

Modern Learning for Modern Learners: Microlearning

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ABSTRACT

Using "yesterday's" methods to train today's learners in a period of rapid learning no longer works. The pandemic has brought a paradigm shift in approach, but it is not enough. In this article, I will describe newer content formats and training delivery strategies that can be successfully adapted to the modern learner. Thus, by offering the modern learner small pieces of content for quick learning, with easy access from mobile devices and additional content to complete formal learning, it seems the recipe for success introduced everywhere in large companies.

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1. Introduction

Formal, traditional, classroom learning is still effective for many learners, but as the world becomes more mobile, there is a need for a way to reach them wherever they are - which could be anywhere. According to data from Bersin by Deloitte, 30% full-time employees perform work tasks most of their allocated time elsewhere than at the employer's location, and this number is increasing given the new habits created in the pandemic.

Digital learning environments were used by companies just before the pandemic. Learning platforms provide an interface with many services and functions for the user and are available in all scales and configurations. The fact that they can organize and aggregate content for the user makes them worth considering, especially if self-directed learning or discovery learning is used.



Figure 1. Bersin by Deloitte's infographic "Meet the Modern Learner" (source [13])

The Bersin by Deloitte infographic "Meet the Modern Learner" has proven to be one of the most relevant studies that brings together the challenges facing today's education professionals. As the concern for the creation of models in quality learning exists permanently, through this article we try to highlight how learning can be adapted to what the brain of the 21st century thinks. According to this study, the most important conclusions are:

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- Learning must be micro, delivered in segments that are easy to assimilate. The study focuses on highlighting the ability of concentration and to pay attention to learning topics by the modern learner. The findings of the study are that most learners will not watch videos longer than four minutes, which seems shocking at first glance but after an analysis of their own behavior the conclusions seem correct, because many people are not able to focus on watching a video. six minutes on YouTube even if it's received from a friend.
- Workplaces must allow for a productive work environment, and this means that those activities that are counterproductive and distracting must be eliminated. A better organization of work can be a solution in this regard.
- Learning from mobile devices is an essential condition because nowadays, the phone is an important accessory. As people now check their phones 9 times an hour, smartphones have become the most accessible means of finding timely answers to various and unexpected problems. Learning works well on mobile because today's students are involved.
- There are currently many companies that have training programs, but too few of them allocate enough time for training or have regular programs. In their time, employees would devote only 1% of their time to training and development but learning new skills or acquiring knowledge requires a more serious commitment over a longer period. So, time is of the essence.
- Even if they have time and can concentrate, an essential condition is that employees really want to learn. And in this sense, 62% of IT professionals say that they have paid for their own training courses even though they do not have much time.
- At work only 38% of employees have access to long-term training programs. In the profitability of the company and the efficiency of the employees' work, the training of skills is essential. An important competitive advantage belongs to the company that offers the most efficient method of learning, in a world governed by competitiveness, to remain at the top of the hierarchy is essential.
- In current issues 70% of employees search for answers to questions or challenges at work through search engines, Google being the simplest tool available when an employee needs information.

Here is some interesting data, according to Skillshub [15] about microlearning, about the way people learn and the technologies they use today, and they do very attractive microlearning:

- The improvement that microlearning has in the retention of information over traditional training is 22%.
- students who learn through microlearning techniques answered questions 28% faster
- the number of today's tech employees that are more likely (75%) to watch a video than to read email, documents, or web articles
- learning in bite-sized pieces makes the transfer of learning from the classroom to the desk 17% more efficient
- 94% learning professionals said that they prefer microlearning to traditional time-consuming eLearning courses because their learners prefer it.
- Attention spans have shrunk by half over the past decade.

2. What is Microlearning?

Microlearning is a way to provide a learner with short, focused content, ideally where and when he or she needs it. It is not a new idea, but it is a recurring one, as technology evolves very quickly and creates the premises for its use, in terms of changes in the learning paradigm.



Figure 2. The best ways to deliver microlearning

The effectiveness of microlearning has been debated for a long time, because small-scale courses do not necessarily mean good learning or improved performance. However, applied in the right context and considering the students' experience, it can be extremely effective. Microlearning is an agile, digital learning tool, readily available to all users, who can train online in just a few minutes. It fits the modern needs of students, especially because of the many benefits it offers to users and organizations.

