E-Learning for Beginners

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Introduction

Welcome to the wonderful world of e-learning! You've joined an industry that's changing in exciting ways all the time, which makes it both fascinating and sometimes daunting.

When people started using the term "e-learning" in the 1990s, most e-learning consisted of Flash versions of PowerPoint presentations. In many cases, these were the same PowerPoint presentations that trainers and teachers delivered in traditional classrooms. But now, employees and students could view them online.

While rudimentary, these PowerPoint-to-Flash courses planted important seeds for the industry. And when bandwidth availability grew and technology matured, the e-learning industry exploded. Now a complex industry with a dizzying number of tools, technologies, players, and terms, it can be hard to navigate.

If you're a new e-learning developer, it can be downright overwhelming. We know because we've been there ourselves: newbies unsure of what "e-learning" even meant, much less what was involved in creating it. Now we're professional course designers at the forefront of the field, and we're eager to share what we've learned with you, so you can quickly and confidently get started.

In this e-book, you'll learn:

- What e-learning really is

- How e-learning can benefit your organization

- What's involved in creating e-learning

- Methods for measuring e-learning effectiveness

- How to get courses to your learners

Let's get started by taking a closer look at what we mean by "e-learning."

What Is E-Learning?

So, what exactly IS e-learning? In short, e-learning is education or training delivered electronically.

In traditional education and training, a teacher or trainer imparts knowledge in a physical classroom setting. Learners listen, watch, and interact with the teacher or trainer in person.

With e-learning, learners consume educational content on computers, tablets, and smartphones. And just what is that "educational content"? Well, it can be so many different things. It can be a series of narrated slides, searchable PDFs, videos, screencasts, software simulations, or a richly interactive slide-based course.

Many people would recognize a basic e-learning course as a slide-based online activity that contains simple navigation buttons (such as "next" and "back" buttons) and incorporates quizzes with true-false or multiple-choice questions. But not all e-learning courses share the same thumbprint. For example, an e-learning course could be a software simulation that demonstrates the click path through an application, or it could be a very interactive course that features role-playing and complex decision-making.

Even with all the diversity of e-learning, there are some common elements you'll often find.

Self-Paced

One of the most convenient characteristics of e-learning is that it's self-paced and asynchronous. This means there's no set time for the learning to take place. Unlike traditional learning, where students must learn at a set time and pace of the instructor's choosing, e-learning can happen at any time, at any speed.

We should note that while there's typically some degree of freedom to learn at one's own pace, some organizations will set deadlines for completing e-learning. For instance, salespeople might be required to complete sales training for new products before a product launch, or a student might have to finish a course before the end of the school term. And while e-learning is typically asynchronous, it can also be a synchronous activity, such as a web conference or internet chat.
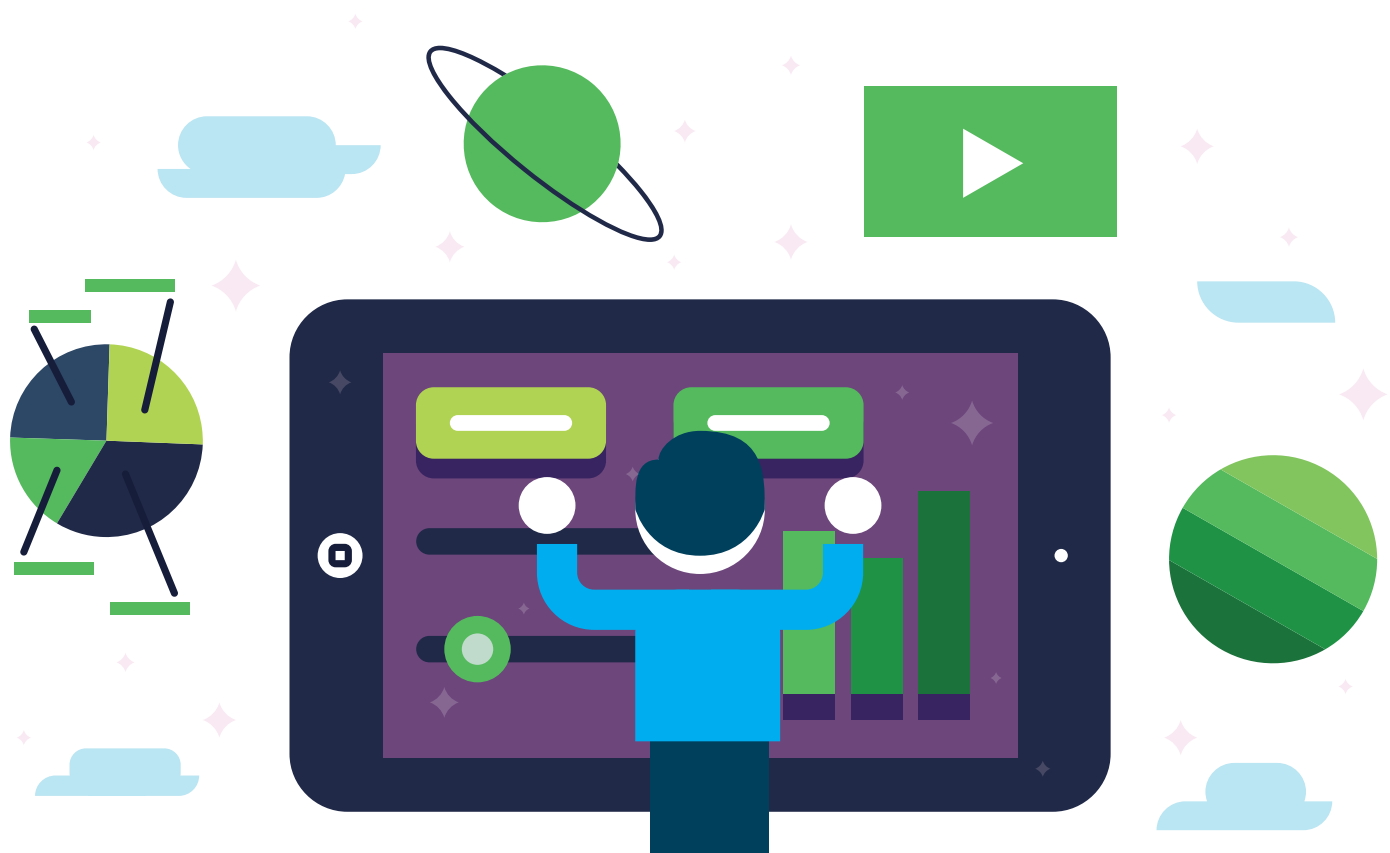
Interactive

Typically, the most engaging e-learning is interactive. Rather than being a passive experience, where the learner just soaks in knowledge through reading or viewing content, interactive e-learning requires learners to be intimately involved. They click or touch the screen. They drag content from one place to the next. They make choices that impact what other content they see. Interactive e-learning may incorporate critical-thinking activities such as games, quizzes, and decision-making scenarios that encourage learners to explore the consequences of their choices in a safe way. While there's plenty of e-learning developed every day that's not interactive, the most effective e-learning typically is.

Media-Rich

E-learning often includes multimedia. Frankly, it's pretty boring to click through a series of PowerPoint slides that have nothing but bullets or paragraphs of text on them. In fact, when we *surveyed more than 500 online learners*, they noted that their biggest frustrations were having to read lists of tedious procedures and regulations and getting bored with courses. The most effective e-learning captures a learner's interest and attention, engaging them in a real way so that they actually digest the material. That's why many e-learning courses include animation, audio, and video—creating a multimodal, immersive, and effective learning experience.

No matter what e-learning looks like, it will generally fall into one of two categories: information-based or performance-based. Information-based courses are just that—they are packed with info a company needs to share with employees, often to comply with regulatory requirements. Information-based courses are designed to increase awareness or certify understanding, not change behavior. E-learning that's about a new company policy or an annual compliance course are good examples of information-based courses.

On the other hand, performance-based courses seek to change behavior, such as applying a new skill on the job. These kinds of courses can drive measurable results that make a real impact on the business. For instance, when a support person learns how to respond effectively to an irate customer, it can boost customer satisfaction and retention rates.

You're probably getting the picture: E-learning comes in all stripes and colors. In fact, some e-learning courses don't look, feel, or act like courses! As an e-learning developer, that gives you tremendous freedom. Up next, we'll explain how e-learning can benefit your entire organization.

