

MERCURI
international

DIGITAL LEARNING CENTER

E-BOOK

THE SCIENCE OF LEARNING

Preparing the workforce of tomorrow



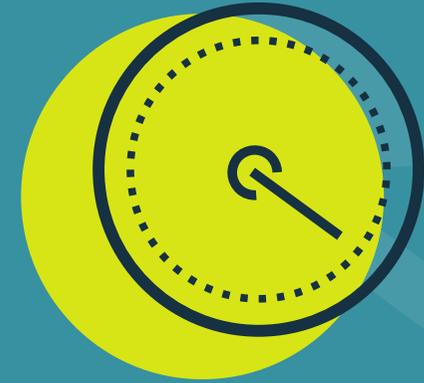
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INTRODUCTION

In 2017, Josh Bersin, in collaboration with Deloitte professional services network, published a paper in which he noted that, on average, sales reps only have time for 24 minutes of training a week. To put this into context, dentists recommend that healthy brushing requires 28. While we're not disputing the benefits of a rigorous oral hygiene regime, it does seem staggering that just 1% of a normal 40 hour working week could be allocated to something so crucial to professional development.

So what's the answer? Well, there are various options. We need to either maximize what we can achieve with 24 minutes, or we find creative new ways to reallocate wasted time from other activities. Alternatively, we could stop brushing our teeth (that's an extra 28 minutes right there...), but this may not be a sustainable long term solution. Or an attractive one.



**On average sales
reps have just
24 minutes a week
for training**

CONTEXT

THE WORLD ACCORDING TO REPS

No matter which business segment, all sales teams have certain things in common. They're frequently highly mobile, working from remote locations with extended travel periods in between. They also prioritize deal closing over most other activities - conversion is key. They have constant demands upon their time, time which is broken up into small segments. Due to their highly mobile nature, they're often completely at ease with (and indeed reliant upon) mobile devices.

This profile presents a number of challenges - and a number of opportunities. Since they're unlikely to follow a straightforward office 9-5 routine, any training solution has to be flexible enough to work around their schedule, whether that be a 5 minute coffee break, or an hour on a train. The solution has to work around them, not the other way around.

Thankfully, what may initially seem to be a major training challenge (small chunks of available time, spread throughout the working week) might actually prove to be a huge opportunity...



Sales teams are at ease with and reliant upon mobile devices

THE SCIENCE BIT...

THE STORY SO FAR

To understand why, we need to go back a bit.

In 1956 George A. Miller published “The Magical Number 7, plus or minus 2”, based on a previous lecture in which he suggested a practical limit for short term memory capacity. The scientific details are profound (although he does have a lovely way with language – “the use of successive judgements... introduces memory as the handmaiden of discrimination”) but his key assertion is this: the maximum number of objects an average human can hold in working memory is 7, plus or minus 2.

To oversimplify, this number refers to the longest list of items (whether they be digits, letters, or words) that a person can immediately repeat back correctly. His findings, often referred to as ‘Miller’s Law’, laid the groundwork for a whole new area of academic research – cognitive science.

In the late 80s, John Sweller expanded upon this principle to develop ‘cognitive load theory’, suggesting that, in order to learn, we need to break down information into smaller, component segments, segments that can be more easily digested into long term memory.



In order to learn, we need to break down information into smaller, component segments

“People learn more deeply from words and pictures than from words alone.”

Richard E. Mayer

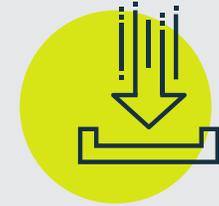
Think of it as swallowing a steak – an impossibility in one mouthful (or at least distinctly unpleasant to both do and watch...), but simple if cut up into smaller pieces.

2001 saw Richard E. Mayer absorb both Miller and Sweller’s findings and release ‘Multimedia Learning’, in which he looked at the use of simultaneous audio and visual cues. Mayer’s theory was as follows: there are two separate

channels for processing information – auditory and visual. These channels have limited capacity.

By employing multiple channels in the way in which we teach, we expand the potential bandwidth for the brain to usefully assimilate information.

In addition, the process of ‘learning’ is an active one, in which we select, organize, and integrate information.



Select

Highlight most relevant information to focus learning



Organize

Represent that information in a coherent format



Integrate

Help learners to activate and apply prior knowledge

THE PRACTICAL BIT...

WHY THIS MATTERS

So why does this matter?

Think of the brain as a filing system. Every system might have unique quirks (depending on who's doing the filing) but certain themes occur across different systems, such as alphabetization or numerical/date order. When we learn, we file information, breaking it down into smaller components and filing it according to a series of rules.

By understanding which rules are common across all systems, we can better understand learning. If we understand how we learn, we can design better ways to teach or train.

So, every brain is unique and everyone learns slightly differently. Neuroscientist Tracy Tokuhama Espinoza has suggested that neural pathways are formed as a result of specific experiences and genetics. In other words, we adapt.

The human brain is uniquely flexible - and one type of training does not necessarily suit all. When we design a training system we must therefore make sure that it is modular, capable of being constructed from a series of small, segmented building blocks.

These building blocks can then be arranged in a sequence that best suits the learner. Some may want to absorb the information 5 minutes at a time, on a regular basis, others may have the mental focus (and time free from distraction) for a more formal, structured learning environment.

There is no one correct path - only a certainty that by offering flexibility, we maximize the chances both of time being found to learn in the first place and that information being usefully retained and acted upon.

CONCLUSION

So, if we can find time to maximize 24 minutes a week (or preferably, encourage our sales teams to incorporate training into coffee breaks, commuting, time between meetings etc.) then we can change the face of sales training and radically increase productivity.

At Mercuri, we're constantly observing sales teams around the globe (and, indeed, how their brains work...) and have designed a complete learning solution, just for them. Our Digital Learning Center offers a uniquely flexible approach to training, built upon the principle that not only are sales reps all different, but so are the companies for which they work.



“We know that the jobs are going to change...It's going to be more about how we learn. Future generations will be about continuous learning, will truly be about creativity.”

Beena Ammanath
Founder, **Humans for AI**

As such, customers can either choose from quick, off-the-shelf resources to 'level-up' their workforce, or we can work with them to design beautiful, intuitive custom products that integrate seamlessly with every level of their operation. Since our solution is modular, customers can select a product and level of customization that perfectly meets the evolving needs of the modern salesforce.

Why is this so urgent?

Forrester, a leading market research company that specializes in understanding the impact of technology, predicts that by 2025 disruptive technologies such as AI, machine learning, robotics and automation will have replaced 7% of US jobs.

For workforces to remain relevant, they need to evolve new skills, skills that allow these disruptors to complement, rather than replace them.

The companies that thrive will be those that embrace this opportunity.

Or find a quicker way to brush teeth.



References / Bibliography

'The Disruption of Digital Learning: Ten Things We Have Learned'

Josh Bersin, Bersin by Deloitte, March 2017

'The magical number seven, plus or minus two: Some limits on our capacity for processing information'

Miller, G.A., Psychological Review, 1956

'Cognitive load during problem solving: Effects on learning'

Sweller, J, Cognitive Science, June 1988

'Multimedia Learning'

Richard E. Mayer, publ. Cambridge University Press, 2009

'Mind, Brain, and Education Science: A Comprehensive Guide to the New Brain-Based Teaching'

T. Tokuhamma-Espinosa, publ. WW Norton & Co, 2011

'Interview with Beena Ammanath'

AQ Winter Edition, Alumni Global, ed. Charles Adams, 2017

'The Future of White Collar Work: Sharing your cubicle with robots'

Forrester Research, 2016



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