Training Design Module

By:

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Course 3: The plan of training

Training Design with the ADDIE method includes:

Analysis or (Needs assessment): (A needs assessment prior to training helps identify the gap between actual and required performance) **What do your learners need to know to accomplish job-related tasks?**

Design or (content design): **What will your training program look like?**

Development :(Activity and assessment design): What content, learning methods, and resources will you need?

Implementation (delivery): **Can you deliver the training program effectively?**

Evaluation: How will you know if the training program is meeting/has met the needs of your learners?

Training Design with the ADDIE method includes:

1- Analysis or (Needs assessment):

(A needs assessment prior to training helps identify the gap between actual and required performance)

What do your learners need to know to accomplish job-related tasks?

Needs assessment:

Primary questions to answer when conducting a training needs assessment:

- Who are adult learners?
- What kinds of learning experiences do learners need? What styles of learning do they bring to the training program?
- What do they need to know to carry out job related tasks?
- What gap exists between what they know and what they need to know?

Assessing the Adult Learner

Major characteristics of adult learners as related to training:
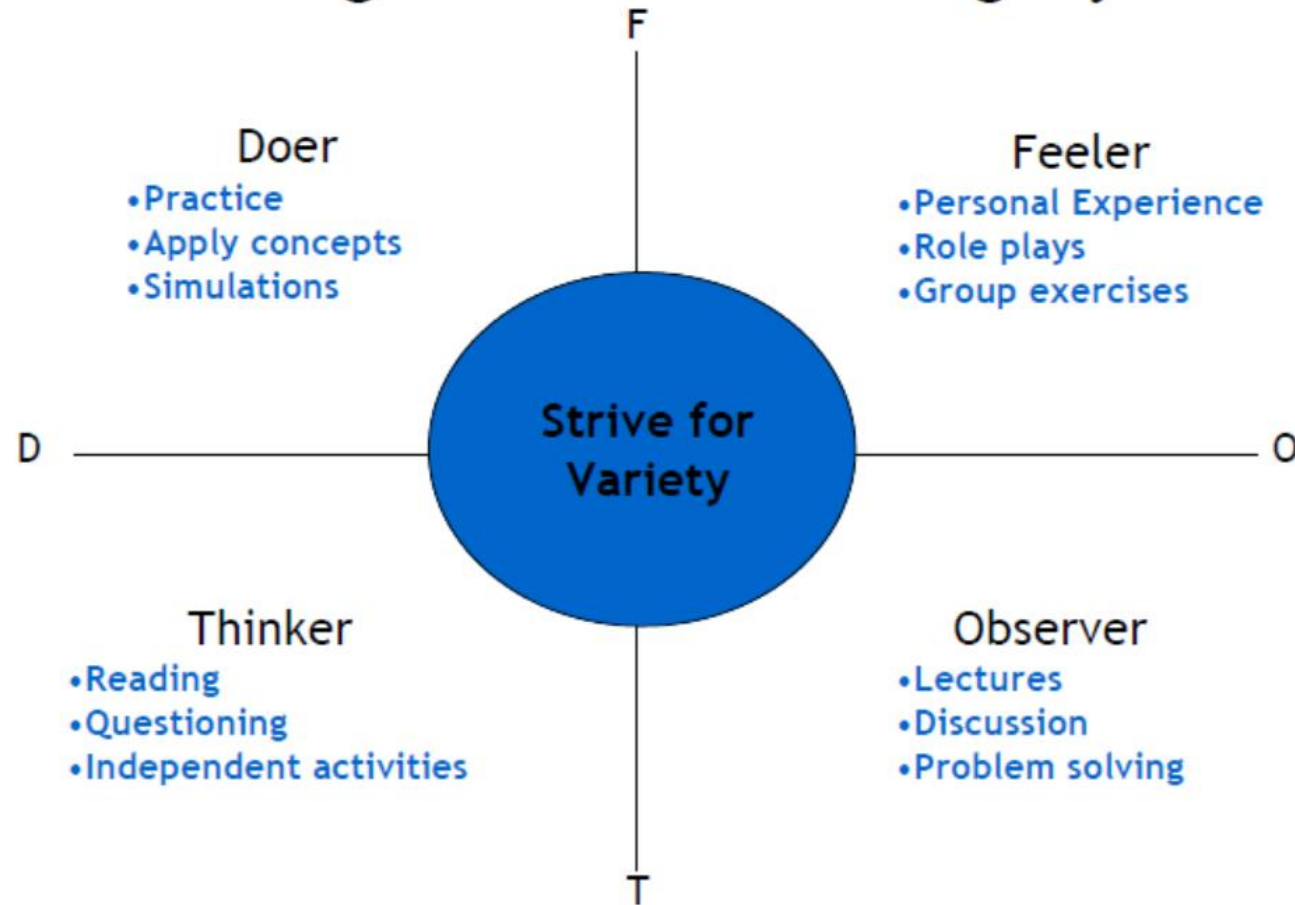
•<u>Need to Know</u>: Want training delivered when they need it, when ready to progress to a new task or next stage.