Benefits of E-Learning
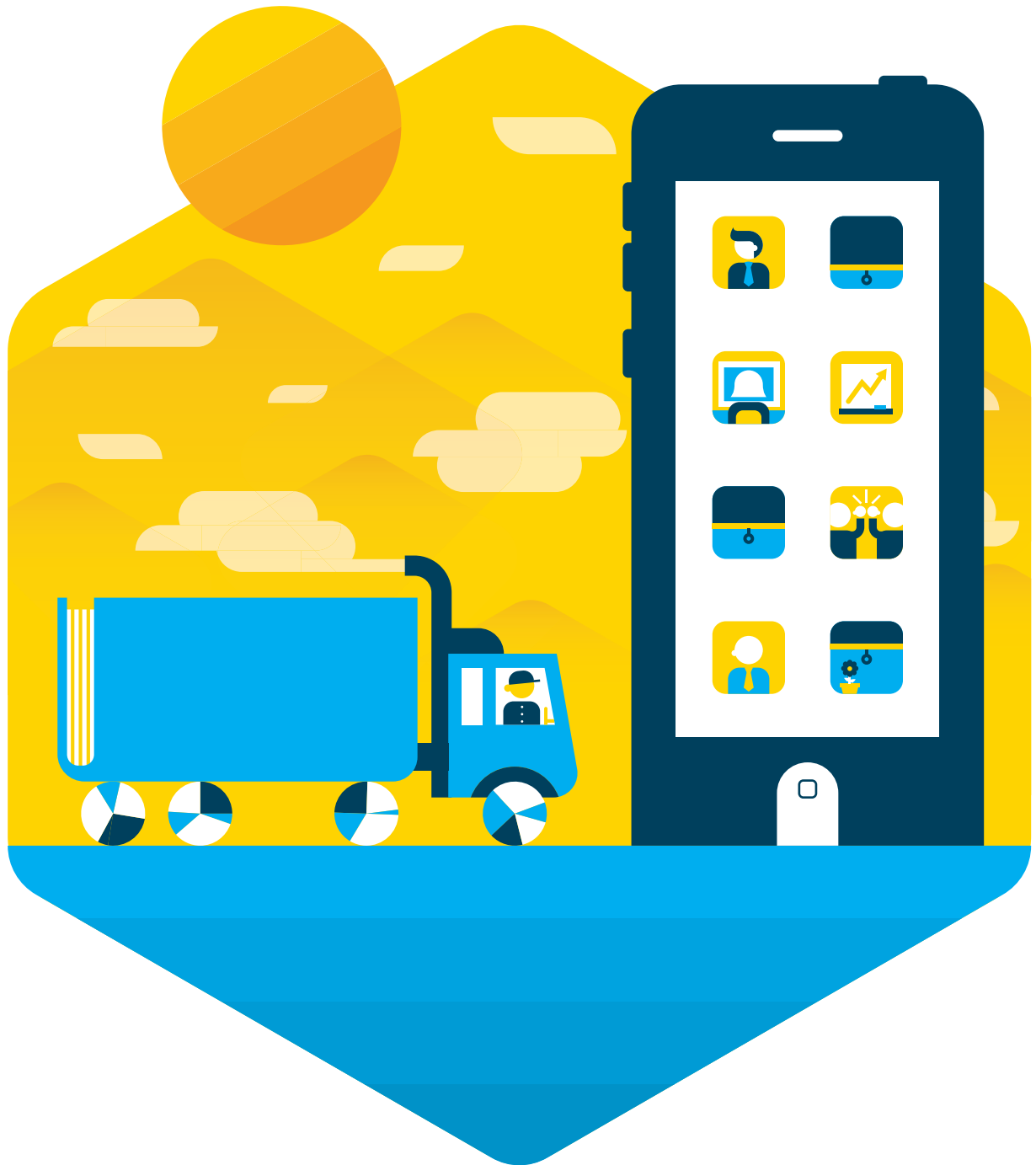
When your trusted coffee-maker finally kicks the bucket after brewing one too many cups, you can either brave mall crowds to choose from a limited selection of replacements, or order a well-reviewed model on Amazon.com and have it delivered directly to your doorstep. Amazon delivers what you need quickly and easily, without the hassle of running to the mall.

Well, e-learning does the same thing for education and training. You don't have to traipse down to a classroom with a crowd of others. With e-learning, you're taught what you need to know quickly and easily, wherever you are. It's learning, delivered right to you. And that yields big benefits for your organization. Let's take a look at what those are.

Cut Costs and Scale

One of the biggest advantages of e-learning is that it costs less and is scalable in a way that in-person training simply isn't. In fact, corporations save 50-70% when they replace instructor-led training with e-learning.*

*(Source: Institute of Management and Administration Survey)

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With traditional training, an organization invests resources in having an instructor prepare a course. Perhaps she spends a few weeks preparing a PowerPoint and a series of workshop-type activities. Then, a group of learners huddles together in a classroom for a few days to consume that content. While they're there, they aren't doing their core jobs. If they have to travel for the training, they're racking up travel costs. And once the training is done, it's done. The next time the organization wants to train a group, it goes through the same process all over again.

But with e-learning, organizations can invest once in a course, then disperse it to everyone and anyone in their workforce, wherever they are. So much more scalable and less costly! And because staff can take the course at their own pace, it's easier to fit it in around their other duties.

Reach Learners Everywhere

No computers where your organization's learners are? No problem. E-learning can also be accessed from tablets and smartphones. This means your learners can be out in the field, on the go in even the most remote locations, and still access learning on the device that's most convenient for them. (And remember, e-learning is great for learners, too. Now they can take learning at their own pace, on the couch or while they're traveling on the road. It puts THEM in the driver's seat.)

Adapt at the Speed of Business

E-learning can also help your organization adapt at the speed of business. Need to get your sales team up to speed on a new product quickly? With

e-learning, you create a course once, often in a matter of hours, and share it instantly with thousands of users. And when regulators want to see who's gone through compliance training, sifting through training registrations and attendance sheets can quickly turn into a record-keeping mess. With e-learning, you can automatically track and report on user completions and scores.

Go Green

E-learning can provide an eco-friendly alternative to classroom training. Cutting travel from the training equation not only lowers costs, as previously discussed, but it also helps reduce carbon emissions. This is a plus for any organization committed to reducing its carbon footprint.

Empower People

Everyone benefits when your organization puts learning into the hands of the people. With e-learning, the training team can shift its focus from

planning and administering traditional classroom training to creating the best possible learning experiences that can be accessed from anywhere. And with on-demand access to learning, your learners are empowered to perform and grow in their roles—and beyond. Last, but certainly not least, business leaders and managers can dramatically reduce training downtime with e-learning, as well as keep everyone focused and productive. In short, e-learning empowers people to perform.

With all these benefits, it's no wonder the e-learning industry is growing so rapidly! Thankfully, there are people like you to help organizations capitalize on all the goodness. In the next section, we'll explore what you need to know to build effective e-learning.

Creating E-Learning

Imagine you're a baker and need to bake an e-learning cake. To do this, you'll need three things. You need **people** to help you make the right kind of cake: one that will be tasty and filling. You need a **process**, like a recipe with instructions for preparing the cake, from gathering the best ingredients to making sure each ingredient is combined in the right proportions, to get the flavor you want. And you need **tools** to help you prep the ingredients, bake the cake, and serve it.

In this section, we'll walk you through each component so you're well prepared to build your very own e-learning cake.

People

Let's use a real-world example—sales training—to illustrate how people, process, and tools all work together. Imagine that you've been asked to create training for your company's sales team. The team's goal is to increase sales revenue by 15% in the next quarter. Who, how, and what do you need to help them reach this goal?

First, you need people. Remember how we said that everyone benefits when your business puts learning into the hands of the people? People are the focus of e-learning and also the means to creating it, so let's start there. The larger your company, the more learners you have, but that may also mean you have more people with distinct roles and responsibilities who can help get your e-learning project off the ground. In larger organizations, a typical e-learning project team may include stakeholders, project managers, subject matter experts, instructional designers, graphic/media designers, e-learning developers, user testing/ quality assurance people, and IT support. The smaller the company,

the more these roles and responsibilities are often collapsed into fewer people—or even just one! But whether you're part of a large project team or a team of one, nearly every e-learning project involves three roles: clients/stakeholders, subject matter experts, and e-learning designers. Let's take a look at each of these.

Clients/stakeholders are the people who've identified a business goal and have asked for your help in achieving it. In our sales training example, the client might be the vice president of sales who comes to you for help growing sales by 15%. She thinks her team, with some training, will do a better job of closing sales.

Subject matter experts (a.k.a., SMEs) have the content or knowledge that learners need to meet the client's goal. Clients and SMEs are sometimes one and the same. Again, sticking with our sales training example, there may be a few different SMEs for that course. One could be a sales manager who knows the job of a salesperson inside and out and is responsible for

supervising and coaching the team. One could be the product manager who provides all the product details used by the sales team to help sell products. Or you could have SMEs on the product marketing team who are experts in how the products meet the needs of your company's customers. Your SMEs could also be folks from the legal department who oversee the product and service disclaimers the sales team needs to know when dealing with customers.

E-learning designers (a.k.a., e-learning developers, instructional designers, and training designers) are responsible for creating the course. They are the bakers of e-learning cakes. If you're reading this e-book, this most likely describes you. By following a design process, you act as a consultant with clients, subject matter experts, and learners. You ask a lot of questions to help understand the goals of the training and identify knowledge gaps. Then you use that information to design and develop e-learning that will meet your clients' goals. (Don't worry, we'll talk below about how you go about doing just that.)

Process

The second thing you need to make your e-learning cake is a process; that is, the recipe you'll follow for creating the right kind of course. When it comes to designing e-learning, there are a number of processes that people use, but they all have three general steps in common: planning and analysis, transformation, and measuring course effectiveness. Let's take a look at each of these steps.

Planning and Analysis Overview

The planning and analysis step is really two phases with a lot of overlap. In some organizations, these two phases are very distinct and a good portion of the project planning is handled by a separate training project manager. In many other organizations, the task falls to the e-learning developer. Whether you're doing all the project planning and analysis on your own, or only a small portion, it's good to understand the goals of this step in the larger design process so you can see how it enables the subsequent steps.

Fundamentally, the goals of the planning and analysis step are to organize your project, identify the training gaps, and develop a strategy for filling those gaps (we'll define these terms for you in context later). The way you'll accomplish these goals is to ask a ton of different questions of the client, SMEs, and learners. Download this helpful list to get you started.

