

ADDIE model of instruction

Objectives: At the end of this lesson you shall be able to

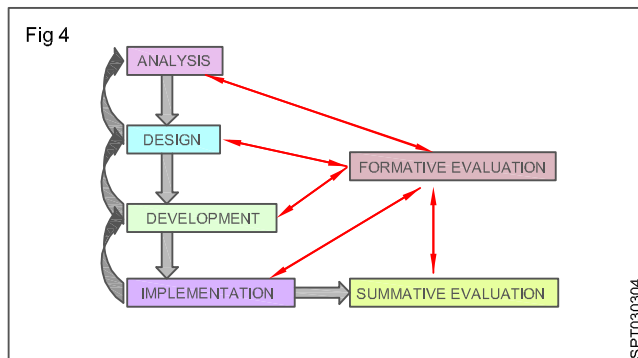
- define ADDIE
- explain the ADDIE model of instruction.

ADDIE

ADDIE is an instructional systems design (ISD) framework that many instructional designers and training developers use to develop courses.

ADDIE is a project management tool that helps to co-ordinate the various steps in course and instructional design technology

Instructional design is the systematic approach to the Analysis, Design, Development, Implementation and Evaluation of learning materials and activities. (Fig 1)

**i Analysis phase**

The analysis phase clarifies instructional problems and objectives, and identifies the learning environment and learner's existing knowledge and skills. Questions the analysis phase addresses include;

- Who are the learners and what are their characteristics?
- What is the desired new behavior?
- What types of learning constraints exist?
- What are the delivery options?
- What are the pedagogical considerations?
- What adult learning theory considerations apply?
- What is the timeline for project completion?

The process of asking these questions is often part of a needs analysis. During the needs analysis instructional designers (IDs) will determine constraints and resources in order to fine tune their plan of action.

ii Design phase

The design phase deals with learning objectives, assessment instruments, exercises, content, subject matter analysis, lesson planning, and media selection. The design phase should be systematic and specific. Systematic means a logical, orderly method that identifies, develops, and evaluates a set of planned strategies for attaining course content. Specific means execute each element of the instructional design plan with attention to detail. The design phase may involve writing a design document/design proposal or concept and structure note to aid final development.

iii Development phase

In the development phase, instructional designers and developers create and assemble course content described in the design phase. If e-learning is involved, programmers develop or integrate technologies.

Designers create storyboards, materials and procedures. The designer reviews and revises the course content according to feedback.

iv Implementaion phase

The implementaion phase develops procedures for training facilitators and learners. Training facilitators cover the course curriculum, learning outcomes, method of delivery, and testing procedures. Preparation for learners includes training them on new tools (software or hardware) and student registration. Implementation includes evaluation of the design.

v Evaluation phase

The evaluation phase consists of two aspects: formative and summative. Formative evaluation is present in each stage of the ADDIE process, while summative evaluation is conducted at the end of their course. Donald Kirkpatrick's Four Levels of Learning Evaluation are often utilized during this phase of the ADDIE process.

These phases sometimes, overlap and can be inter related; however, they provide a dynamic, flexible guideline for developing effective and efficient instruction (Table 1)

Table 1

	Sample Tasks	Sample output
Analysis the process of defining what is to be learned	<ul style="list-style-type: none"> • Learner profile • Problem identification • Task analysis 	<ul style="list-style-type: none"> • Learner profile • Description of constraints • Needs, problem statement • Task analysis
Design the process of specifying how it is to be learned	<ul style="list-style-type: none"> • Written objectives • Develop test items • Plan instruction • Identify resources 	<ul style="list-style-type: none"> • Measurable objectives • Instructional strategy • Prototype specifications
Development the process of authoring and producing the materials	<ul style="list-style-type: none"> • Work with producers • Develop workbook, flowchart Program 	<ul style="list-style-type: none"> • Storyboard • Script • Exercises • Computer assisted instruction
Implementation the process of installing the project in the real world context	<ul style="list-style-type: none"> • Teacher training • Tryout 	<ul style="list-style-type: none"> • Student comments, data
Evaluation the process of determining the adequacy of the instruction	<ul style="list-style-type: none"> • Record time data • Interpret test results • Revise activities 	<ul style="list-style-type: none"> • Recommendations • Revised prototype