•<u>Self Concept</u>: Desire to be recognized by instructor as independent and self-directed.

•<u>Life Experience</u>: Expect instructor to recognize their prior accomplishments and knowledge.

•<u>Task-centered and Practical</u>: Training should help them meet job-related needs.

•<u>Internally Motivated</u>: Largely (but not exclusively) driven by internal rewards and not, for example, grades or parental approval.

Assessing Learning Styles

Four categories of learning experiences or styles:

•Doer: Like to be actively involved in learning process, want to know how they will apply learning in real world, like information presented clearly and concisely.

•Feeler: People-oriented, expressive, focus on feelings and emotions, thrive in open, unstructured learning environment.

•Thinker: Rely on logic and reason, like to share ideas and concepts, analyze and evaluate, enjoy independent work.

•Observer: Like to watch and listen, tend to be reserved, will take their time before participating, thrive on learning through discovery.

Training Methods & Learning Styles

Doer
- Practice
- Apply concepts
- Simulations

Feeler
- Personal Experience
- Role plays
- Group exercises

Thinker
- Reading
- Questioning
- Independent activities

Observer
- Lectures
- Discussion
- Problem solving

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D   **Strive for Variety**   O

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Questions to consider:

Considering who adult learners are and their different learning styles:

•What do you need to consider when developing training for people who have considerable life experience?

•How would a need to know approach to learning influence the development of a training program?

•What is your own learning style and how might it influence your approach to developing training?

Steps for Conducting a Training Needs Assessment

A training needs assessment consists of gathering at least six different types of data:

1. Determine Desired Performance: At the end of training, what do you want learners to be able to do?
2. Participant Analysis: How many, what is their expertise and experience, what do they need to learn to be able to do desired performance, what might be their response to training, etc.?
3. Learning Context: Who will support the training, how will the training be organized, where, when, what are the values and beliefs of the participants, etc.?
4.Content Expertise: Who are the relevant experts to supply the content?
5. Training Expertise: Who is available to skillfully deliver the training?
6. Logistical Requirements: Will training be mandatory, what financial resources to develop materials, will it be held onsite, is travel a problem, is there a suitable space, how much time is available, what are potential roadblocks to address, etc.?

Methods for Collecting Data

Consider using the following methods to conduct a training needs assessment:

•Interview target learners about their knowledge, experience, and expectations.
•Interview trainers who have developed similar training programs under similar circumstances.
•Interview content experts.
•Interview stakeholders in training (e.g., organization directors, clients, etc.).
•Gather documents related to desired outcomes of training.
•Analyze previous training materials in a similar subject area.

Training Design with the ADDIE method includes:

2-Design or (content design):

What will your training program look like?

Primary questions to answer when designing a training program:

- What do I want learners to be able to do as a result of this training program?

- What methods will I use to assist them to reach this level of performance and knowledge?

- What resources will be used to deliver this training program?

- How will this training be structured overall?

Learning outcomes (Los)

Identify what students will be able to do as a result of participating in the training program. For example:

•Students in this workshop will be able to write explicit, concisely worded and precisely defined statements that clearly identify a behavior that is expected to be performed by learners at the end of the training.

« Learning outcomes comprise the framework of a training plan"

Guidelines for Developing Los

Learning outcomes should include the following components:

•Results/outcome oriented
•Measurable
•Focused on only major job-related tasks
•Behavioral statements (e.g., not just knowing or understanding something but demonstrating that they know it and understand it)
•Specific and precise about what they are to be able to do
•Clearly stated, no clutter

Types of Learning Outcomes

Learning outcomes can be placed into three major domains of learning:

•<u>Attitudinal Learning</u>: Outcomes that aim to change or enhance a learner's attitude or motivation about a subject. Changing a learner's attitude about something…

•<u>Cognitive Learning</u>: Outcomes that aim to contribute to a learner's body of knowledge about a topic. Providing statistics about what you are learning about.

