

# Demystifying Instructional Design

A primer  
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## Demystifying Design I

Would you like to design training programs but fear you don't have the skills to succeed? Have you taken a shot at it, but didn't like the result?

Instructional design is definitely a handy skill to have. Learning to do instructional design takes years and many, many hours of intense study—or so some instructional designers would have you believe.

Instructional design is actually not that hard to do well. This the first of a series of articles that blow the lid off the mystery of instructional design, and give you tips on how to succeed with it. In this article, I try to reduce the intimidation factor by de-clawing common myths and revealing lingo to be just that: mere lingo.

### Myth Busting

There are some common myths about instructional design. Probably most prevalent is the idea that you need a degree in instructional design to do it well; no, wait, you need an *advanced* degree.

Second on the myth list is that instructional design is complicated and so takes extra time to do.

Other prevalent myths are that you need to know adult learning theory at tremendous depth, and be fully versed in things such as Kirkpatrick's four levels.

- The only degree you need is a degree of patience (and creativity).
- Instructional design is not complicated, nor does it add time to getting training ready to go. Like any other process, its value is that it makes things less complicated and more efficient.
- You don't need to know adult learning theory, in depth. What you need to know can be conveyed in an article or two, and those articles will follow.
- Asking six training professionals to explain the merits of designing to Kirkpatrick's level two versus four, is like asking six economists how macro economics affects the world order. You'll get six different answers, plus a few comments about how there are actually five or six levels...

## Lingo ~ Through the Looking Glass

It's easy to think you won't succeed with design when you don't even know what people are talking about. Here's a gathering of the high-flown nomenclature that cause many people to feel intimidated:

*"We use an organizational development approach to instructional design, beginning with gap and task analysis, dialogue with subject matter experts, and performance consultation to identify desired paradigms. From there, we will design and develop a blended learning solution, e-learning or instructor-led training intervention that generates cognitive, psychomotor, and attitudinal learning, as well as experiential knowing, in a fully-integrated learning system."*

Here's the scoop: It's not necessarily a lack of education or experience that causes you to run into problems in understanding the lingo. Like Alice, you may be encountering strange ways to describe everyday things. For example:

- "Dialogue" means to have conversations—to talk with other people.
- "Paradigm" means pattern, but sounds so much more regal. In the above example, it refers to results.
- "Training intervention" doesn't mean someone should run into a classroom yelling, "Stop, stop!" It is another way to say, "training program," or might mean the idea is to change existing behavior.

In time, you will easily translate lingo such as that shown above; however, such easy translation often also creates design problems!

### Preventing a Basic Design Error

In our line of work, many words and phrases are wide-open to interpretation, which easily creates misunderstanding. This is true for both fancy language; such as some of the above, and simple words; such as "training."

One hundred years ago, only children, dogs, soldiers and athletes were "trained"; the rest of us were "taught" or "instructed."

In the business world, we currently use the word “training” to mean all kinds of stuff associated with learning and teaching.

This simple word has grown in its implications and ability to generate misunderstanding. If you are working with other people, such misunderstandings can be the death-knell for good design. For example:

If you and your boss or client mean two different things by the phrase “needs assessment,” it won’t be easy to meet expectations.

If you and your colleague don’t agree on what “integrated” means, you could work at cross-purposes.

If you and the consultant don’t actually mean the same thing by “blended learning,” you could end up paying more for design than you intended or not get the results you want.

To prevent a basic design error, no matter what your level of experience in training, take two steps back and:

- (1) Figure out how to explain words and phrases in simple, layperson’s language;
- (2) Discuss and define the meaning of words and terms with co-workers and clients, to guide your work.

Hopefully, this article helps reduce the intimidation factor of design. Next: What you need to know to design well.

### **The Trouble with Trainings**

Many people incorrectly turn the word “training” into a stand-alone noun: **trainings**.

Be advised: There’s no such word.

If you want to express plural training events you have to use phrases such as “training *workshops*” or “training *programs*.”

## **Demystifying Design II**

The key points from the first article were: Keep things simple; and talk with clients and colleagues to create practical definitions of words and phrases.

In this article, I’ll get you started on the design process. I’ll begin with defining “instructional design”: What are you designing and what does “designing” mean?