Everyone you talk to will approach the goal from a different perspective. A client or SME probably has a high-level, strategic view of the goal, whereas a learner has more of a feet-on-the ground, tactical perspective.

Balancing these viewpoints is an important part of evaluating what type of training and content is needed to bridge the knowledge or skills gap.

Planning Kick-Off

Before you can get to the point of identifying specific training needs, you must understand your project needs. This is where planning comes in. A good way to start the planning phase is to invite your client to a project kick-off meeting. The point of this meeting is to ask questions that will help you better understand the project goals and nail down the project logistics, such as the client's target dates for rolling out the training, their budget, and what people you might need for the project. Later, you'll use the answers to these questions to formulate a project plan or timeline and to zero in on the analysis questions you'll need to ask to get a clear understanding of the audience.

Project kick-off meetings are also a great way to set expectations and get everyone to agree on roles and responsibilities. Knowing who will be the final decision-maker when issues arise will help you know who to turn to when it's time to move the project forward. And since clients are often operating at 10,000 feet and don't know enough about the day-to-day operations to verify the accuracy of the content, ask your client if there's a SME who can take on that role. Then make sure that person is brought into the loop.

Another topic you'll want to discuss in the kick-off meeting is the launch. For the course to be successful, you'll need to talk through the project roll-out. Identify who will communicate the course's availability to learners, who will be required to take the course, and whether course

completion needs to be tracked. You'll also want to agree on a process for gathering feedback, discuss how you'll incorporate feedback into the course, and make plans for maintaining the course after its launch.

When you leave the project kick-off meeting, you may find that you still have a lot of planning to do! That's okay, because the time you invest in planning and organizing your project now will pay off in the form of reduced confusion and agony later. Because of this, you should aim to leave the kick-off meeting with two action items.

First, reach out to other project contributors, such as additional SMEs identified by the client, a pilot group of learners, IT support, or multimedia developers. Make sure they understand the project and are prepared to contribute.

Second, pull together a high-level project plan or timeline. It's important that you and your client have a common understanding of how long it will

take to create the training. While you may be tempted to use a complex tool such as MS Project, we think it's a lot easier to manage a plan or a timeline using a spreadsheet or even a simple table. Of course, the choice is yours.

For more help on planning your course, check out our E-Learning 101 Series, *Planning Your Course*.

Gap Analysis Overview

With planning under your belt, you're ready to move onto analysis. Some people refer to the analysis phase as audience analysis or gap analysis. In other words, it means getting a handle on the gap between where learners are, in terms of skills and knowledge, and where they need to be to reach the client's goals. Once you understand this gap, you can develop the proper training to fill it.

The purpose of the gap analysis is to pinpoint gaps, focus on the goals, and identify the strategies you'll use to address the gaps and measure the impact of your training on the end results.

First, you'll need to determine whether the gaps are due to the learners' lack of skills or knowledge. These are the areas you'll want to focus on in your training. Second, you should define learning objectives. The client gave you a terminal objective—in our example, to increase sales revenue by 15%—but with your new understanding of the learners' skills and knowledge (and the gaps therein), you'll need to break that down into specific actions your learners need to take or knowledge they need to acquire to meet that goal. For example, "The learner must demonstrate the ability to overcome customer objections," or "The learner will accurately discuss product features and benefits with customers."

With clear objectives defined, you're ready to identify a learning strategy. A learning strategy is the method you'll use to teach your learners— for example, determining whether you need an information-based or performance-based e-learning course.

Finally, establish a measurement strategy. This will help you evaluate how effective your learning strategy was in achieving the client's goal. For example, you might pull reports on closed sales percentages that let you compare learner performance before and after training.

Performing a Gap Analysis

You can start identifying the gaps by talking to various folks in your organization. Let's use our sales training example to explore who you

might want to talk to and what you might want to ask them. Keep in mind that your course topic and objectives will dictate who you'll need to interview for your gap analysis. But hopefully this example will give you food for thought.

Since we're trying to improve sales of a particular product in our example, the product manager and the marketing team are great resources for helping you build your understanding of the product. These SMEs know how the product works, its features and functions, and how to present it to your company's customers. Having a better understanding of these things can help you determine whether the sales team is struggling to highlight the right product features or has difficulty addressing customer confusion about some aspect of the product. For our example, you could ask the product manager about the key product features and unique selling propositions, as well as get insight into competitive products and positioning. Armed with this information, you'll understand the product the way the sales staff needs to understand it, which will inform how you will design your course.

To better understand the learners, their environment, and their challenges with selling the product, start by talking to the sales manager. The sales manager should be able to paint a "day in the life" picture of a salesperson, starting with her sales targets and ending with the methods she uses to close each sale. The sales manager can also provide information on how the team's performance is evaluated, which is useful because it informs how the organization defines success and will hone the key areas of focus for your training. Hopefully the sales manager will paint a clear picture of the sales team's strengths and weaknesses. You'll

also want to talk directly to a sales team member (preferably one of your learners) to get an in-the-trenches perspective.

One of the benefits of talking with and observing your learners in their work environment is that it gives you a better sense of the mechanics of how they perform their job, as well as the emotional aspects of their job. This, in turn, can highlight knowledge and/or skill gaps from the learners' perspectives and can help you find that attention-grabbing hook or creative treatment that really motivates and engages them in learning. To get the most of your learners' time, ask them to talk about what works and doesn't work well about selling the company's product. What part of the

sales process do they find most challenging? What systems do they use and how well do they work? What is hard or easy about selling the product to customers? You get the idea.

Another audience to consider in your analysis is the customer. The great thing about talking with customers is you can get a sense of the end-to-end sales and product experience. Conversations with customers can help you glean things such as how well the product was explained by the salesperson, what the purchasing process was like, and whether they would buy the product again. Later, you can compare customer information with the other perspectives you've gathered.

So, you've asked insightful questions of your client, SMEs, learners, and customers—now what? What do you do with all the information? It's time to start synthesizing and drawing some conclusions from all the information you've collected. Those conclusions will help you focus your learning strategy, learning objectives, messaging, and creative treatment.

To draw conclusions you need to look at the information you've gathered with a focus on the cause of the gaps. Gaps tend to fall into two categories: a gap in knowledge or a gap in skills.

Let's look at a quick example.

Vinh, one of the learners you spoke with from the sales team, thinks he would close more sales if he didn't struggle so much with overcoming customer objections to the product's price. He says that the sales scripting from the product marketing team doesn't really reflect the kinds of pricing objections he hears from his customers.
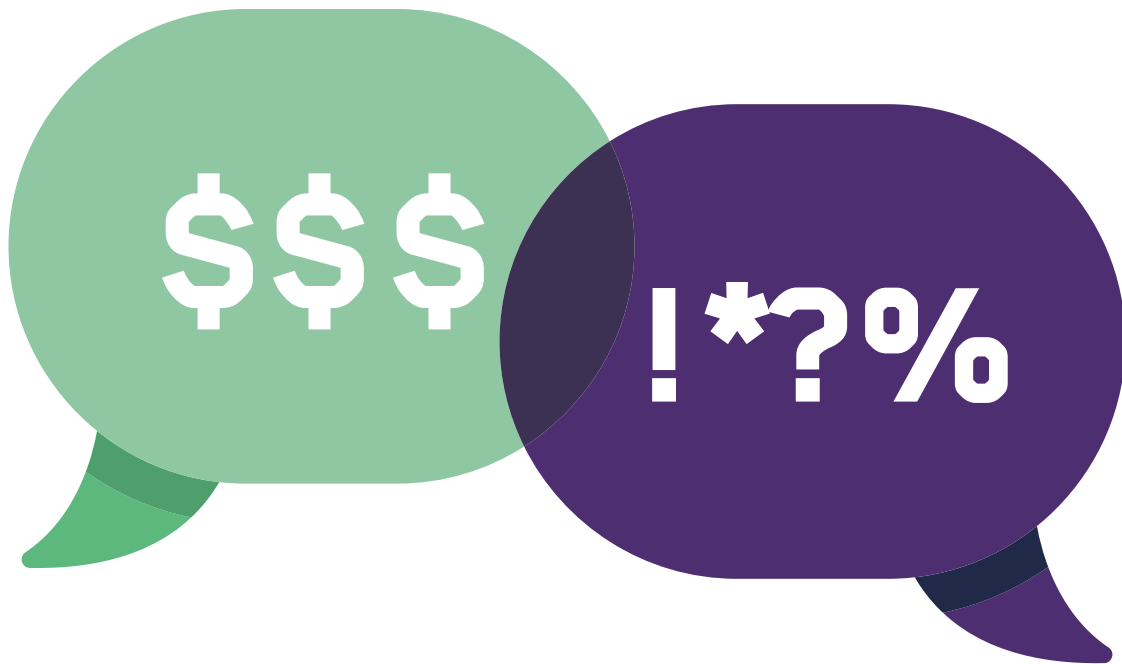
Based on Vinh's information, what kind of a gap do you see here—knowledge or skills?

If you think that Vinh's perspective speaks to a gap in skills, you're on the right track. That's because it's pretty clear that Vinh is aware of the company's sales process. He even knows what portion of that process gives him the most trouble and why. He just lacks the skills for dealing with one aspect of the process.

But before you start building a course on overcoming customer objections, first you need to balance Vinh's perspectives with the other information and perspectives you've collected. For instance, your product marketing folks may have shed some light on the product's position in the larger marketplace. Balancing your new understanding of the competitive landscape with Vinh's observations about not feeling prepared to overcome a customer's objections to the product's price can

give you some more insights into how to address the skills gap with your course.