•<u>Skill Learning</u>: Outcomes that aim to help a learner perform a job-related, behavioral task.
Training a learner to talk easily about what you are learning about to community members.

Selecting Learning Experiences

Determine what learning experiences (strategies) are most effective and practical given a particular training context:

•<u>Interactive Lecturette</u>: Detailed explanations with questions from students and trainer.

•<u>Class Discussion</u>: Conversation with questions posed to elicit thoughtful responses from learners.

•<u>Small Group Exercises</u>: 4-6 people answering questions or solving problems together.

•<u>Two & Three-person Exercises</u>: Smaller groups designed for more intense discussion and problemsolving.

•<u>Case Studies</u>: Learners analyze a written account of a realistic situation and how it was solved.

Selecting Learning Experiences (cont.)

Determine what learning experiences (strategies) are most effective and practical given a particular training context :

•<u>Role-playing</u>: Realistic situation played out by learners.

•<u>Simulations</u>: Lengthy scenarios similar to problems in a job-related environment.

•<u>Games</u>: Competitive activity that allows learners to test their knowledge of and skill in a subject.

•<u>Surveys, Quizzes, and Short Writing Exercises</u>: Answer questions or write one or two paragraphs.

•<u>Observations and Hands-on Work in Field</u>: Students watching others accomplish a job-related task or practice skills they learned in training.

Identifying Training Resources

Several kinds of training resources need to be identified:

•<u>Content Experts</u>: Available/willing to assist in development of training?

•<u>Trainer(s)</u>: Available? Relevant experience? Cost?

•<u>Location(s)</u>: Where? Multiple sites?

•<u>Building</u>: Suitable rooms available? Adequate seating and media available (if applicable)?

•<u>Travel:</u> How will participants travel to learning site(s)? What funds are available?

•<u>Materials</u>: Books, pens, manuals, equipment, name cards, food, etc.

•<u>Time:</u> How long? Training delivered across several months or concentrated in a few days? Multi-part training? When are learners available?

Developing an Instructional Plan

An instructional plan is a map that outlines the design of your training program and includes the following:

Training Program Title	Instructional Materials and Aids Needed
•Overall Description of Training •Learning Outcomes •Length of Training •Target Learners •Overall Format for Training •Participant Requirements/Participation	•Logistical Issues •Content Outline, including: –Major topics to be addressed –Brief description for each topic –Identification of learning methods to be used

Development :(Activity and assessment design):

What content, learning methods, and resources will you need?

Primary questions to answer when developing content, learning experiences, and materials for a training program:

•What content do I want to teach learners that will enable them to accomplish the stated learning outcomes?

•What learning experiences do I want to use to teach this content to the target learners?

•What materials will I develop to supplement this learning?

Developing Content

When developing the content of a training plan (i.e., filling in the content outline), what should you consider?

•Have I consulted primary content experts?

•Have I provided enough information and learning experiences for students to accomplish the stated learning outcomes?

•Is there a balance of interactive, independent, and instructor-lead learning experiences?

•Is there enough detail to allow a trainer to use the content outline to teach the training program?

•Have I included logistical detail such as allotted time, instructions, and resource use?

Developing Learning Experiences

A training program is built on a series of carefully designed learning experiences. When developing learning experiences, consider the following guidelines:

•Develop learning experiences based on a specific learning outcome.

•The learning experience should be appropriate for accomplishing the learning outcome.

•The learning experience should be appropriate to the learning domain.

•Use a variety of learning experiences.

•Allow for questions and student-to-student interaction in each learning experience.

•Consider constraints in facilitating each learning experience.

Developing Materials

Training materials should be:

•Easy to understand.

•Economically produced.

•Relevant to one or more learning outcomes.

•Contribute as a secondary source of information and not act as the primary source.

•Complement the learning experiences in which learners are engaging.

•Include as much practical, direct job-based information as possible.

•Describe process-oriented tasks in a step-bystep format, free of extraneous detail.

•Include illustrative examples that support textbased information.

•Minimal -- students will use them primarily as a reference.

Implementation (delivery):

Can you deliver the training program effectively?