### **What ~ Back to an Old-fashioned Word**

Our work has become so inundated with fancy words and phrases that it’s easy to lose sight of what our work is really all about. We’re teaching.

Think of teaching as an umbrella. Beneath that umbrella are teaching methods—different ways to teach. Teaching methods include:

- Lecture.
- Socratic method.
- Self-study.
- Training.

Now, we could go deeper into each of those methods; such as defining different forms of self-study. However, now is not the time to do that. To get a clear picture of instructional design, keep your mind on the umbrella: What we’re talking about is teaching.

### **What Does “Designing” Mean?**

“Designing” means choosing teaching methods and organizing them into a particular flow.

But, wait, you say! Why do we call it instructional design; why not “teaching design”?

It could be because the art got its biggest boost from the military, during World War II. Being the military, their preference was for the word “instruction.” (Look “instruction” up in a dictionary, and you’ll see why.)

*See the next page...*

## Getting Started

The design process begins with two questions:

- What do we want people to *know*?
- What do we want people to *do*?

“Doing” is about behavior—something we can see or hear. Doing is also often about applying knowledge, so it’s easy to get the two mixed up. A couple examples might help:

- If you’re teaching people about the impact of Longstreet’s last move in the battle of Gettysburg, you’re giving them knowledge.

If you’re teaching people how to write the sort of essay on Gettysburg that gets a high grade, you’re teaching them to do something with that knowledge.

- The importance of high customer service ratings for your business is about knowledge or perspective.

If you want people to provide good customer service, that means you want them to do something. However, the above knowledge might help as background as you teach customer service skills.

- If your client says, “I want my people to understand that meetings should be useful,” his words are about comprehension, but he is probably actually interested in some change in performance.

As a good designer, you’d ask, “What would your people do, or not do, that would show you they understand that?”

## So What?

You have to be clear on the difference between knowledge and action, because the best methods for teaching the two differ.

However, as you read the examples above, you probably thought the two issues—know versus do—are often both important. You’re right.

- ☑ When you want to teach adults to do something, you must always give them knowledge, as well.

However, the opposite is not necessarily true.

- ☑ When you want to give adults knowledge, you don’t necessarily also have to teach them to do something with it.

Examples: Teaching adults about the history of a company as part of an orientation; teaching adults about Jackie Coogan to help them remember what a CUTMA account is, as part of product knowledge. (I’ll tell you about CUTMAs later.)

## In Sum – Key Points

- To design well—to choose the teaching methods and organize them into an effective flow—you begin by looking at the desired results.
- To be most effective, you should keep it simple: What do you want people to know? What do you want people to do?

If you want this information to sink in, a little practice in applying it will help:

## Exercise

Here’s a list of topics. For each one, figure out if you need to teach adults to know, or to do; or both. Notice I said “adults.”

- ◆ Lead effective meetings.
- ◆ Use transactional analysis in communication.
- ◆ The difference between id, ego, and superego.
- ◆ Product information.
- ◆ Service policy.
- ◆ Deliver great customer service.
- ◆ Corporate mission.
- ◆ Learn about instructional design.
- ◆ Psychology of leadership.

See the next page to check your answers. And, for a really cool summary of the history of instructional design, go to:

[www.coe.uh.edu/courses/cuin6373/idhistory/index.html](http://www.coe.uh.edu/courses/cuin6373/idhistory/index.html)

## Answers

**Lead effective meetings.** *Know and do.*

**Use transactional analysis in communication.**  
*Know and do.*

**The difference between id, ego, and superego.** *Know.*

If you want adults to practice psychology, or pass a test on the topic, or be able to hold a scintillating conversation about the forces of id versus ego... Then you'd teach them to apply the above knowledge so they could *do* those things.

**New product information.** *Know.*

But wait: You probably expect salespeople to apply the new product information in selling, which means you want them to *do* something, right? Well...

If they know how to sell similar products already, they already know how to apply the information. This means you don't need to teach them to do anything.

Analogy: They already to a great job of selling sneakers. The new product is a high-top sneaker. That's not a hugely different product. A little information about the high-top sneaker features and benefits is all you need to teach them.

**Service policy.** *Know.*

If you want people to correctly apply service policy, then you'd also teach them to do something.