Maybe your competition has recently lowered their prices, resulting in new pricing objections the sales team was not equipped to respond to. Or maybe the sales team needs to understand how to use the current sales scripting to focus on the right product features to highlight so that customers have a better appreciation of the product's value. Using a simulation or a role-play interaction could be a good way to address these needs because it would give Vinh and his peers practice responding to objections and using sales scripting to emphasize different product features that justify its higher price.

You can also look at data to help balance perspectives and validate your conclusions about the nature of the gap. Take a look at how the sales manager's observations square with the client's interpretation and how they stack up with the sales team's interpretation of their own performance. Looking at what the data says about customers' product and sales experiences could also be helpful in understanding the nature of the gap and how to fill it.

If you're thinking that planning and analysis seems like a lot of fact-finding, you're right. But time spent on having good, meaningful conversations now will help you craft more meaningful and engaging e-learning later. All the questioning, thinking, and analyzing you do should result in a clearer understanding of the gap and what it will take to fill it. Through the analysis process you'll surface a learning strategy (knowledge-based or performance-based course), training objectives, and ways you can measure the effectiveness of your learning strategy on achieving the client's objective.

We should note that we've given you an overview and example of how you might approach gathering and analyzing information. But every project will be different and your gap analysis may vary. And, the truth is, not every project will require a vigorous planning and analysis process. Sometimes the client can give you everything you need up front. In some cases, you may even have enough first-hand knowledge of an issue to understand the gaps and how to fill them with effective training.
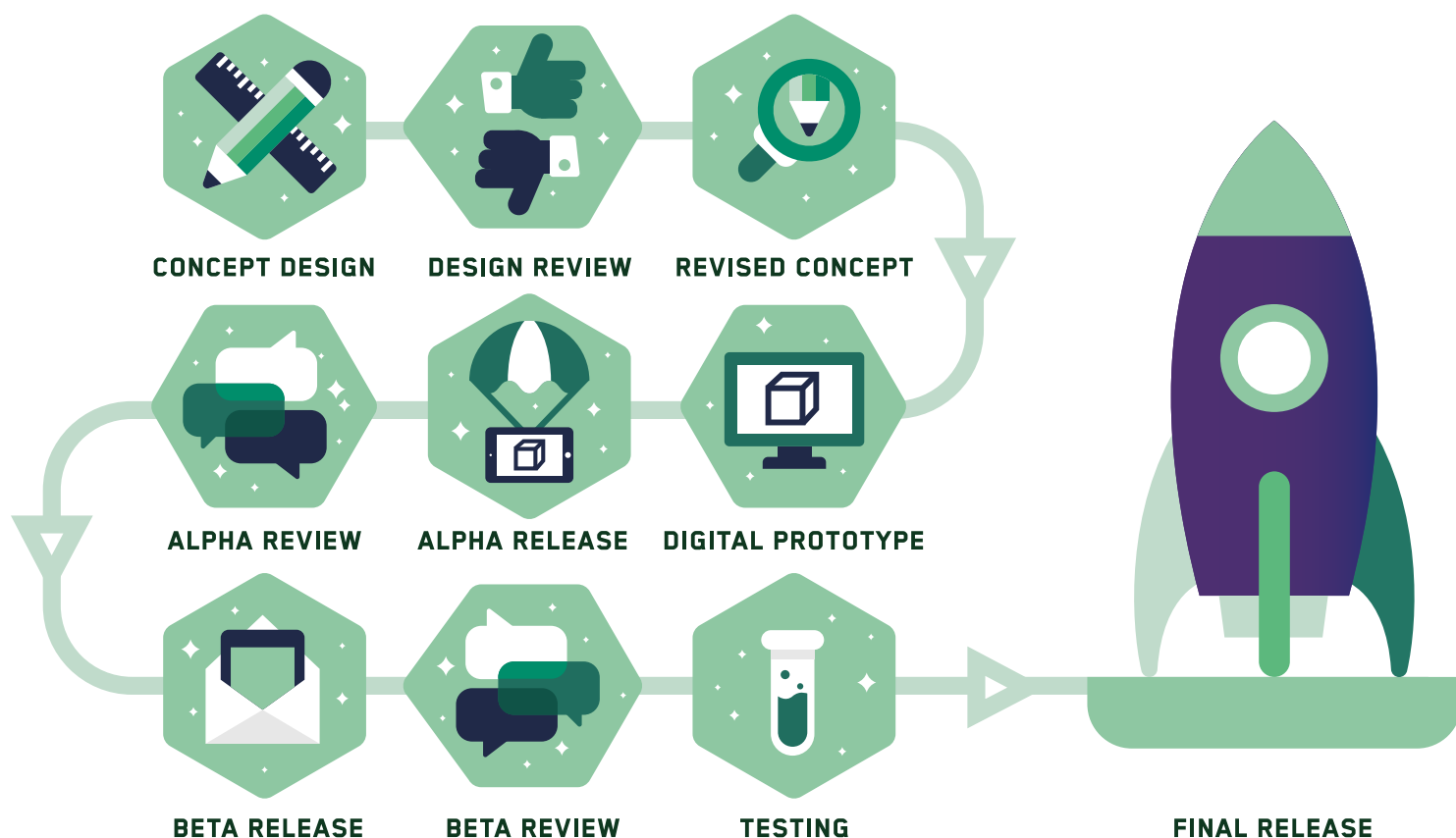
For more pointers on performing a gap analysis, check out these helpful articles and books:

1. *The 3 Types of E-Learning Analysis*

2. *Needs Analysis: When Is E-Learning the Solution?*

3. *How to Do an E-Learning Audience Analysis*

4. *From Analysis to Evaluation: Tools, Tips, and Techniques for Trainers by Dr. Jane Bozarth*

Transformation

Once you've absorbed all the raw content you can handle, it's time to turn it into an engaging and effective course. We like to call this transformation, and it's what the design process is all about. During this phase, you can use brainstorming, mindmapping, sketching, or deep thinking—basically whatever it takes to get your creative juices flowing—to take the information you have and reimagine it on paper, and ultimately in your authoring tool of choice. But it doesn't all come together in one fell swoop. Transformation involves several key steps.

The first step of transformation is creating the initial concept design.

CONCEPT DESIGN   DESIGN REVIEW   REVISED CONCEPT

ALPHA REVIEW   ALPHA RELEASE   DIGITAL PROTOTYPE

BETA RELEASE   BETA REVIEW   TESTING   FINAL RELEASE

For e-learning courses, a concept design could consist of a screen mockup to illustrate how the user will navigate the course, a content outline to validate the structure of the information and activities, a highly detailed screen-by-screen storyboard—or all of the above. The level of detail for your initial concept design is usually defined by the project's timing, budget, and goals. Check out this sample storyboard for ideas on how to put yours together.

Next, you'll need your client and SMEs to review your concept and provide feedback. This is a crucial step, as it ensures you're headed in the right direction before taking the plunge into course development.

With feedback from the client and SMEs in hand, you'll make some revisions to the concept design. These revisions often continue with periodic reviews and feedback from the client and SMEs, even as you go into the next phase—course development.

The course development step can be different for every project, but it almost always begins with a digital prototype. This step is where your e-learning cake batter is transformed into an e-learning cake. Sometimes people have a hard time visualizing designs on paper, no matter how detailed or well-documented they may be. That's where digital prototypes come into play. Rather than develop the entire course before getting your client's initial reaction to your "live" design, a digital prototype is a great way to give clients, SMEs, and even learners a sneak peek at the course.

Created in an authoring tool (which we'll discuss more below), a digital prototype can be just a few screens or the first section of the course. Some e-learning developers move from a paper storyboard to a digital prototype while they're still storyboarding. Others opt to build a digital prototype shortly after they've completed the final storyboard but before they've developed the entire course. It's really up to you, but there are positives and negatives to each approach.

Some people skip storyboarding and go straight into prototyping because they find it saves time and they get more meaningful feedback from clients and SMEs who review the prototype. Other people think storyboarding is more essential because it forces you to create a highly detailed blueprint of the entire course before it's built. Many of those same people choose to forgo prototyping in favor of storyboarding, while others believe both steps are essential for ensuring the best outcome.

People who use both storyboarding and digital prototyping as part of their e-learning design and development process usually get feedback on both the storyboard and the prototype before building out the entire course, but this takes more time, as you can imagine.

However you decide to approach prototyping, keep in mind that it's extremely useful for surfacing hidden requirements or a client's design preferences—things that can be very hard to elicit from clients who don't see a prototype. For more information on storyboarding and concept design, check out the E-Learning 101 Series, *Developing Your Course*.

Once you've got approval on a storyboard and/or a digital prototype, it's time to build your alpha release: the first full release of your course. You'll find that everyone has a different interpretation of what an alpha release should look like, but, at the very least, you should expect to present a version of the course that reflects the preferences and requirements

communicated by your client during the storyboarding and digital prototyping process. Your alpha release should also show the content in its transformed state. This includes a working user interface (the buttons and other course features that allow users to move through the content), any narrative devices such as stories or scenarios, and fully functional interactions, including quizzes.

Just as your alpha release is your chance to show how you incorporated the client's feedback from the prototype, the beta release is your opportunity to demonstrate how you incorporated feedback from the alpha release. In essence, a beta release gives the client one last chance to make minor changes before you publish a final release. Many people upload the beta release to their LMS or to a web server for testing. That way, if they find any functional issues, there's still time to address bugs and make minor adjustments before the final release.