Here are some ways to offer e-learning microlearning that I consider affordable and have already proven to be effective:

- **Micro content** - Content delivered by segments or topics - The main goal of the instructional design process is to reduce long-term learning topics into small lessons. Although this is not a technique in the instructional design process, I believe that every designer should follow this practice or goal.
- **Videos** - Short explanatory videos have already proven to be an effective micro-learning technique to engage learners. The evolution of technology has further fueled the importance and impact of video in micro-learning. At no cost, an organization can start an official YouTube channel to upload micro-learning videos and make them accessible to learners. Another common practice is to use WhatsApp groups where content is easily shared. Animations are extremely effective mediums for describing or explaining general concepts that might otherwise be difficult to understand.
- **Games, Puzzles & Quizzes** - Games are designed for entertainment. These are popular short games that are designed and can be included in micro-learning sessions. The importance of a game is that people learn the most even without realizing it. A test that takes salespeople to higher levels while answering customer support questions, a puzzle that requires cybernetics learners to complete missing items in a program, or a vocabulary quiz are all great ways to stimulate user adoption and increase involvement.
- **Podcasts** - In the field of learning, podcasts are very useful for auditory learners who like to listen to content rather than view it on screen. Micro-learning podcasts are a technique that can be used in instructional design. Because podcasts should be able to effectively communicate learning objectives to learners, they need to be carefully crafted by content designers. Without visual elements to complete the learning process, the sound should be effectively scripted to make students understand the learning process. Podcasts can also be used when instructors are asked to give instructions. The student may subscribe to or download podcasts and listen to them later. Each podcast should cover a single goal, ensuring that there is no cognitive overload for learners. Podcasts are also useful in areas where there is a reduced internet bandwidth or a lower connection because sounds without visuals do not require more internet bandwidth.
- **Power Point Presentations** - Another effective microlearning technique that can be used in the training design approach is to provide micro-learning content through power point content. Another effective micro-learning technique that can be used in the training design approach is the provision of microlearning content through power point content. In this sense we can mention a very popular platform like SlideShare, which has several million uploads in about 40 content categories. SlideShare is the most watched and accessed learning platform, allowing learners to learn from a wide variety of learning topics that are in the form of smaller slides. Slides mostly present content in concise formats.
- **Infographics** - Interactive and non-interactive infographics can be techniques in microlearning. I believe that a well-designed infographic can create an interesting learning experience for modern learners, as it condenses the information into a very short form, with the learner receiving only the most relevant information. The use of high-quality graphic content helps to attract students' attention and, in turn, helps the brain to formulate patterns that help with easy recall and retention.

The advantages of microlearning are highlighted in Figure 3.



Figure 3. The advantages of microlearning

Microlearning, as an integral part of e-learning, is a suitable solution in a certain context, but not a universal solution that can replace all other forms of eLearning, due to its disadvantages. Microlearning, focusing only on small, isolated pieces of learning, has the great disadvantage that it is not at all appropriate to sell. Another conclusion that emerges is that micro-learning is totally inappropriate when there is a large amount of content that needs to be studied and understood in detail, although it would be great to learn a few specific things quickly. Microlearning would work to learn the characteristics of events, happenings, or facts, to memorize them, but it would not work to study their motives, interactions, and deeper currents.

For a long time, even before the pandemic, specialists in the field of learning have highlighted that the future belongs to e-learning, whether it is digital knowledge delivered in small format, attractive through design and graphics in the form of microlearning, or knowledge transfer through microlearning.