**Deliver great customer service.** *Know and do.*

**Corporate mission.** *Know.*

**Learn about instructional design.** *Know.*

That's what these articles do: Teach about instructional design. If the goal was to teach you how to do instructional design, articles would not be the best teaching method to use.

This might bring up questions about confirming success in teaching for knowledge. For example, all I'm doing is writing—how do I know if readers get it?

Well, writers certainly don't know if readers get it and that's another good point to consider as you begin design.

However, the design question is not how can you confirm understanding; the question is should you do that. More on this point in later articles.

**Psychology of leadership.** *Know.*

If you want them to behave like great leaders, then you'd have to come up with what great leaders do (and don't do) and teach them to do that.

**In Sum:** As you might notice, the key issue is whether people are to do anything with knowledge, or not.

As a designer, you have to delve into this fairly assertively as part of your assessment. Tips on how to do that follow!

### What's a CUTMA?

A CUTMA is a Custodian Uniform Transfer to Minors Act account. It's a bank account designed to help prevent grown-ups from wasting or stealing money earned by their child.

Jackie Coogan, Charlie Chaplin's sidekick, was the first child star to be famously ripped off in that manner. CUTMA accounts were created by legislators who were horrified over what happened to him. (Unfortunately, it was too late for poor Jackie.)

### Key Design Points, so far...

- ☆ Instructional design is about choosing teaching methods, and organizing them into a flow.
- ☆ Keep it simple.
- ☆ Create practical, working definitions of words and phrases with clients and colleagues.
- ☆ The design process begins with a focus on two questions:
  1. What do you want people to do?
  2. What do you want them to know?

Next: The basics of adult learning theory.

## Demystifying Design III

In the last article, I said that the instructional design process begins by asking two questions:

- What do we want people to know?
- What do we want people to do?

In this article, I cover another key concept you'll use to design effective training. The concept is called "Adult Learning Theory" (ALT). I'll also bust a popular myth about adult learning.

### Grown-ups are Different (Sort of)

The way adults learn is somewhat different from the way young children learn. This means our experience in helping kids learn is not necessarily going to help us design ways to teach adults (or visa versa). However, one of the things that adults and kids have in common is a tendency to have a preferred mode of receiving information. The modes are:

- Visual (see or picture).
- Auditory (hearing).
- Tactile (touch).
- Kinetic (movement).
- Experiential (must test-drive).

For example, many people absorb information more easily when they can see the speaker but have trouble following an audio tape of the very same content and speaker. We'd say these people are "visual."

If they found it easy to get information from a recording, we'd say they are "auditory."

This is where the myth comes in. These preferred modes for receiving information are often called "learning styles." But these are not truly learning styles because absorbing information is often only part of the learning process.

Remember the two questions shown above? If you want to teach people information (if you want them to know something) then you can leverage the above modes to succeed.

☞ If you want adults to do something with that information, you will have to take it several steps further.

## How Adults Learn to Do

Adults learn to do stuff by doing stuff. Adults learn new behaviors or skills by practicing them. We can make the learning process easier by using a design with these steps:

1. Model the behavior/skill (show them what it looks like).
2. Give them a guide for steps (also often called a "model" or "framework").
3. Have them practice the behavior/skill in a realistic context (e.g., role-play).
4. Tell them what they are doing correctly (provide feedback).

But, wait, there's more!

### Adults Want to Know Why

Alas, adults rarely do things just because you tell them to. When you design for teaching adults, you must include:

#### **Why something works or is desirable:**

Provide background information or concepts that support the desired behaviors. For example:

- One of the ways to get adults role-playing with some enthusiasm is to explain how practice is required for learning. (It also helps to call it "practice," instead of "role play.")
- If you are teaching coaching skills, you might explain the psychology behind different feedback methods.

#### **How the new skill/behavior may benefit them:**

Adults want to know how something relates to their work and/or life. This means you should design an opening in which you present how the new behavior/skill may benefit them.

However, be careful not to position this information as a certainty. Use words like "may" or "might" so you honor their right to make their own decision on value and relevance.