Pending any revisions to the beta release, you're ready to reveal your finished product with the final release. In this phase, your final published

e-learning project is uploaded to a hosting platform, or LMS, and is ready for learners—much like a cake ready to be eaten! Now your course is available to learners, and you'll want to get the word out. Some organizations use a simple email to announce the availability of a new course. Others come up with more elaborate internal marketing campaigns to generate awareness and excitement for the course.

Measuring Course Effectiveness

This is it: the final phase of your process. Did your course meet the client's goals? Was your cake both delicious and filling? Measuring e-learning success depends a lot on how you defined success back in the planning and analysis phase. Was your course designed to change your learners' behavior (performance-based) or to inform them (information-based)?

If your course was designed to change the learners' behavior, you'll want to correlate positive changes in their performance with taking your course. Using our sales training example, you could compare sales revenue at the individual level to see if those who completed training generated more sales than those who hadn't. Did their closed sales rise by at least 15%? Remember, the vice president of sales needed to boost sales by 15% and was counting on your training to help meet that goal.

If your course is information-based, you can use measurements such as who completed the course or how learners scored on a quiz to rate its effectiveness. For instance, if course completions were high but quiz scores were low, you may need to rewrite your quiz questions so they better match the content. Alternatively, you could rewrite the content so it better prepares learners for the quiz. If you don't have an LMS for tracking quiz scores and completions, that's okay. Sometimes all you need to know is whether the e-learning you've provided is being accessed by learners and that they're finding it helpful. In those cases, using a simple survey or other feedback mechanism can help you see what learners felt was most valuable about the training.

The point is to use the measurement strategies you identified and defined in the planning and analysis phase to make sure all your hard work has paid off. Sometimes the payoff is in the form of information getting to the learners who need it and sometimes that payoff is in the form of changes to performance. Keep in mind that when it comes to measuring the impact of your e-learning, there are many metrics you can use to define success, but the most important metric is the one provided by your client. For more help on measuring course success, take a look at our E-Learning 101 series, *Deploying and Measuring Your Course*.
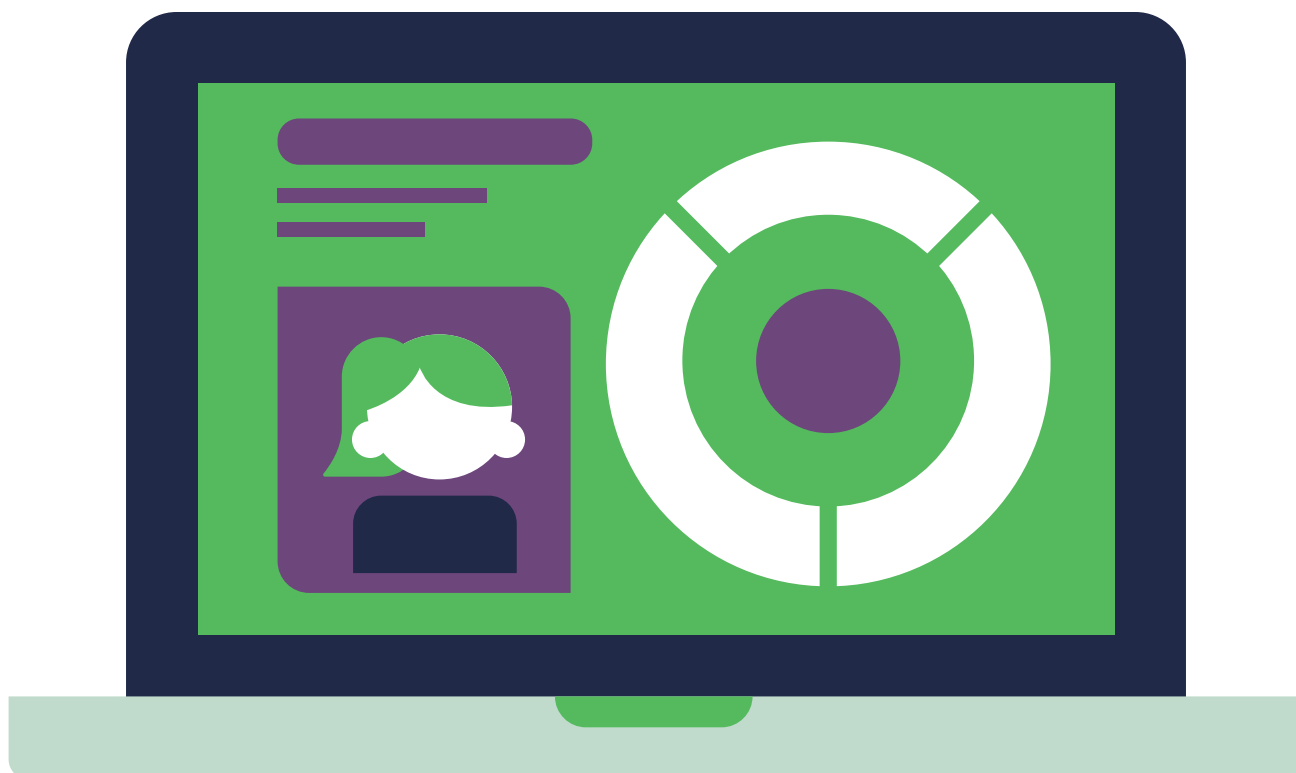
Tools

The third and final thing you'll need to move beyond a static recipe to a satisfying, rewarding e-learning cake (as alluded to above) are tools. Tools are akin to the measuring cups, bowls, mixers, cake pans, spoons, and oven you need to make a cake. For e-learning, you need an authoring tool, a hosting platform, and occasionally some other specialized applications to develop, publish, and share your course.

An authoring tool is just what it sounds like: a tool you use to author, or create, your course. Authoring tools make it possible to develop rich multimedia interactions with text, images, animation, audio, and video. They're typically broken down into two categories: form-based and freeform tools.

Form-based authoring tools provide you with pre-built interactions and/or quiz questions. All you need to add is the text, images, and other media. You can also change colors to match a specific theme or brand style. *Articulate Engage* (part of the Articulate Studio suite) is a perfect example of a form-based tool. It offers 20 prebuilt interactions you can customize with your own information and media. Here are some examples of form-based e-learning activities created using Articulate Engage '13: *Circle Diagram*, *Bulletin Board*, and *Pyramid*.

Form-based tools are great for people who need to develop content quickly. They also work well for people who are less technically savvy, or who are newer to e-learning and don't want a steep learning curve. These tools offer simplicity, but at the expense of customization. It's a trade-off many people are happy to make when "quick" and "easy" are their top priorities.

Freeform tools let you create custom e-learning. With freeform tools, the only limit is your imagination! The best freeform tools on the market, such as the industry favorite *Articulate Storyline*, are also designed to be super simple to use. Freeform tools help you create highly interactive, highly customized e-learning, quickly and easily. They also scale with your growth as a designer, and let you build anything from simple e-learning all the way up to highly complex e-learning. You can find great examples of freeform e-learning content created using Articulate Storyline in the *E-Learning Heroes* community. Here are a few of our favorites: *Sliders and Motion Paths*, *Interactive Map*, and *Drag-and-Drop Game*.

There are also authoring tools that offer you both form-based and freeform capabilities. Articulate Storyline and *Articulate Quizmaker* are both good examples of these kinds of tools. They let you choose from two different development modes: Form View and Slide View. With Form View, you simply fill out a form to create a quiz (form-based). Switch to Slide View and you can design your slide any way you want (freeform). To get a clearer picture, check out these Articulate Quizmaker examples: *Freeform Pick-One Scenario*, *Tablet Inspired Quiz Template*, and *Freeform Drag-and-Drop Knowledge Check*.
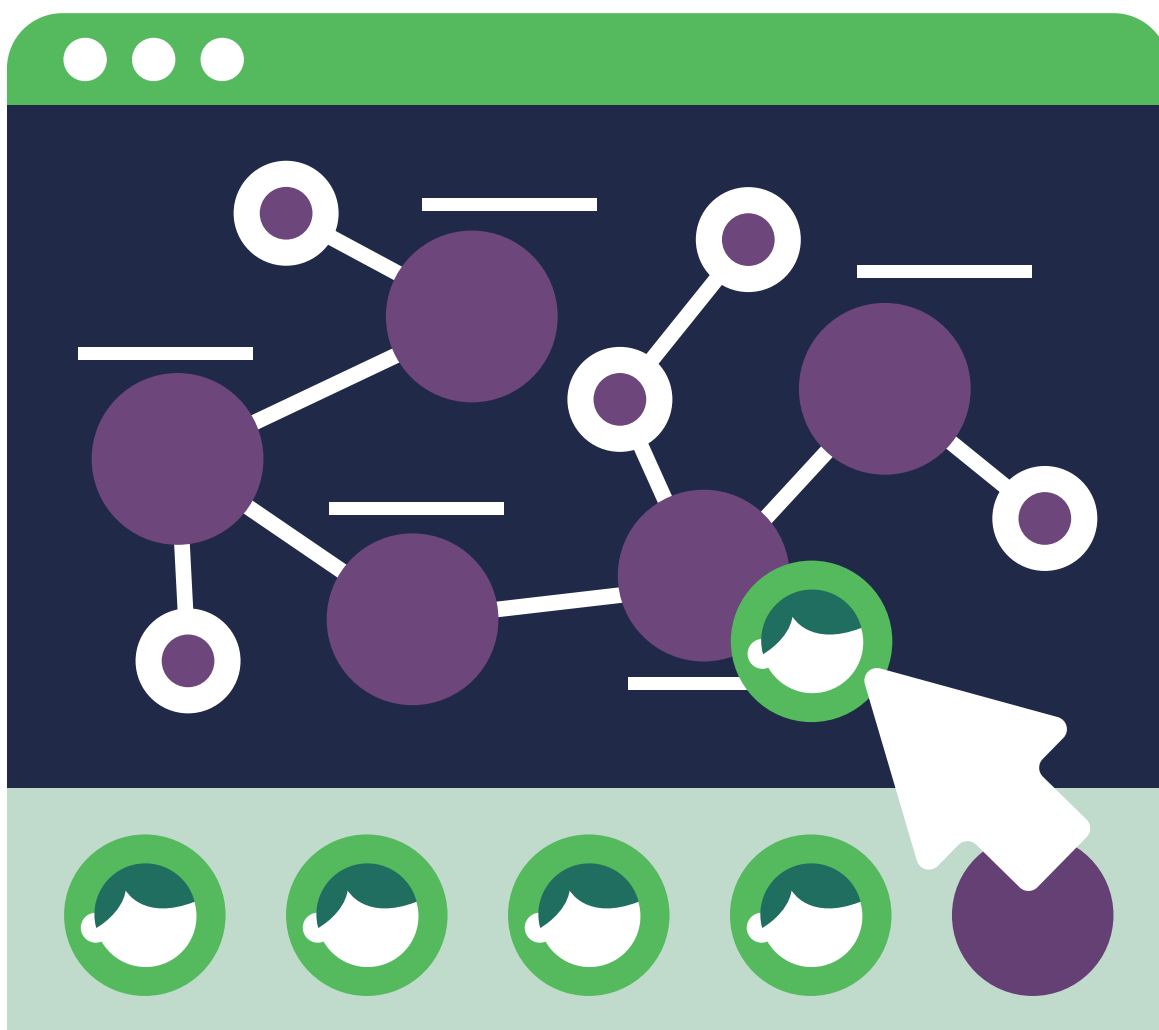
To learn more about choosing an appropriate authoring tool for your project, check out this article: *Top 9 Considerations for Choosing the Right E-Learning Authoring Tool*.