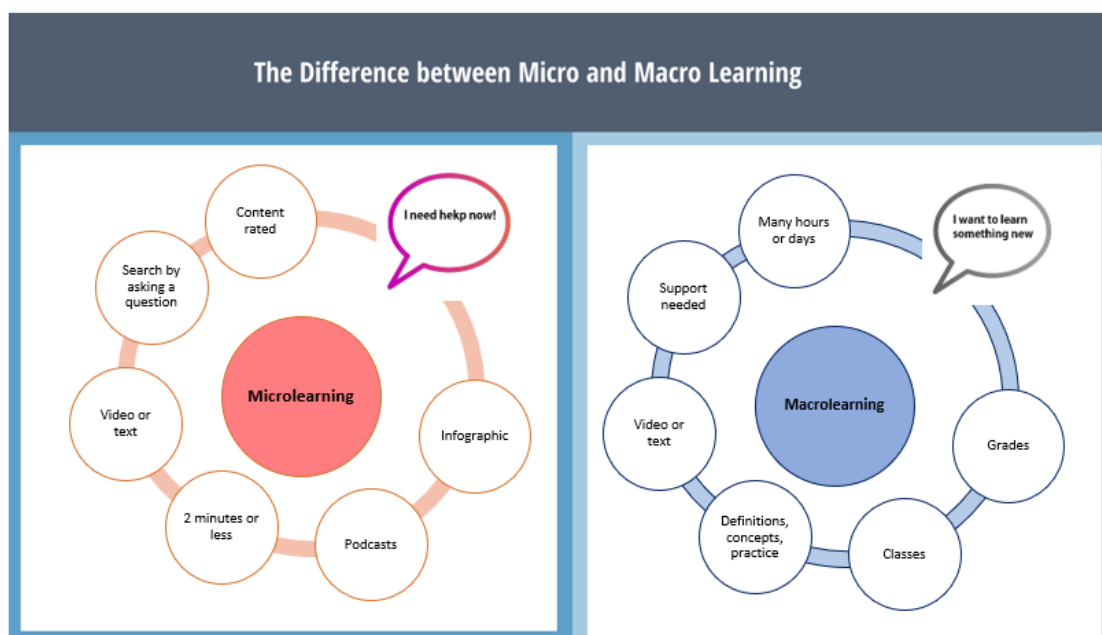


Figure 4. The difference between microlearning and macrolearning

3. Microlearning Platforms

Microlearning platforms gather a wide variety of information, which they simplify in a way that facilitates learning and communication - in small pieces. The right micro-learning platform is just as valuable for an entrepreneur or a small business that needs to streamline information and improve workflow. If you're still trying to train your students through web-based communication or use PowerPoint, share files with Google Docs and elsewhere - using a micro-learning platform will be a real change. Although they are designed to help you provide training materials and track student performance, no two micro-learning platforms are identical.

The key features to keep in mind are:

- Through a microlearning platform, you need to access knowledge sharing functions and answer questions directly through the platform, as you can access the entire knowledge base with a single command.
- Through a microlearning platform, you need to access functions in which to search the knowledge base to quickly refer to processes, activation resources, definitions and much more.
- Through a microlearning platform, you need to access functions to create new text / video materials and documentation in seconds, which can be easily referenced to eliminate repetitive questions.
- Through a microlearning platform, you need to access features that increase the productivity of your team, making it incredibly easy to get answers to questions and content created from anywhere.
- Functions for mobile learning, for intuitive and intelligent UX design and ease of use
- Wide range of features that allow interaction and connectivity with other tools
- Advanced analysis and reporting features to help you use your data more efficiently
- Ability to record, create and share content, materials, and information faster

Microlearning platforms should provide short and engaging content that is engaging to the learner, preferably using several different types of media content, such as images, videos, or graphics, to present information in interesting and memorable ways. They can combine microlearning with other learning approaches, such as gamification, scenario-based learning, video-based learning, and more, to create a greater impact. Microlearning platforms can also make boring topics highly interactive and help you use them more effectively.

4. Conclusions

Microlearning is not only a by-product of the evolution of learning patterns, and in the context of reducing the ability of the modern learner to be attentive and to learn, it becomes a very useful eLearning methodology. Micro-learning has good and very good results for students who do not have much time. And in this sense, research has shown that it is already an effective learning tool because we learn more and remember and apply what we have learned, when we study in short and focused episodes than when we are forced to stay in long courses.

Another argument in favor of microlearning and its use, especially now in the age of the Internet, because when everyone has a mobile phone, and many people have a lot of downtime (for example when they are stuck in traffic or commuting to work). The evolution of microlearning is evident because in primitive forms of microlearning, such as books and questionnaires, are already widely used, when combined with new learning techniques, they become even more powerful because they can access content in different formats at any time, to add multimedia elements, to use gamification strategies.

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