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Microlearning and Nanolearning: what are they?

This article explores microlearning and nanolearning and the respective roles they play in corporate training

One of the most obvious transformations brought about by the development of technology is that everything tends to become smaller or shorter, but more powerful. Innovation has helped to deliver better results with more efficient and smaller means such as computers, once the size of a room, now equipped with 10-13 inch screens, or TVs with higher and higher resolutions in increasingly flat screens. Technology has also transformed the modes of communication, now shorter but capable of reaching billions of people, and with this it has transformed the mode of training. But how has corporate training transformed in the digital age, with the pace of work becoming ever tighter? This article examines the roles that micro- and nano-learning play in the world of corporate training.

Microlearning and Nanolearning

Microlearning and nanolearning (also called microlearning and nanolearning) are modes of learning through short contents that can be used on any device and at any time with the aim of making life easier for learners. Let's see what they are exactly and how they differ.

What is microlearning?

Microlearning is a form of learning that is delivered in short modules that can be completed quickly and when the learner has the opportunity or need. Content is processed in learning activities that focus on specific topics and provide clear instructions to the learner. Microlearning learning modules last between 3 and 10 minutes, short enough to keep the learner's attention from start to finish. The content can usually be delivered in different formats: in audio-visual form (e.g. video), via podcasts, or with a series of texts (e.g. short blogs, posters or infographics).

The reason why microlearning is characterised by **short learning modules** comprising smaller learning activities lies in the fact that it is designed to be practical. The learning content must be quickly accessible on available mobile devices, mainly on mobile phones. In fact, both micro- and nano-learning are designed to be used by employees in the workplace while they are going about their business, exactly when and where they are needed.

It is important to specify that microlearning does not consist of breaking up a course with longer content into smaller parts, but is a true mini-course that focuses on a specific learning objective and can have a knowledge check and summary. In other words, it is a complete learning experience.

What is nano-learning?

Nano-learning is similar to microlearning, but the learning sessions are designed to be even shorter. Nano-learning provides modules ranging **from 1 to 3 minutes**, focusing on teaching a specific skill within the learning objective of the training course. It is therefore ultra-specific content that is intended to help achieve the learning objectives. (Chandra, 2021)

The trend of creating increasingly shorter content is visible on social platforms and two of the most popular platforms, YouTube and TikTok, provide perfect examples of the importance of microlearning and nanolearning. YouTube, the leader in video sharing with over two billion monthly users, has plenty of short content explaining 'how to do' something, from a recipe to decorating a room. In addition, more and more users are turning to Tik Tok for even shorter, faster and probably dwarfing content. YouTube videos can last from a few minutes to half an hour or more, whereas Tik Tok videos average about one minute. TikTok already has over a billion users and is gradually establishing its dominance in the social media space. Whatsapp is also becoming a training tool.

The popularity of these platforms and the large number of people already using these tools to learn on the spot is a clear sign of the great potential this mode of communication can have for the world of **training**.

Microlearning and nanolearning

"Personally, I am always ready to learn, even if I don't always like to be taught" - Winston Churchill

This quote explains why micro- and nano-learning are useful tools for training. In this mode, the learner does not feel the authority of the instructor nor the constraint of having a time and place to learn chosen by other people. Micro- and nano-learning are the perfect tools to give the learner independence and freedom in accessing and enjoying the learning content of a course. These forms of learning are characterised by certain features:

- They are focused on specific objectives
- They focus on providing instruction on tasks and not on narration
- They can be used before, during and after formal training.

Both micro- and nano-learning are designed to be delivered on mobile devices, either in short moments when learners have downtime, or when they are **' in the flow of work'**, to quickly answer specific questions and queries that employees have while they are working. In fact, we should not forget that 91% of people who have a smartphone look up information on their device while they are performing a task.

The popularity of these learning styles has increased in tandem with the rise of smartphones, tablets and PCs and because of the limited time modern learners have for education (some experts argue that it also corresponds to a decline in attention spans). Whether our attention spans are decreasing or not is a matter of debate, but certainly every day our lives are characterised by a constant switching from one activity to another and from one screen to another.

The analogies

Besides serving the common purpose of facilitating learners' lives by giving them the opportunity to independently manage the way they learn, both have similarities. For example:

- Giving access to information at the point of need.
- They facilitate reinforcement of learning.
- They help learning at one's own pace.
- Provide low-cost training solutions.
- Helping to identify and focus on learning objectives.
- Give learners control of the training.
- Offer rich multimedia content.
- Reduce cognitive load.
- Give access to content even outside working hours.

The difference between micro- and nano-learning

Micro- and nano-learning differ in the scope and duration of the training. While an average microlearning module can last from 10 minutes, the duration of nanolearning modules is generally 1-3 minutes. Consequently, nano-learning is aimed at teaching a specific competence that serves to achieve a training objective, whereas microlearning offers a more comprehensive view and teaches all competences within the training objective through short contents.

Advantages and disadvantages of micro and nano-learning

- Micro and nano learning suit the modern learner and can be a perfect way to keep employees engaged and up-to-date with the latest company developments and goals. They are training methods that can be part of an **ongoing personal development** plan that allows employees to grow on a personal level, honing soft skills and keeping motivation high.

- Courses can be delivered in several modes: video, audio or text, which makes them accessible to all users and satisfies different learning needs. They can also offer an easy and **quick method of refresher training**, or act as a 'helper' in the workflow.
- These types of courses can be delivered with a **smaller budget** than traditional eLearning courses, although they can take time to develop.
- Micro- and nano-learning are part of a learning style that is better suited to some topics than others and must be used to **achieve very specific results**. It is useful for reinforcing existing knowledge or giving specific instructions on how to perform a task, but on its own is not sufficient to convey more complex concepts.
- Since employees can take these courses at any time during their day, there is a possibility that learning will become very fragmented.
- It is essential that the microlearning strategy reinforces and cooperates with long-term objectives and that there are no conflicts of interest.
- Micro- and nano-learning courses alone cannot foster solid training in a company, but must be part of a broader learning strategy, where their role is to further help employees.

Conclusion

The integration of micro- and nano-learning as part of a company's training strategy can certainly be a great help to employees. As we have seen, this way of delivering learning can be effective if it is focused on very specific objectives or if it is used to reinforce or supplement employees' knowledge. It is a type of training that stems from an action that is already an integral part of our lives; therefore, employees will look for information on their mobile phones to help them with work tasks regardless of whether or not these are provided by the company.

According to studies, companies that adopt these new training methods will reap the benefits and can help build a corporate culture of engaged and motivated employees. However, micro- and nano-learning alone is not enough and will only be effective in a company if it is embedded in the context of a broader learning strategy and supported by leadership that values personal and skills development.