Primary questions to answer when delivering training:

- Is the trainer prepared to facilitate the learning experiences in an engaging manner?
- Have the appropriate training materials been developed?
- Have questions been developed to challenge learners and debrief the learning experience?

Engaging Learners

Ten Steps to being positively engaging:

•Ask learners what they want to learn from the training, and then list them.

•Probe learners with questions frequently; interactivity should be an primary characteristic of the training.

•Encourage application of material by providing examples, posing job-based problems, and asking learners to consider how they might apply what they are learning.

•Quiz and give feedback in a nonthreatening way.

•Start with questions instead of with providing information (talking 'at' students).

Ten Steps to being positively engaging (cont.):

•Pose alternative, thought-provoking questions and scenarios to get students to critique and question and get beyond the obvious.

•Start with what learners know to empower them and identify what to build on.

•Use both visual and aural (hearing) modes of learning.

•Use organizing techniques (e.g., 'Okay, we've just addressed...now that let's move to...)that help learners keep track of where they are and what they've learned.

•Use humor and stories to enhance content and maintain learner motivation.

Deming, B., Ten Steps to being Positively Engaging, Training and Development, January 2001, pp. 18-19.

Questioning

Questions compel students to consider the information they are learning. They serve several learning purposes

•<u>Explaining</u>: Asks students to explain their responses or poses a question that asks for elaboration.

•<u>Problem solving</u>: Poses problems for students to answer.

•<u>Debriefing</u>: After a class exercise or field study event, allows students to consider what they have experienced.

•<u>Predicting</u>: Presents job-related, realistic hypothetical situations for students to consider.

Hyman, R., 'Discussing Strategies and Tactics,' Questions, Questioning Techniques, and Effective Teaching (ed. W. Wilen), 1987, Washington, DC: national Education Association pp. 138-139

Feedback

Provide feedback on the learning experiences in which you just participated.

- Was the learning experience engaging?

- Was it appropriately interactive?

- Was there a balance of instructor and studentprovided information?

- Were questions posed that challenged students?

- Did it help students meet the stated outcome?

- Was it completed in a timely manner?

Evaluation:

How will you know if the training program is meeting/has met the needs of your learners?

Primary questions to answer when evaluating training:

•How can you assess if the learning outcomes are being addressed adequately during the development and delivery of training?

•How can you evaluate the effectiveness of a training program immediately after the delivery of training?

•How can you evaluate whether the learning from the training is being applied in a work setting after students complete a training program?

When to Evaluate

Evaluation of training can be separated into two primary categories:

•Formative: Occurs while the training is being designed, developed, and delivered. Allows trainers to determine what needs to change in their training plans and delivery.

•Summative: Usually completed immediately after training is conducted to evaluate the extent to which learners enjoyed and believed they received valuable learning. Can also be conducted over the course of weeks or months after training.

Evaluation Methods: Formative

There are several ways to evaluate the effectiveness of training during design, development, and delivery.*

•Needs Assessment Analysis
•Content Expert Evaluation
•Beta Test of Training
•Pre and Post Training Questionnaire
•Trainer Assessment
•Student Questionnaire
•Class Interview

*See handout entitled "Instructional Evaluation Methods:
Formative vs. Summative Evaluation"

Evaluation Methods: Summative

There are several ways to evaluate the effectiveness of training after a training has been conducted.*

•In-class Questionnaires
•Post Training Questionnaires
•Post Training Debrief
•Interviews
•Journals
•Observations

*See handout entitled "Instructional Evaluation Methods: Formative vs. Summative Evaluation

Questions to Consider

When considering formative and summative evaluation methods for your own training program:

- What kinds of evaluation are likely to be easiest to implement? Most difficult?
- What kind of evaluation are learners most likely to respond to? Least likely?
- What logistical issues do the various forms of evaluation pose for trainers and learners?

*See handout entitled "Instructional Evaluation Methods: Formative vs. Summative Evaluation"

Training should be assessed at different levels of evaluation in order to determine its overall effectiveness:*

•Level 1: Did the participants enjoy the training?

•Level 2: Did the participants believe they learned something from the training?

•Level 3: Did the training influence how learners perform in their jobs?

•Level 4: Did the training impact the larger organization?

•Level 5: Was the training cost-effective?

*See handout "Instructional Evaluation Methods: Levels of Evaluation," based on Kirkpatrick, D., Evaluating Training Programs: The Four Levels, 1994, San Francisco: Berrett-Koehler.