

# MICROLEARNING FOR PROFESSIONAL DEVELOPMENT

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*Undoubtedly, teaching and learning have taken different forms throughout history. First, they were limited to the hand-in of information from one generation to the next, but in time, schools began to develop and thrive. Nowadays, due to the inordinate number of information that people need at their working place, both teaching and learning are on the verge of a revolution which will probably change education as we know it. However, as this process is underway, it is difficult to predict whether the steps taken now to modernize the educational system are all made in the right direction. Will microcontent and microlearning be the answer to some of the problem in education? If people learn only what is needed and necessary, will this solve the information overload? The aim of this paper is to answer some of these questions by providing a balanced approach regarding the scope, uses and design of microlearning for professional development.*

**Key words:** *micro learning, lifelong learning, professional development, microcontent, course design.*

## 1. INTRODUCTION

Nowadays, the amount of information that a modern person would learn in order to function in the fast-changing modern environment combines itself with the permanent need to update knowledge in order to keep abreast to the latest developments in the area of expertise. Still, beyond other educational problems, some questions will normally arise: How can people learn everything they

need? How much will they actually use? In case they concentrate only on certain aspects or knowledge, what will happen if they do not see the big picture?

In the last decades, the advancement in information technology and the wide-spread use of Web 2.0 features have resulted in a new generation of people who are digital natives and who are used to thinking in terms of microcontent.

They need instant access to information, are comfortable with parallel processes and multi-tasking, prefer graphics to text, like to function as part of a network rather than on their own and expect quick gratification (Prensky, 2001). Rapid reword means that people spend as little time as possible searching for information and learning it and prefer to have it ready-made.

Actually, social media has this effect on users since it favors the production of texts that rely on condensed information to fit into a format that allows only a small number of words. The popularity of messages on Facebook, Twitter, Instagram, etc. is based entirely on their frugality and on the way in which essential information is provided in a manner that is both simple and engaging. As a result, microcontent becomes an important part of online communication especially because users have less time to concentrate on longer pieces of writing or on searching for information and prefer this type of prefabricated structures.

In this context, education is trying to change the way in which knowledge is provided and, consequently, it becomes more standardized, going through a process in which only certain information is selected and delivered to the learners in the form of educational packages. What is left behind will take other forms that are part of personal

learning, lifelong learning and of the quite recent microlearning.

Even if there is not clear when the term *microlearning* was coined, the credit for it goes to RESEARCH STUDIOS AUSTRIA (Behringer, 2013), which defined it as a number of little segments used for learning. It is obvious that learners are fighting a losing battle when it comes to traditional courses because the lack of time and the huge amount of information they need to acquire. Nowadays, even eLearning is considered somehow obsolete when it comes to certain fields that require individuals to permanently keep themselves informed with the latest developments in their area of expertise (Laru & Järvelä, 2013).

It may seem that the time for ubiquitous learning has arrived due to its availability, not only at anyplace and anytime, but also on any kind of device, microlearning becoming thus part of a kind of u-learning where information is provided in bite-sized portions.

Microlearning refers to courses that are designed and taught as part of a contract between one organization or department which needs to train its personnel and another person or entity responsible for the content and delivery of the courses. Still, microlearning may also take a less formal structure in the sense that it can include certain learning activities performed solely by a person and

based on the information coming from different sources outside the framework of a course.