## Back to Modes

Since adults want to know “why,” you’ll need to design good ways to deliver information. The best way to deliver information (the most effective mode) differs from person to person. It’s not practical to figure out each adult’s preferred mode and design to that.

Instead, your design should use all of the modes. This is not as difficult as it may sound. Here are just some ways you can use all of the modes for classroom design:

- Seeing the facilitator, looking at flipcharts and handouts use a visual mode.
- Talking, and inviting participants to talk, use an audio mode.
- Providing paper for people to take notes, or giving them toys to play with, use both tactile and kinesthetic modes.
- Inviting comments and using role-play use the experiential mode.

Many of the above ways also work for non-classroom design; such as paper-based or computer-based self-study. For example:

- Using a mouse or completing a written exercise use both tactile and kinesthetic modes.
- Exercises that ask people to note their thoughts and experiences use a somewhat experiential mode.

## Adults Want to Participate

Adults want to bring their perspective and experience to the party. This is one of the reasons that we often call adults training “participants” instead of “students.”

Ultimately, adults also expect to be able to choose how to apply new information or skills—adapting them to their own style and situation. Our demand to ‘participate’ in a learning process is especially applicable for classroom design (including virtual classrooms).

As you design your class, you should build-in lots of ways to invite active participation or interaction. Some of the things you can build into design include calling on individuals and holding discussions in various formats.

You can also include tips for facilitators in your design; e.g., reminders in the Leader’s Guide to appeal to the group’s experience and ideas; and to encourage challenges from the group.

## On to “Reinforcement”

The last thing you need to know about adult learning theory is that the average adult needs 30 to 40 repetitions of a new behavior/skill/application of information before it’s automatic—learned.

☞ That’s 30 to 40 repetitions of the *correct* behavior/skill/application of information.

These repetitions usually occur after training because it often takes up to a couple months for those repetitions to occur.

The need for these repetitions is commonly called “reinforcement.” Unfortunately, that word downgrades the type of activity needed.

To design effectively, you’ll need to include activities so adults can complete the learning curve once they’ve closed the self-study or walked out of the workshop.

Such activities are rarely under the trainer’s or designer’s control. To get buy-in for these activities: Teach both students and their supervisors about how adults learn and the need for supporting completion of the learning curve.

## Key Points

Design, so far:

- What do we want people to know?

*How can we deliver this information so it appeals to all modes (visual, audio, etc.)?*

*What background for the desired behaviors shall we teach?*

*What background information do we give to show relevance and potential benefit?*

- What do we want people to do?

*How shall we facilitate practice?*

*How will we engage participants in the process?*

Next: Choosing the best tools and methods to teach!

## Demystifying Design IV

In this suspenseful article, we take the information shared in the first three and put it to work on an instructional design challenge.

It was a dark and stormy day. The intrepid instructional designer sat snug in her cubicle, fresh cup of coffee steaming at her elbow. Today's challenge: Prepare customer service reps to deal successfully with a small increase in the monthly fee for one of their products.

She looked at the notes taken in conversation with her internal client, the customer service director. The director said his reps were all very experienced and performance was generally excellent.

"We haven't increased fees in a long time," the director said. "But we can pretty much bet any increase will generate complaints. We don't want to lose customers."

The instructional designer had negotiated a few things with her client. She got agreement to have a couple hours for in-person meetings in the company classroom so she could do some training, if needed. The director also agreed to have his managers help during those meetings.

She also learned the company policy was to give the reps full discretion in reversing the first month's higher fee.

And, the designer had casually observed a handful of reps in action and confirmed their skills were indeed strong.

With all of that in mind, our designer took out her supply of post-its and transferred her thoughts onto them: one issue or point per post-it.

She divided the post-its into two groups: One group was about what the reps needed to do, the other group was about what the reps needed to know.

After moving post-its around a bit more when she noted a logical order, her "do" group included these items:

### DO

- Field questions in a positive manner.
- Calm customers down – defuse upset.
- Position value of product, even with higher monthly fee.
- Evaluate product fit, as needed.
- Offer to reverse the first month's higher fee, when appropriate.
- Complete reversal process in system.
- Refer customers to manager, when needed.

Our designer looked at these post-its and did a little reality check. How much training for skills (the "do" part) would the reps need?

