Designing eLearning Courses That Support Long-Term Memory

Have you ever attended a class and forgot over half of the information that you learned within a week? Have you taken a refresher course on topic you already knew only to discover that you leaned more in the refresher course than you did taking the class the first time? All of the questions are related to how we remember information and the forgetting curve.

In this paper, I will give you some tips on how to design your eLearning courses so your students will remember the information in your course for a longer period of time. Let's begin by learning about the concept of the Forgetting Curve.

The **Forgetting Curve** was thought of by Hermann Ebbinghaus, a German experimental psychologist in the 1800s. Ebbinghaus theorized that the longer you take to practice something you have just learned, the less you'll remember it. Below are two figures that illustrate this concept.

In Figure 1, the red line shows the more days that go by without practicing what you have learned, the more likely you will forget the information about that topic. However, the more practice or review the information learned; the less likely you are to forget it. The graph in Figure 2 illustrates that the more times you review the information; the longer it takes to forget it.
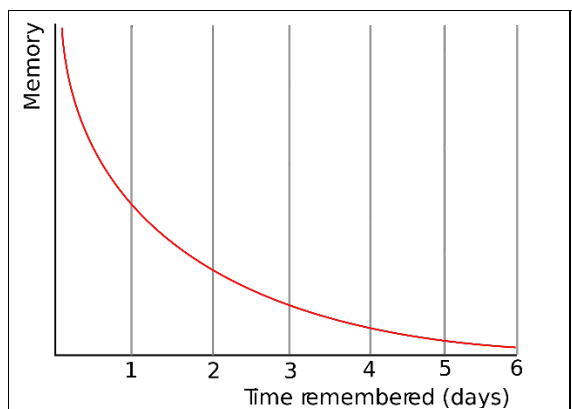
Figure 1 – The Forgetting Curve
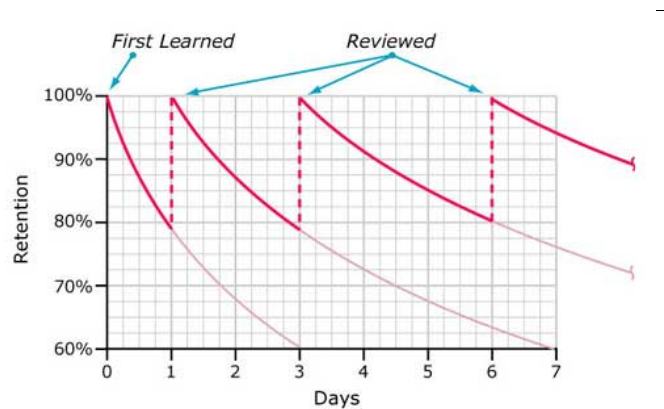
Figure 2 – The Forgetting Curve and Memory Retention

There are a couple points to remember about the Forgetting Curve. The more familiar you are with the information you're learning, the easier it is to remember. It always takes more time to learn information when there is more learning material involved. People lean more effectively when the material is taught over a longer period of time, and not all at once. Most importantly, people start forgetting immediately; so if they continue to review the material they just learned, forgetting that information will slow down over time.

Below are a few tips for developing eLearning courses that take account for the Forgetting Curve.

1. **Explain to the user why they need this course.** If the course is directly related to their job or something that they're interested in; people become more engaged in the material and the learning experience becomes more memorable because they want to learn the information.

2. **Create your eLearning courses using smaller modules.** People tend to learn more when the material is divided into smaller portions. Design your eLearning courses using several smaller modules instead of having all of the material in one or two larger modules.

3. **Add interactions to your courses.** People tend to remember information better when they have a chance to practice it. When designing your course, add a question or two that relates directly to the material covered on the previous pages. Today, eLearning courses have a lot of different questions types and interactions that can be used to create practice activities.

4. **Measure the user's progress.** Use tests, quizzes and other learning activities when designing your courses. If a student knows that they will be tested on the material covered and they must pass a quiz or test with a certain score; they will want to retain the material more.

5. **Have your course available for review.** People tend to forget information immediately after they learned it. So if the student is able to review the information in your course at a later time; they will retain the information for a longer period of time.

If you want to design memorable eLearning courses; take in account the Forgetting Curve and design your eLearning courses with smaller modules. Make sure your course contains information that relates to their job and allows them to practice the concepts presented. Your students will not only learn the information presented; they'll remember it for a longer period of time.