

Tips for e-Learning Design

Overview

There are a few practical differences between instructor-led training and e-Learning which require a different approach to instructional design.

ILT	e-Learning
Learners are generally a captive audience	Learners can quit any time they want
Structure and flow can depend on fitting content into workdays around breaks, etc.	Structure and flow are generally unconstrained
Learners generally can't be forced to complete individual exercises or participate meaningfully in group activities	Learners can be made to complete all exercises; all exercises are individual
Learners generally receive feedback on only some of their work, or feedback that's generic to the class	Learners can receive targeted feedback on every interaction
Human trainers can fill in gaps and answer questions not covered by the material	e-Learning has to anticipate questions, difficult content, inconsistencies and other issues, and resolve them as part of its design
Examples and scenarios may come from participants, so needn't be scripted	All examples and scenarios must be scripted as part of the course design

Some of these factors are disadvantages for e-Learning, and some are advantages. Many disadvantages can be overcome, and advantages optimized, by applying an ABC model of instructional design:

A: Antecedents. The stimuli, or information, that we present to learners
B: Behavior. What learners do; how they interact with the information
C: Consequences. Feedback for learners' responses

Learning happens when people make responses – or do things – and receive consequences, or feedback.

The first step in producing learning, then, is to present clear, careful information.

Antecedents

An e-Learning course, much like a sales pitch or TV commercial, must have a hook up front.

This is a big part of how you grab learners' attention, and get them engaged.

- Hooks generally provide a big, obvious WIIFM to the user for taking the course (e.g., improving sales). But, "This course will help you boost sales," is not a hook. A hook must also grab the learner's attention.

To do this, a good hook:

- Is the first thing in the course – even before the objectives
- Leaves learners guessing a little; teases or previews the content without revealing the whole story. If you leave learners with unanswered questions, they're more likely to continue to find out the answers.
- Makes people think about something important or interesting to them (e.g., Do you ever wonder just how...)
- Some common examples or scenarios include:
 - Someone who is really successful or good at the learner's job, then ask, "Would you like this to be you?"
 - Something bad or frustrating happening to someone, then ask, "Has this ever happened to you? How would you like to fix it?"
 - A twist – something that seems innocent or neutral, but which you reveal to have hidden dangers. (e.g., compliance violations that most people don't realize are violations)

The hook helps combat the fact that learners can quit e-Learning any time.

Once you've grabbed a learners' attention with a hook, you need to keep them engaged every step of the way.

To do this, you need a clear structure and story.

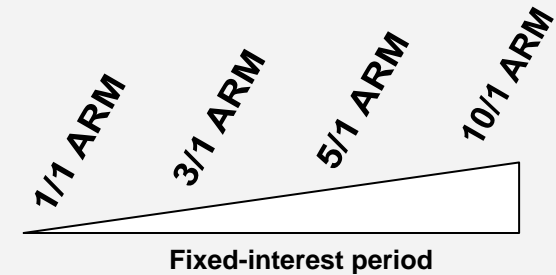
- The structure ties together the course content, relates it all to the purpose / benefit of the course, and leads the learner through the content with a logical flow and transitions.
- Some content has an obvious structure to give the content a backbone:
 - A “day in the life” often provides a good structure for content about job roles
 - Work process diagrams are another built-in structure, though they may have to be simplified to provide the overall structure, and you can “zoom into” more detail as you cover specific topics.
- Sometimes, you'll have to create the content's structure. To do this, think of some way to visually represent the overall content of the course. Some common ways you can structure a course include:
 - Categorizing or grouping parts of content according to their similarities and differences.
 - Content like this often can be depicted by a table that builds or becomes more detailed throughout the course
 - Arranging topics from general to specific or from simple to complex

Keeping learners engaged also combats the fact that learners can quit e-Learning any time.

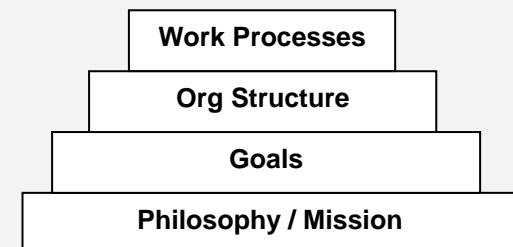
Establishing structures:

The loan fulfillment process has 3 main steps: setup, processing, and closing... In this course, we'll look at each step in more detail.

ARM products all have these similar features... They differ mainly along a spectrum of initial fixed interest period.



A company overview as a pyramid:



Once you've defined your overall structure, break the content into small, logical chunks.

Each chunk should be take users around 5-20 minutes to complete.

- Generally, assume about 1 minute per "page."
- Keep the chunks small, but logical. It's better to follow a topic to its logical end, and go 23 pages, than to artificially divide it.

