components may use it as a high-level introduction to a common instructional design process. It includes a review of the ADDIE Framework and provides practical guidance. Reference this document as needed.

What is the ADDIE Framework?

ADDIE is a widely-used instructional design framework that consists of five phases: Analysis, Design, Development, Implementation, and Evaluation. It is a systematic and consistent process that guides individuals through the process of designing and developing effective training activities.

How does it Work?

The ADDIE Framework functions as a systematic process. Each phase leads to a specific set of outcomes that influence the next phase. Although the model is linear in nature, there is room for flexibility.

Who is Involved in the Implementation of the ADDIE Framework?

There can be several people involved in the ADDIE process including the following:

- *Instructional Systems Designer (ISD)*: ISDs are typically involved in every stage from analyzing training needs, determining the training goals, choosing the overall instructional strategy, selecting the appropriate media to include in the in the training course and overseeing the development process of the training course. The ISDs develop the training activities to be included in the course and any supplemental course materials. They also define the delivery and evaluation strategies.
- *Subject Matter Expert (SME)*: SMEs contribute the knowledge and content required for a particular course. They work closely with the instructional designers to create learning objectives, course outlines, and course story boards. In instructor-led courses, they can also serve as training facilitators.
- *Media developers (Graphic Artist and Programmer)*: Media developers are responsible for developing media and interactive components, and creating the graphical user interface.
- *Voice Talent*: The voice talent records the narration for the course.
- *Team of Reviewers*:
 - *Technical Reviewer*: The technical reviewer cross-references the course with the style-guide used to develop the course.
 - *Project Manager*: The project manager oversees the entire training project and ensures it is operating according to schedule.
 - *Peer Reviewer*: The peer reviewer typically consists of another instructional designer who reviews the course.

What does each phase of the ADDIE process entail?

Phase	Description
Analysis	During the analysis phase, the instructional designer identifies the learning gaps, course goals, course content, course environment, assessment strategies, evaluation approach, and any constraints that may exist.

Phase	Description
	<p>Instructional designers should be able to answer the following questions at the end of this phase.</p> <ul style="list-style-type: none"> • What are the organizational goals? • Who is the target audience? • Who are the stakeholders? • What do learners already know about the topic? • What do learners need to know, feel, or be able to do? • What are the obstacles encountered? • When should the project be completed? • What are the costs associated with the project? • What are the benefits of the project? • What will be the mode of delivery?
Design	<p>During the design phase, the instructional designer determines the learning objectives, look and feel of the course material, outlines the course content, and selects the course media. Instructional designers should be able to answer the following questions at the end of this phase.</p> <ul style="list-style-type: none"> • What are the learning objectives for the course? • What content should be included in the course to support the learning objectives? • How will the course be structured? • What is the length of the course? • How will learners' knowledge or skills be assessed? • How will the training be evaluated? • What media (i.e. video, audio, graphics, and animations) should be used in the course?
Development	<p>During the development phase, the instructional designer uses outputs from the design phase to create storyboards, develop course content, and work with graphic artists and programmers to bring the course material to life. This includes designing graphics, animations, and interactive exercises. The voice talent (if audio is included in the course) also records the audio during this phase. Designers should be able to answer the following questions at the end of the development phase.</p> <ul style="list-style-type: none"> • Have the training materials been approved for development by the appropriate stakeholders? • Is the design of the training materials consistent with stakeholder requests and the approved outline? • Do the training materials function properly? • Do the training materials operate on the necessary platforms or web-browsers? • Has the course been reviewed by the appropriate parties? • Did members of the target audience pilot the course? Was there feedback considered or incorporated? • Were all supplemental materials completed and reviewed? • Did the key stakeholder provide approval to move forward to the

Phase	Description
	implementation phase?
Implementation	<p>During the implementation phase, the course material is delivered to members of the target audience and/or course facilitators/instructors. Procedures are put in place to help the learner navigate the course to assist the instructor/facilitator in teaching the course. Instructional designers should be able to answer the following questions at the end of this phase:</p> <ul style="list-style-type: none"> • What communications were provided to the stakeholders to announce the release of the training materials? • How will the training materials be distributed to members of the target audience? • How does the course need to be packaged for hosting on a specific LMS? • Is the technology infrastructure in place to facilitate the training course (if necessary)? • Are the training facilitators prepared to teach the course (if necessary)? • Is the venue secured for the training session? • What are the requirements for enrolling in the training course?
Evaluation	<p>The evaluation phase consists of two steps: completing a formative evaluation and a summative evaluation. Formative evaluations occur during each phase of the ADDIE process and help identify how to best modify or improve the course material. Summative evaluations provide opportunities for feedback from the learners. Instructional designers should be able to answer the following questions at the end of this phase.</p> <ul style="list-style-type: none"> • How many people completed the training materials? • How did learners rate their satisfaction with the training materials? • How did the training materials impact learners work performance? • What implications for future improvement did the evaluation feedback provide? • How well did the project perform in reference to costs, timelines, scope, stakeholder satisfaction, and project team satisfaction?

References:

- 1) Learning – Theories.com
<http://www.learning-theories.com/addie-model.html>
- 2) Instructional Design Central
http://www.instructionaldesigncentral.com/html/IDC_instructionaldesignmodels.htm
- 3) Instructional Design
<http://www.instructionaldesign.org/index.html>