Learning Objectives

The best instruction starts with clear learning objectives.

Learning objectives give you and your learners goals to work towards as you teach. They answer questions like: What do you want your participants to know and understand? How do you hope they'll be able to demonstrate that new knowledge and understanding? What should they leave being able to *do*?

Victor Nolet and Margaret J. McLaughlin, two graduate professors of education, have a great series of questions to ask yourself as you are planning instruction and zeroing in on learning objectives.

- What type of information am I asking my students to learn?
- Why do I want my students to remember this information?
- How is this information connected to other things they already know?
- How is this information related to what it is my students will need to know in the future?
- How will my students use this information?
- When will my students need to use this information?
- What is the most efficient way for my students to learn this information?

For example, if your goal is to help participants understand two-factor authentication (or 2FA) as a way to protect their online accounts, thinking about learning objectives can help you focus your training on ways to highlight that basic understanding, rather than jumping into abstract definitions of all the different types of 2FA.

For most trainings, a simple statement of "Learners will be able to..." is an excellent guide. Try to narrow it down to three to five main things you hope participants will be able to demonstrate. Can they explain something back to you? Can they show you through action that they understand a main idea? These three to five things should be something that all participants are able to accomplish, regardless of ability. Gauging whether they are actually able to demonstrate this information feeds back into assessment, but keeping these learning objectives in mind is something that you should be thinking about in terms of what information you hope participants actually leave with.

For example, for a session on 2FA, you might land on learning objectives that sound something like:

- Learners will be able to explain 2FA to a fellow classmate, including its pros and cons.
- Learners will be able to figure out which sites offer 2FA.
- Learners will find 2FA in their security settings and enable it.
- Learners will use 2FA to successfully log into an account.

An even more thorough way to do this is with a chart that lays out your different goals for the session and how students at various "levels" would demonstrate their understanding. Although this is not always necessary for your average training or

class, it can be a great way to challenge yourself to think through all the different ways your learning objectives might manifest in different people with different backgrounds. For a session on 2FA, this might look like:

	Not At All	Beginner	Intermediate	Expert
Objective 1: Learners can explain how 2FA works.	Needs help understanding the login/ authentication process and the role of passwords	Describes logic behind something you "know" vs. something you "have"	Provides several examples of a second factor, e.g. SMS code, app code, security key, biometrics, etc.	Explains the pros and cons of different types of 2FA; understands how 2FA can protect against password theft and phishing
Objective 2: Learners can figure out what sites offer 2FA.	Unfamiliar with what indicators, on a site itself or on a separate reference site, mean a site offers 2FA	Knows how to navigate twofactorauth.org	Has made a list of the sites they use that offer 2FA	Recognizes patterns among the types of 2FA different sites offer, e.g. banks using bank- provided keys
Objective 3: Learners can find 2FA in a site's settings and enable it.	Does not know how to navigate to settings and/or where to look in settings	Knows to look in security settings, and can troubleshoot with Google when not sure	they use and	Distinguishes which types of 2FA are best for them on which sites; recognizes different names for 2FA
Objective 4: Learners can successfully log into an account with 2FA.	Needs help understanding the login/ authentication process and the role of passwords	Can begin the login process, but may need help when providing a second factor	Logs in successfully!	Can log in with several types of 2FA; saves backup codes

In the chart above, each level from beginner to intermediate to expert builds on the ones before it. For example, an "expert" user can theoretically accomplish the objectives in the "beginner" and "intermediate" columns as well as the "expert" one. Of course, learners do not always fall in the neat categories we expect. If a learner, for example, accomplishes the "expert" task in objective 3 of understanding different types and names of 2FA, but has trouble with the "intermediate" step of setting it up, it may be a cue to us as trainers to revise our expectations.

When thinking about learning objectives, it can also help to think about "abstract" goals versus more "concrete" goals. For example, Objective 1 above is a more abstract goal; it requires learners to absorb a new concept and explain it back in their own words. Abstract objectives tend to focus on what students will know, understand, or can explain. Objectives 2, 3, and 4 are more concrete; they represent tasks for learners to complete that will have tangible outcomes. Concrete objectives tend to

focus on what students will be able to do or demonstrate.

In addition to helping you recognize levels of learning, going through a chart like this also helps ensure that you provide several ways for learners to meet an objective. For example, does someone *have* to use their phone or computer in a standard way in order to follow along? If you are relying on outside resources to guide learners (like twofactorauth.org in the example above), is there an option for people with varying levels of English proficiency? If your activities involve movement, do people have to be able-bodied to participate, or can you structure it so that different people can participate meaningfully? It's not always possible to make every learning activity work for every possible learner—but if you think through questions like these with what you know about your audience in mind, it will make a difference.

Si busca la traducción al español de este artículo, haga clic aquí.