After defining the structure and chunks of content, it's time to present the content clearly and directly.

- Show it rather than tell it wherever possible
 - Charts and diagrams can be extremely useful in presenting information.
 - Other graphics or animations can serve as "memory anchors" if they provide a memorable mnemonic for the content.
- Writing should be:
 - Active rather than passive
 - Concise; direct and to-the-point
 - Conversational in tone; read the narration text aloud to make sure it isn't awkward
- Clarity trumps esoteric grammar technicalities, e.g.
 - Use simpler verb tenses even when more complicated ones are technically correct
 - It's ok to start sentences with "And" or "But" when they fit the narrative flow, and to keep sentences short.
 - Strunk & White's *Elements of Style* is a great summary of clear writing principles.

Using appropriate chunks helps combat the fact that learners can quit e-Learning any time.

It's also possible because e-Learning structure is generally unconstrained by the calendar.

Good writing examples:

- *Enter details on the form.*
- *The Loan Officer should ask borrowers to complete the form. If he doesn't, the loan can't close on time.*
- *In general, you should complete Form A first. But, you complete Form Q first when there are 3 or more borrowers.*

Poor writing examples:

- *Details are to be entered on the form.*
- *The Loan Officer should have had the form completed by the borrowers if they are to close on time.*
- *There are several different variations to the procedures for completing all the forms that need to be completed. The first step is to complete Form A, except when there are more than 2 borrowers, in which case the S04 rule applies, and Form A is completed as the second step after Form Q.*

Behavior

People learn what they do.

- Whenever possible, make learners respond in an overt, meaningful way to the content rather than telling them about it.
- Meaningful means related to the training objectives and, ideally, to the job task. Meaningful interactions produce more and deeper cognitive processing, which produces more learning.
 - Clicking “Next” is not a meaningful interaction in this sense.
 - Asking users to “think about what they would do” is not overt, so you can never know if it’s meaningful.
 - Clicking a word to read its definition is useful, but only slightly meaningful.
 - Some common examples of interactions that may be meaningful include:
 - Multiple-choice questions that ask users to make fine discriminations—i.e., picking answers that aren’t easy.
 - Drag-and-drop exercises to:
 - i. categorize examples of related concepts
 - ii. put process steps in the correct order
 - iii. “assign” job roles or tasks to the correct department or job
 - iv. “complete” a form by dropping information into the correct locations
 - Click on the correct part of a screen shot or other diagram
 - Choosing the best example of something
 - Completing simulated rating forms as a way to rate the quality of some example
 - In general, think about what tasks learners need to do in their jobs, and approximate those as closely as possible to create learning interactions.

Meaningful interactions are good places to include a wide range of examples and scenarios that learners would encounter in their jobs.

Meaningful interactions

What is the appropriate loan application path for the customer with the details shown above?

- A) Full Application
- B) Pre-Qualification
- C) Pre Approval
- D) Simultaneous close

Click on the part of the screen where you enter the loan amount.

Click on the part of the process where you complete Form A

Which of the examples above is the best benefit statement?

Less meaningful interactions

What is the appropriate loan application path for the customer with the income and debt details shown above?

- A) Full Application
- B) Easy Path
- C) Go to another lender

Is ‘multiple payment options’ a benefit?

Is ‘high interest rate’ a benefit?

Use learning interactions frequently, sprinkled throughout the content to teach it, not just as a test at the end of a module

- You should provide interactions for every significant piece of content.
- If it's not significant enough to warrant teaching interactions, it may not be significant enough to teach. E.g., it may be better as a job aid.

Consequences

For teaching interactions to be effective, learners need to know whether they responded correctly.

They need immediate, useful feedback following every response.

- Feedback should be brief, salient, and consistent. If it's too long, people will not know immediately—or at all—whether they answered correctly.
 - Generally, if they answered correctly, saying “Right!” or providing an established “correct” symbol is enough.
 - Wherever possible, feedback for incorrect responses should provide a hint to the correct answer, and another chance to respond.
 - When possible, feedback for incorrect responses should explain why that specific response is incorrect.
- Feedback should not be overly aversive. If it's too punishing, learners may stop responding completely.

In general, learners should be made to answer every interaction correctly

- That means preventing them from proceeding past a page until they answer correctly.
- This principle does not apply for random access products primarily intended as performance support or Help.

Response-dependent feedback gives each learner an individualized learning experience.

Good feedback

- *Right!*
- *No, that's the path when customers know what property they want. Try Again.*

No so good feedback

- *Wrong!*
- *The answer is Full Application.*
- *You must have been paying close attention, because, as you can see, you've chosen the correct answer. Full Application is indeed the appropriate path for this customer.*

Trapping users until they answer each interaction correctly is a great way to ensure that every learner participates, which means better learning.