Once you've published your finished e-learning project with your authoring tool, you'll use a hosting platform to let your learners access it. Some examples of a hosting platform include a company website or a learning management system (also called an LMS). We'll talk more about hosting platforms in the next section of this e-book.

Finally, supporting tools are a catch-all category for any software used alongside authoring tools and hosting platforms to help you design or develop aspects of your project. Examples of supporting tools include advanced audio and video editing software, screencasting software such as *Articulate Replay*, and robust photo editing tools such as Adobe Photoshop.

Much like a baker, you're going to have clients big, small, hands-on, and hands-off. But even if a client asks for a modest sheet cake instead of a multi-tiered wedding cake, you don't want to skip the important steps of e-learning cake-baking. Take time to get the right people, process, and tools in place so you can deliver relevant, effective courses, every time. For more help on the course creation process, check out the *Building Better Courses* and *E-Learning 101* hubs on E-Learning Heroes, and ask questions in the E-Learning Heroes *discussion forums*. Next, we'll explore the key elements that make great e-learning great and how you can apply those to your own courses.

Making E-Learning Effective
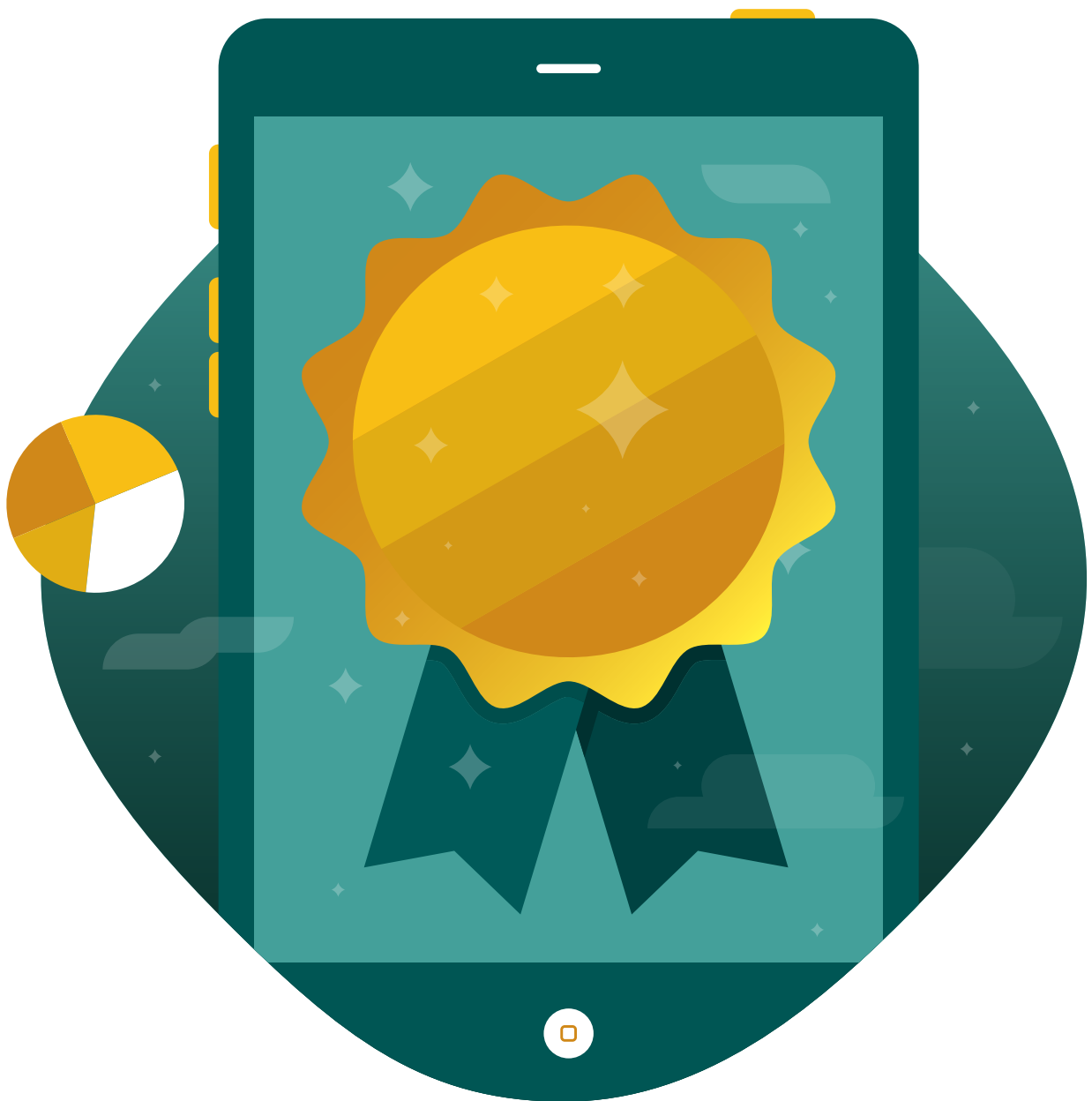
We've talked about how to make an e-learning cake, but how do you know that it's appetizing? For e-learning to be effective, you need to entice learners to take that first bite and then keep eating—savoring every moment.

So how do you do that? In this section, we'll share some pro tips for striking the right balance of flavors and textures with snappy writing, compelling interactions, and cohesive visual design. All these elements work together to create an e-learning cake your learners will find irresistible. First, we'll take a look at the important role of writing.

WRITE IN A WARM AND HUMAN VOICE / ADDRESS LEARNERS DIRECTLY / KEEP CONTENT CONCISE

Writing

We like to think of writing as a friendly conversation between two people. In fact, we're writing in a conversational tone to connect with you right now! The reason we've chosen this tone of voice is probably the same reason you're still reading: it's more engaging. Creating effective

e-learning starts with engaging your learners with language. When people feel that you're giving them information that's interesting, relevant, and personal, they're much more likely to listen and keep listening. As you're writing for e-learning, stay conversational by following these basic rules of thumb.

First, use contractions to keep your writing warm and human. You may have learned in school that using contractions in business writing is sloppy or unprofessional. That's a somewhat old-fashioned view. In fact, more and more businesses recognize that writing that connects with people is more effective. And that's especially true for e-learning. Effective e-learning reaches people on an emotional level. You want learners to connect your ideas to their actions, or to engross them in a quest for new knowledge. Those emotional connections are hard to create when your writing comes across as formal, stiff, or robotic. For example, instead of giving quiz feedback such as "That is not correct," try using something more human and helpful such as "Sorry. That's not quite right. Here's a better way to solve the problem."

Second, address the learner as an individual. There's nothing that turns people off more than being constantly lumped into a corporate "we" or referred to as "the trainee" or "the learner." Instead of sharing learning objectives in a passive way, such as "After this course, the learner will be able to (insert objective here)," try rephrasing it to something more personal, such as "Completing this course will help you (insert objective)" or "Imagine if you could (insert objective)."

Finally, keep your content concise to enhance readability. On-screen reading can be tiring on the eyes, so keeping your text short and sweet helps your learners maintain their focus. For instance, when providing

instructions, instead of saying "Position the cursor to hover over the adjacent text-entry field before clicking to enter text" try using "Hover your mouse over the text field. Click to enter text."

