

# How Does Your Memory Capacity Affect Safety Training?

Have you ever given much thought to how much of the information workers understand and retain after a training session? How many times have you conducted training, or assigned online training, and automatically concluded that your employees understood exactly what you said or understood the information covered in an online course?

I would venture to say most of us focus on the compliance piece of training and don't give a lot of thought to the comprehension and retention of the training. But here are two reasons why you should.

## Information Overload

The technical term is Cognitive Load, but we can think about it as information overload.

As we take in information from our surroundings, media, co-workers, and during training, our brains go through several steps before this information is committed to memory. Because of this, there are multiple opportunities for memory formation to fail.

More precisely, we gather new information into our "working memory" which then filters it and decides what to commit to our "long-term memory." Our "working memory" isn't interested in wasting its resources and it's very picky!

This makes it crucial to give learners information in chunks they can easily process. Remember, every time your training includes unnecessary information (no matter how small),

you're taking up more space in your employees' "working memory." And that unnecessary information could be what ends up getting through, instead of the important technical steps you've explained.

## The Forgetting Curve

Let's assume the training info makes it past the learner's working memory, the question then becomes, will they be able to retain what they learn long enough to use it to safely do their job? Not according to the forgetting curve.

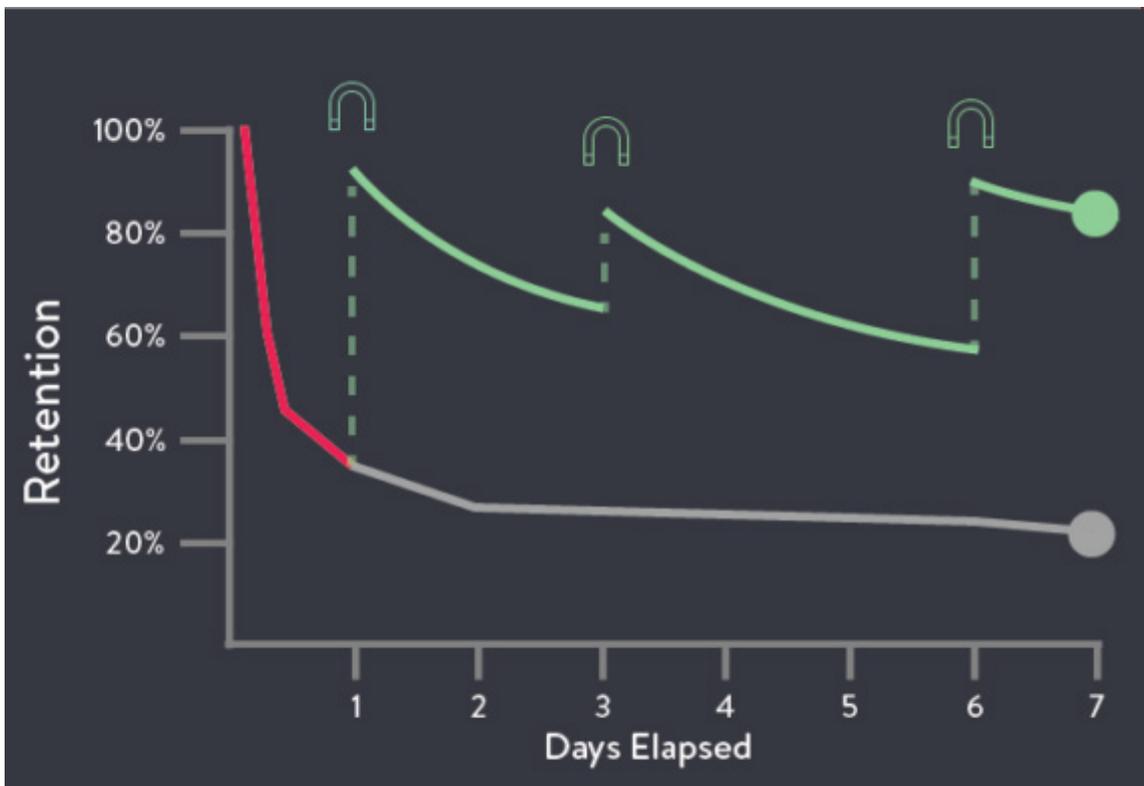
The forgetting curve describes how the brain's ability to hold on to information decreases over time. Hermann Ebbinghaus and his research in memory and forgetting, is credited with the creation of the curve in 1885.

He discovered that from the point when you learn a piece of information (100% retention), retention begins to drop exponentially. What that means is, without follow-up, about 70% of what we learn is forgotten within 24 hours of learning it. On top of that, some studies show that total retention a month later is only around 10-20 %.

**Employees are likely forgetting up to 70% or more of what they learn in a training session!**

## Retention Factors

There are various factors that can affect the rate of forgetting and the level of retention, some good, some not



If the goal is behavioral change, then what happens after training is more important than what happens during training. Will workers retain information long enough to actually use it?

With SafetyNow, workers will retain learning by recalling the information with a bite-sized refresher lesson and strategically timed follow-up quizzes. Over time, safety sticks.

Find out how to beat the "forgetting curve" with SafetyNow and get a FREE 7 day eLearning pilot. Visit [www.SafetyNow.com](http://www.SafetyNow.com).

so good. Here are four of them to keep in mind when it comes to training employees.

1. **Meaningfulness** - the more meaningful the content, the easier it is to remember. If the content doesn't make sense or isn't relevant enough, it's going to be harder for workers to learn the material.
2. **Practice** - active practice or rehearsal enhances retention - that's why actors study their lines, and why you practice before giving a presentation. But there is one type of practice that yields better learning results. It's known as the spacing effect or spaced repetition, and refers to regularly spaced practice exercises. Studies have shown the effect of spaced repetition is significant and is especially beneficial when learning unfamiliar material and during fast presentation rates.
3. **Interference** - an interference during learning is always

negative. It happens when a learner tries to remember old material while learning new material. Old material can slow the learner's speed of learning and memory performance. It can also cause the learner to have problems with distinguishing similar concepts and can cause students to forget items they remembered clearly for years.

4. **Transfer** - knowledge transfer takes place when prior learning or old material makes new learning easier. When old and new tasks or material have more in common, a transfer effect is likely to happen.

Anything you can do to lessen the negative effects of interference and bump up the positive factors of meaningfulness, transfer and practice, the more successful your training will be. In our next shop talk we will look at ways to do that!

## SPOT THE SAFETY VIOLATION WHEN INGENUITY GOES TOO FAR...AND TOO HIGH

One of the safety violations in this image is almost screaming at you, it's so obvious. Never, and I mean never, use a forklift to lift a person, especially if that person is sitting inside another forklift, and that forklift is lifting yet another piece of heavy equipment! It's a trifecta of a disaster waiting to happen.

Some forklifts are designed to lift personnel but this is clearly not one of them. Other hazards in this image include:

1. Overhead power lines, which we don't know for sure, but it's a safe bet to say they haven't been de-energized.
2. No traffic control - unless you count all the bystanders and gawkers.
3. It doesn't appear there are wheel chocks, or anything else, holding the bottom forklift in place to keep it from rolling away.
4. The weight of the second forklift, the man in the forklift, and the equipment being lifted is likely well over the rated capacity of the lift.

Operating a forklift comes with its own set of safety challenges, there's no need to add more!



Did you know that 70% of safety training is forgotten in 7 days? Find out how to beat the "forgetting curve" with SafetyNow and get a FREE 7 day eLearning pilot. Visit [www.SafetyNow.com](http://www.SafetyNow.com).