Based on the director's comments and her observations, the service reps had these skills down, so she didn't have to design training to teach them. That was good, since she'd need way more than two hours to do that!

She thought about the service reps' feelings about getting complaints from customers. Handling complaints was something the reps did all day long, but would it be harder to handle this sort of complaint?

According to her notes, the service director had said, "Morale is high, so taking more complaints probably won't be much of an issue. This won't present a major new challenge, either."

But, our designer thought she should check-in on how the reps felt. And, just in case, she decided to use at least one hour of the classroom time to have the reps practice the needed skills as a refresher. She knew she could always end the meeting early if the group demonstrated the know-how. Nobody ever complains about shorter meetings!

That left one hour: How would she teach the "know" part, shown in the group of post-its shown on the next page?

## KNOW

- Amount of increase and when it was applied.
- How and when customers were advised about increase.
- Last time the fee was raised.
- What gives the product value, in customers' eyes.
- Company policy about reversing first month's fee.
- Process for reversing fee.
- Procedure for escalating complaints.

Our designer thought she could use lecture and discussion during the meeting to teach the above, but that wouldn't leave much time to answer questions or practice.

Hmmm—what to do, what to do?

As our designer muddled all this through, the director called to let her know she could only have 90 minutes of meeting/classroom time.

That decided it! She decided to create some pre-work reading and exercises, leaving lots of meeting time for handling questions and providing a bit of practice.

Our designer wrote a self-study document, including instructions for completion, and positioning potential benefits for doing so.

Part of the self-study was simply reading about most of the points in her “know” group of post-its. She included copies of the materials sent to customers about the fee increase.

Procedures for reversing fees were shown on one page in step-by-step form so the page also worked as a job aid.

And, even though the reps already knew all of the products inside and out, she also included a copy of the product job aid.

To pave the way for practicing in the meeting, she wanted the reps go through a thought process about value and other products, in advance. So, our designer included exercises in the self-study, and indicated the reps were to bring the completed exercises to class.

In one exercise, the reps were to make notes about their thoughts about what gives the product its value, in their customers' eyes.

In the other exercise, the reps were to write down indications that the customer might be better off with a different product.

Our designer then designed her training program. Her outline:

- ◆ Open with a “temperature check” – How do the reps feel about dealing with complaints?
- ◆ Briefly discuss policy about reversing fee.
- ◆ Quickly review process and procedure for reversing fee.
- ◆ Discuss pre-work exercises, posting their comments on value and indicators for product change.
- ◆ Post models (descriptions) for skill of calming customers, and positioning product value.
- ◆ Role play practice for 45 minutes or less.
- ◆ Close with a “temperature check” – Do the reps feel ready?
- ◆ (Follow-through with managers, if they do not.)

Our designer called the director, and each manager, and talked about the self-study and the flow of the training program. She requested and received their agreements for support and confirming participation.

By this time, several days had passed, her coffee was cold, and her colleagues wondered what the heck she was doing wearing the same old clothes. But, hey, fashion disaster aside, she'd done a great job with this instructional design challenge!

*See next page for a summary...*

## What the Designer Did

- ☑ She completed a quick assessment and determined the skills required for success were present. This meant that training was not needed; rather, she needed to teach the reps all about the increased fee.
- ☑ Our designer created a two-part program. She used a paper-based self-study to cover the “know” issues because it was fast and inexpensive to create.
- ☑ She included a couple self-paced exercises to get the reps’ brains flowing in the direction she wanted. The self-study materials also provided a handy reference.
- ☑ Perhaps most importantly, using self-study freed classroom/meeting time to cover the “do” issues. Our designer created an experience in which there was plenty of time to air concerns and share best practices for positioning product value.
- ☑ She also included time to practice having productive conversations with customers, and chose role play to make sure practice was as realistic as possible.
- ☑ Though she didn’t need classroom/meeting time to teach these skills from scratch, by posting the models and including practice she was able to refresh skills as needed.
- ☑ And, last but not least, by getting the director’s and managers’ help in meetings she did what she could to ensure any lingering issues would be addressed by those managers.

And so ends this exciting primer on instructional design.

Feel free to use this information as a guide to design your own programs and teaching tools.

In return, we only ask that you never use the word “trainings.”

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