These are just a few quick writing pointers. If you'd like to dive deeper, check out *Top Writing Tips for E-Learning* and *20+ Tips for Writing Great Quiz Questions and Response Options*, or poll your fellow course developers in the *E-Learning Heroes discussion forums*.

Engaging Interactions

When was the last time you had an entire workday free of distracting meetings or conference calls? It's probably been a while. Like you, your learners have competing demands for their time and attention. To make your e-learning effective, you need to cut through that noise and hold your learners' attentions from start to finish.
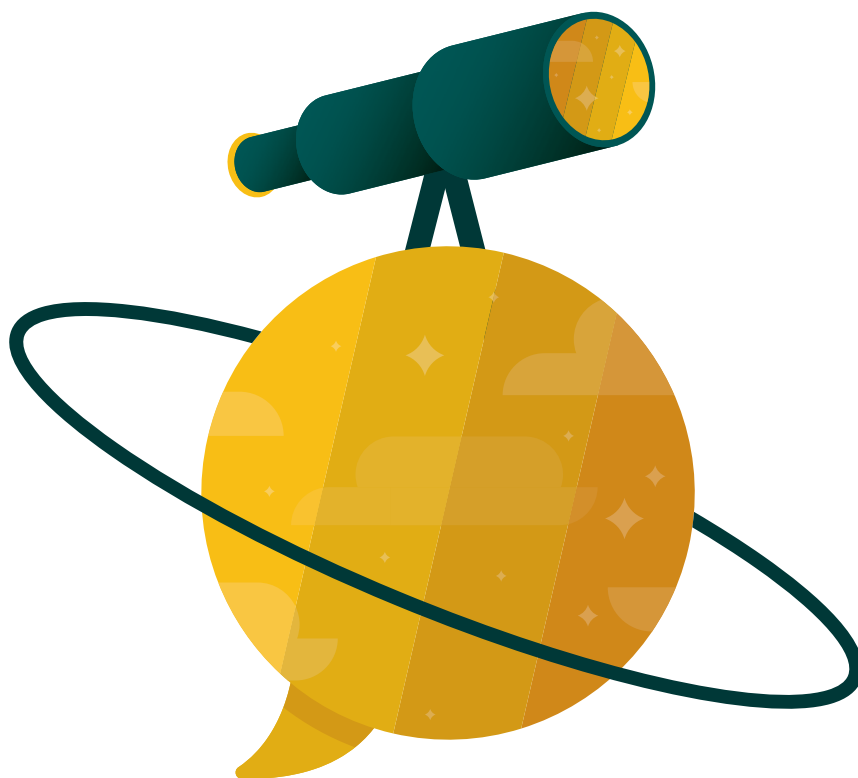
Just as you engage learners with your writing, you also need to engage them with activity—or, more accurately, interactivity. Interactions that engage are ones that give learners the opportunity to discover, explore, or connect with content in a meaningful way.

Unlike the passive experience of listening to or reading information, meaningful interactions are engaging because your learners learn by doing. They're tapping the screen. Moving objects around on the screen. Making choices that keep their brains working. Not only is learning by doing a more engaging way to learn, it's also an experience that your learners are more likely to retain and apply later.

To be effective, e-learning interactions don't need to be super complex. Even the simplest interaction can empower learners to explore content in a way that helps them make connections. Check out this _simple tabbed interaction_.

It breaks up related content in an engaging way, rather than presenting it as boring bullet points. In fact, chunked content is easier to digest—the tabbed structure invites learners to dig in and explore the content in the way that's most meaningful to them.

On the other end of the spectrum, more complex interactions can help give your learners much needed practice with solving problems or making important decisions in a safe, meaningful way. Take a look at *this great example of an immersive simulation*—a job interview.

Using the learner's name and company personalizes the interaction right from the start. Prompting the learner to make choices and providing helpful feedback takes what could have been a passive lecture on interviewing skills and turns it into an engaging, fun, and challenging interactive learning experience.

The good news is that whether your interaction design is simple or complex, you can follow some general guidelines to ensure they're engaging and effective.

First and foremost, stay focused on the learner. As with writing, you need to consider your learners' needs when designing interactions: who they are, what they really need to learn, and what challenges they face. In short, make your interactions relevant. For example, if your learners are struggling with handling difficult customers, one type of relevant interaction you could use is a scenario-based activity that simulates an actual customer conversation. By providing the learners with helpful feedback based on their selected responses, you can help them learn from their mistakes in a consequence-free environment. For more tips on how to build a scenario-based activity, check out *Top 3 Things You Need to Know to Write Realistic Scenarios for E-Learning* and *4 Instructional Design Tips to Create Awesome E-Learning Scenarios*.

You should also stay clear of information overload. Our brains can only process about three to five pieces of information at any one time. When you design interactions that have a lot of moving parts—such as images, animations, text, and multiple answer options—it can get confusing pretty quickly. Instead, keep the desired actions clear and simple and limit the number of choices. It's just easier for people to make decisions when there are fewer choices competing for their attention.

When designing an interaction that's multi-stepped, it's also a good idea to provide learners with a quick visual that helps them track their progress. There are lots of different creative ways you can illustrate progress, including *progress meters*, numbered icons representing the steps in a process, or even just a series of shapes that change color as the learner progresses through the content.

Finally, show learners the real-world consequences of their choices. They say experience is the greatest teacher, so when you're designing an interaction, think about how you can help the learner experience both the good and the bad consequences of a choice they'll need to make on the job. After all, isn't it better for them to learn from their mistakes during training? One way to help learners experience consequences is by letting them actually see and hear what happens. For instance, let's say you've created a course about how to give a patient medicine. Based on the learner's choices, you could show the patient experiencing serious side effects from a dosage that's too high or too low.

The bottom line on interactions is if they're concise, relevant, and connect to a learner's actual job responsibilities, they'll resonate long after the learner completes your course.

Visual Design

It's a simple fact: People DO judge a book by its cover. We all prefer the experience of exploring and interacting with things that are visually appealing. Building a course with great visual design makes the learning experience more compelling. It invites learners to dig in and explore. It's the frosting on the cake!

Visual design is a big topic, and we can only scratch the surface of it here. (Check out our *Essential Guide to Visual Design* e-book for more in-depth guidance.) But let's start with three basic visual design principles you can use to make your first e-learning course more appealing.

First, try to logically group elements on the screen. The visual design of your e-learning can feel confusing and haphazard when elements such as images, text, buttons, etc., aren't grouped in a way that makes sense. The logical grouping of items is known in the graphic design world as the principle of "proximity." By placing like elements together and different ones apart, you're helping to create a sense

of order for learners. And when people don't have to sort out where to click or what text description goes with what image, it lets them focus on the information and the experience. Case in point: when you see a sign that says, "No Parking," along with a pictogram of a tow truck pulling a car behind it, your brain gets the message pretty quickly! Add some more signs with conflicting messages and unclear associations and your brain gets overwhelmed—and you end up with a parking ticket.

The principle of subtraction is another grouping concept to keep in mind. When the screens of your courses are cluttered with too many objects, even if they're logically grouped, it's hard for learners' brains to organize the information and make connections. Instead of using lots of objects competing for attention, only feature the ones that absolutely need to be there to drive the point home. And to further reduce visual clutter and create a stronger sense of order, try styling all boxes, buttons, and arrows so they have the same fonts, fill colors, hover effects, outlines, and textures.

Second, use a consistent color palette. Color has a huge impact. It conveys emotion and meaning in ways that are hard to do with words or images alone. This is why traffic signals in almost every corner of the globe use colors, not words, to communicate with drivers! We could spend the rest of this guide explaining the details of color theory, but the key points you need to keep in mind as a newbie are fairly intuitive. Use color associations that make sense. For example, if you're using a green and red palette for navigation buttons, green should mean "go" and red should mean "stop." Keep the use of color consistent throughout the course. The easiest way to do this is to create a color scheme. Try using a key image from your course as a starting point and then create a color

scheme from that. For more pointers on how to assemble a color scheme, check out *5 Easy Ways to Find a Great Color Scheme*.

Finally, use familiar patterns. Without patterns in nature, such as the constellations, we would never have been able to circumnavigate the globe, much less land on the moon. In essence, patterns help us navigate the physical (and digital) world. We're wired to respond to them. For instance, most of us have learned that the right-facing triangle under a video means "play" and two vertical lines means "pause." When it comes to e-learning, you can use patterns to save on time and effort. Instead of labeling buttons with the words "Play" and "Pause" or spending lots of time establishing new visual patterns, try using ones that are already well established.

Remember, visual design for e-learning is more than just aesthetics. The visuals you use are powerful messengers, setting the tone and communicating key ideas about your course without requiring you to say a word.

Hopefully, you now have a foundation for building more appealing e-learning. It all starts with friendly writing, engaging interactions, and cohesive visual design. With a little discipline and attention to these areas, you'll be baking an appetizing e-learning cake in no time. Next, we'll take a look at exactly how you (or your organization) can get your courses into the hands of learners.

