

The Secret Behind: How Microlearning Boosts Knowledge Retention by at least 50%





Introduction

How can we be confident that our employees are engaging with and retaining the knowledge from our current L&D programmes?

With most in-person training programmes on hold, Google searches for digital learning have increased 4x in recent weeks, with digital learning set to be adopted by 60% of companies in the 2020. And steady growth predicted beyond this year.

But before we jump to traditional e-learning tools, we should consider if there are better solutions.

Mobile microlearning produces 4 times higher engagement rates and 50% better knowledge retention than traditional e-learning tools.

But how does mobile microlearning produce such impressive results? And how can we implement these techniques to better train and engage our workforce?

Let's have a quick look at the science behind the stats, alongside the four reasons why it produces these results.



Why do we forget traditional training so quickly?

Our brains process and retain knowledge, and therefore training content, in specific ways. It's all about psychology; and understanding psychology a little more helps us to then improve how we learn.

For example, did you know that scientific experiments show that:

• 50% of newly learned content is forgotten 20 minutes after a lesson ends;

That falls by a further 10% in the next 9 hours;

• Only 24% is retained in 31 days, if no revision or repeat learning takes place.

This is referred to as the Ebbinghause 'forgetting curve', after psychologist Hermann Ebbinghaus conducted some of the earliest investigations on memory, recall, and microlearning. He found that memory retention decreases over time, and that relevant information is lost when there is no attempt to retain or use it.



So, according to his research, we forget 76% of what we are taught within 31 days.

This is a major downside of traditional training methods. When employees have to complete long trainings, it doesn't only decrease work productivity and available worktime, it also increases budget spending, without being able to guarantee a full adoption of the knowledge transferred. This, in turn, impacts performance and affects customer experience levels, conversion rates and productivity metrics.

Which begs the question:

What can we do to retain more knowledge?

Microlearning combines four science-based techniques to improve knowledge retention and engagement. Let's have a look at these techniques and how we can implement them for maximum impact to our bottom line.

Spaced repetition improves how we learn

The first thing we can use to improve knowledge retention is spaced repetition. Reintroducing the lessons in smaller increments helps us to retain knowledge for a longer amount of time.

Again, this is down to how our brain works. Our brain stores, processes and recalls short-term and long-term memory in different regions. In order to transfer learnings from our short-term memory to our long-term memory where it can be stored and recalled as knowledge, we need to create stronger neural pathways.



Through repeatedly revising lessons in short, engaging bursts over set spaces of time, these neural pathways are strengthened and the memory can move into the long-term memory region more easily.

This is reinforced by 'retrieval practice,' where courses and questions are structured strategically to force our brain to repeatedly retrieve the most important information, and thereby move the knowledge into our long term memory.



"By repeatedly using micro-learning [...], the retention level can reach that of early levels [...]. According to Kang 2016, hundreds of studies in cognitive and educational psychology have demonstrated that spacing out repeated encounters with the material over time produces superior long-term learning."



So the science shows that space and retrieval practice is essential, but what about the content itself?

2. We learn better in short bursts

Secondly, the short duration of microlearning content reduces the mental fatigue caused by longer lessons. This results in the 4 times higher engagement rates and better knowledge retention.

When learning in short bursts, we can finish a quick lesson, grasp the key concept, and then take a break. This break gives our brain the time to process and index the learned material from our short term memory to our long term memory.

This is also why we tend to be more immersed in microlearning and finish our courses faster:



"Even though [users] are not rushed, they tend to finish the entire course faster because they are more immersed. This technique can be accomplished because microlearning avoids the phenomenon of mental fatigue."

However, the duration and spaced repetition is not enough on its own. The hierarchy or structure of the content is also key to the science.

3. We can structure courses for maximum recall

By breaking information down into smaller learning moments, microlearning enables us to focus on one piece of information at a time. But the placement and framework of the key concepts also helps us to retain the knowledge that really matters.

Our brains automatically tend to recall the first and last items in a list. Our capacity to recover things at the start of a list is called the Primacy Effect. Recalling things from the end of the list is called the Recency Effect.



"Microlearning, [combined] with the Primacy and Recency Effects, can facilitate the movement of learned material from short-term to long-term memory."

Combined with retrieval practice, we are able to place key concepts at the beginning and end of lessons to create the most successful training programmes.



"The educator should use the Primacy and Recency Effects when considering **how to order items in a list**. Moreover, the educator should use the Primacy and Recency Effects when they want learners to **remember a specific option or item** of importance in the list."

4. How we deliver this training boosts engagement

Now that we understand the basics of how to create the most engaging and effective training, (bite-sized content, repeated frequently, using the primacy and recency effect), the question remains as to how to deliver this content?

Luckily, the answer lies in a device which the majority, if not all, of our employees will already have. Our mobile phones:

"By using mobile devices, users can pause and continue their micro-lessons with ease. The mobile application also gives them the opportunity to continually check on their performance, and adjust their learning accordingly. Microlearning on mobile devices also keeps engagement levels high because it utilizes different forms of media to keep users captivated."

This also reduces the training costs associated with providing laptops, desktops and classrooms/ key speakers, and is particularly well suited to remote or frontline workforces.

Using Psychology to improve learning

As we can see, microlearning is more than just a buzzword. In a rapidly evolving workplace, where our ways of working and collaborating are changing daily, the need to effectively train and engage our employees is higher, and more challenging, than ever.

Through understanding how we learn, how we engage with learning content, and, ultimately, how we recall and use that knowledge, we are able to meet these challenges head on.

The science shows that mobile microlearning is one of the best proven ways to improve engagement and retention - impacting employee performance and business-metrics such as NPS, conversion levels and productivity.

However, that isn't to say that it has to be a standalone solution. Through spaced repetition, short, engaging learning chunks and smart frameworks, it can be used to successfully reinforce additional L&D techniques and programmes.

The way that we work is changing. The way that we learn isn't. Our brains have always processed information this way. With mobile microlearning, the technology has finally caught up with the science.

About MobieTrain

Knowledge is our forte, and it is our mission to empower employees with the knowledge that they need to succeed. With mobile-first training, employees are put at the heart of their own learning and development, which leads to better customer experience, employee engagement and impacts business' bottom line.

Focusing on the remote and deskless workforce, and the management team that drives them, we are transforming traditional learning methods to match the challenges of the modern workplace. Through microlearning, gamification, brain science and mobile, we deliver high impact training for the future of work.

After spending the last decade gathering customer insights and leading training for some of Europe's biggest brands, including Decathlon, Vans, Diesel, Proximus and Total, we understand how greater knowledge empowers greater performance and productivity.

Our vision is to define the global standard for mobile learning to boost productivity and sales in the workplace, one employee at a time. Author: Rebecca Martin

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