Distributing E-Learning

You could be the world's most talented artisan cake baker, but if your bakery were located at the bottom of the Grand Canyon, business would be slow. Much like "Grand Canyon Cakes, Inc.," the success of your e-learning course is largely tied to your method of sharing it with others, also known as distribution. Let's look at two of the most common methods of distribution, along with the pros and cons of each.
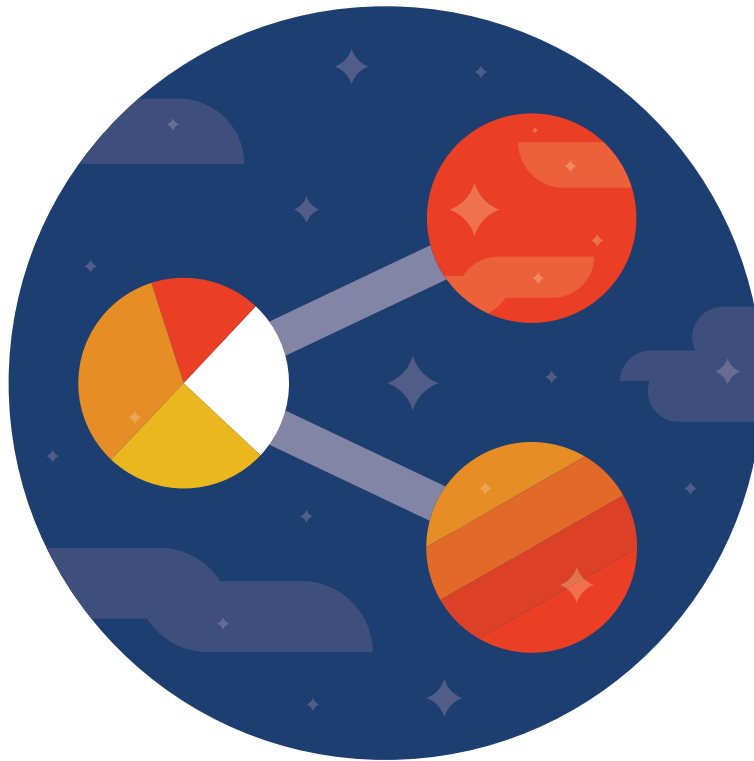
The first method is known as informal distribution, and it's just that—informal. It means that learners are given access to e-learning but they're not tracked or scored for completion. Probably the easiest way to share e-learning informally is to upload it to a web server and then send participants a link to view the course. This approach has a few advantages. Learners get easy access to content, usually without having to log in to another platform or system. It's also great for learning content that's helpful to know or that's targeted to support performance, such as a quick reference guide. But informal distribution also has a downside: you don't know for certain whether learners have completed your course.

The second method is known as—you guessed it—formal distribution, and it means you're tracking and recording the learners' completion statuses and/or scores. Formal distribution is appealing because not only can learner performance be tracked and reported, but it can also be analyzed alongside other performance data. Although, just like informal distribution, it also has a disadvantage: it's more complex. For developers, this means more systems to implement and maintain, which requires more time and resources.

While the advantages and disadvantages of the two types of distribution may be enough to sway you toward one or the other, there are other factors to consider. Organizations that need formal distribution of e-learning often have certain systems, equipment, and standards driving their need to track learner completion and scores. For example, many organizations need to demonstrate that they are in compliance with industry regulations, which may mandate regular training.

For other organizations, human capital management is a critical function, and tracking learner achievements can give a clearer understanding of the skills mix of employees. And identifying the need for additional training is another area where formal distribution can be helpful. For instance, if learners repeatedly score poorly on a particular course, this may indicate a need for more basic training around the topic.

With a formal distribution approach, tracking is usually done using a learning management system, or LMS, as we mentioned in the previous chapter. An LMS is considered "formal" because it adheres to certain industry standards for reporting information. There are a handful of these standards commonly in use, including AICC, SCORM, and, more recently, Tin Can API, which is also known as Experience API.
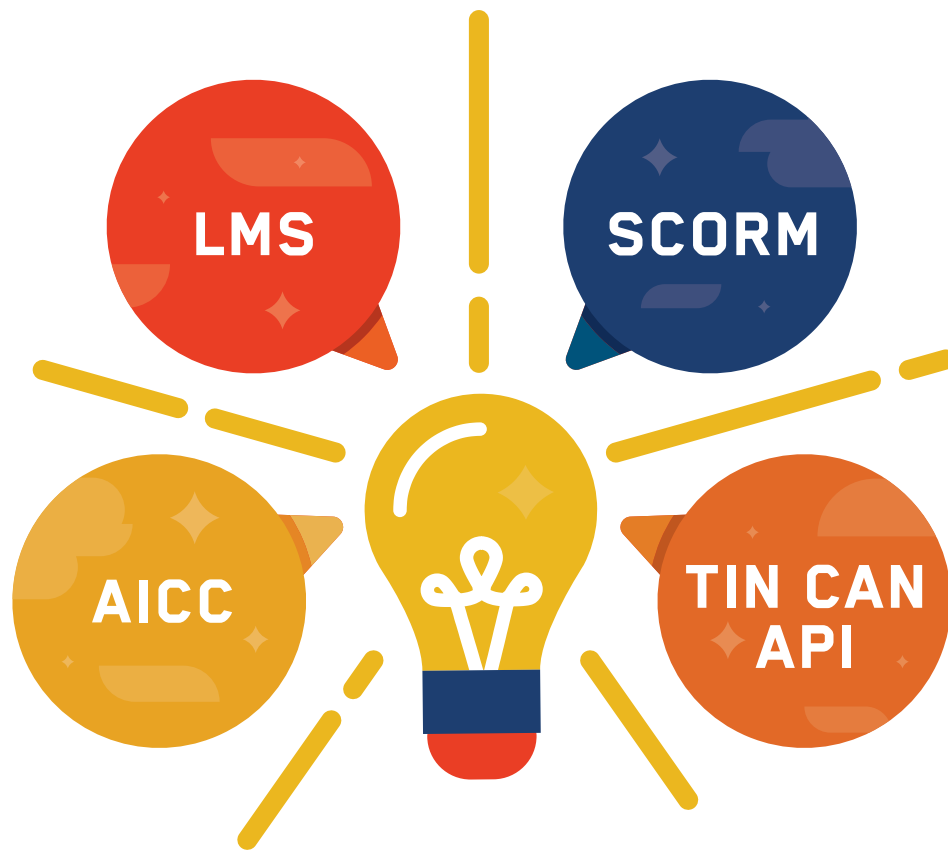
If you're shying away from formal distribution due to the dizzying array of acronyms and terms, let's demystify them for you.

Learning Management System (LMS)

An LMS is the software used to administer, track, report, and document the delivery of your e-learning courses. Choosing an LMS can be a bit of a process because they come in many different flavors. Some offer a small set of features tailored to the needs and budgets of smaller businesses. Others are large-scale enterprise systems. Some LMSs are installed on an organization's computer network. Others are hosted by the LMS vendor on its own network.

If you aren't sure your company already has an LMS, your systems or IT team should be able to tell you if they're already supporting one and who the business owner is. If there is no LMS, you may want to ask the systems or IT folks to help you research this area and select the right system for your company's needs and budget.

SCORM

Shareable Content Object Reference Model, or SCORM, is a collection of specifications and standards for e-learning that allows communication between e-learning content and the LMS. There are several versions of SCORM and you'll want to make sure your authoring tool and your LMS support the same "flavor" of SCORM.

AICC

AICC stands for Aviation Industry Computer-Based Training Committee. It's a set of standards that primarily uses the HTTP AICC Communication Protocol (HACP) to facilitate communication between course content and LMS. Most LMSs will support AICC- and SCORM-compliant content.

Tin Can API

Tin Can is an API (Application Programming Interface) that's a new specification for e-learning. The Tin Can API addresses some of the limitations of SCORM and AICC, which sometimes make communicating learner activity with LMSs difficult. Tin Can collects data about learners' experiences across various systems and devices. This data is recorded in a Learning Record Store (LRS), which in turn can be accessed by an LMS. Not every LMS vendor has adopted Tin Can, so it's a good idea to add that to your list of system criteria if collecting data from outside of the LMS is a key requirement for your organization.

Whether you choose informal or formal distribution, the deciding factor should be what you need to measure. A formal distribution method such as an LMS offers you more robust data, but with a greater administrative burden. Informal methods lower the administrative overhead, but provide you with less specific data. For more ideas on the best approach for tracking your particular e-learning, check out *4 Ways to Track Your E-Learning*.

More E-Learning Resources

We've shared a lot of basic information about e-learning to get you started. And now, hopefully, you have a rough idea of the areas you need or want to dive into more deeply. *Articulate's E-Learning Heroes Community* is a treasure trove of continuing education that will provide all the guidance you need. At E-Learning Heroes, you can connect with a vibrant, helpful community of fellow e-learning professionals. They'll help you hone your skills, think of new ideas, and grow as an e-learning designer and developer.

On E-Learning Heroes, you'll also find an ever-growing collection of free e-books, how-to articles, templates, graphics, and examples to inspire your designs and speed course development.

You might want to start with these helpful e-books and articles:

1. *Instructional Design Basics for E-Learning*

2. *Building Compelling Interactions: What You Need to Know*

3. *Essential Guide to Visual Design*

4. *Best Practices for Effective Project Management*

5. *Considerations When Choosing an Authoring Tool*

6. *Getting Started with Articulate Storyline*

7. *Getting Started with Articulate Studio*

So, there you have it—the world of e-learning in a nutshell. We love e-learning because it provides loads of opportunities for making a positive impact on the world, and we hope this e-book has gotten you as excited about the possibilities as we are. Of course, it's okay if you don't have all the skills and expertise you need just yet. Most of us have learned what we know through trial and error. But our mission is to ensure that, with our help, you'll be an e-learning pro in no time.

If you enjoyed this guide, please feel free to link to it from your own site or share this link on social networks.

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