## **2. THE EPISODIC CHARACTER OF MICROLEARNING**

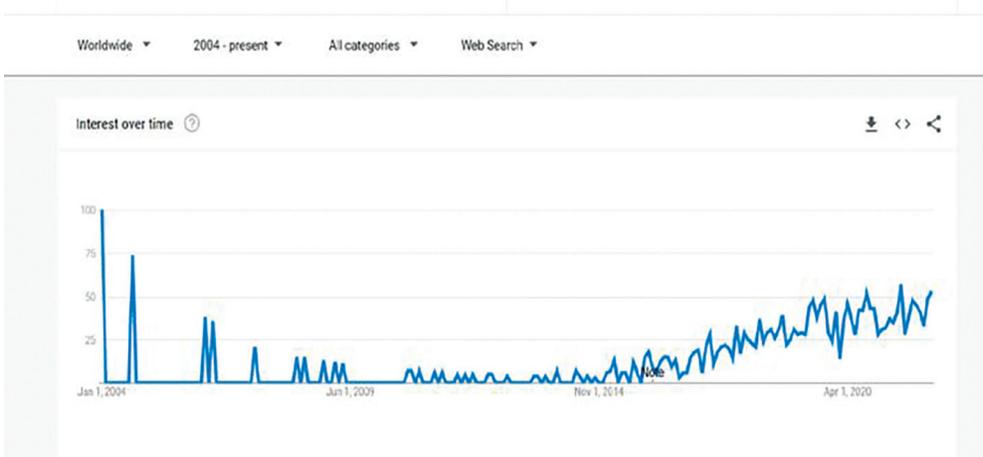
Microlearning courses contain chunks of information that address specific learning needs and are focused on a specific topic, a feature which makes them more suitable and popular for lifelong, personal and corporate learning. They are more flexible than traditional courses, more learner-focused. In traditional/formal courses, learners have to select the knowledge they need from a vast array of information in order to perform a specific task, but in the case of microlearning, the knowledge has already been selected and organized so that it will be easy to use. This way, the teaching-learning process is more reduced, the focus being not on acquiring information, but on using information in order to solve a task. Microlearning is thus more about episodic learning related to specific tasks which involve taking small, but conscious steps with the help of a large variety of technologies and teaching methods (Hug, 2007).

Microlearning is also regarded as connected to personal learning environments due to the fact that it is more or less self-directed and informal, having a simple structure based on elements of microcontent

and resources that come from a variety of media, libraries, cloud, blogs, databases, social media, etc.

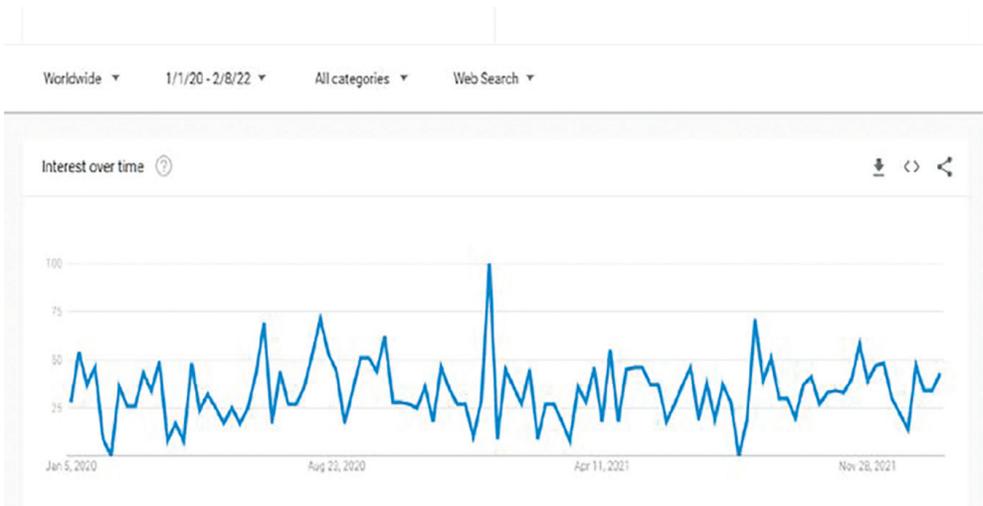
Microlearning can also be a brief learning experience acquired during some forms of planned and organized training which serve a specific learning goal (Malamed, 2015). Practically, microlearning can be any bundle of knowledge with a single purpose which teachers provide at a certain point even during traditional and eLearning courses. However, the concept refers not to micro-structures of this sort, but to the independent ones that serve a clear, immediate purpose and have a clear outcome while teaching becomes more task-oriented than in other types of courses. As a result, people get training, keep themselves updated, find new opportunities for professional growth and develop skills without losing time.

The popularity of microlearning has increased over the years. From 2004 to 2014, the interest in the topic was only sporadic, however, since then, it has gained momentum due to its practical use. Due to the challenges of the COVID-19 Pandemic, bringing groups of people together has become a problem in many countries since 2020. Actually, from the educational point of view, 2020 marked a turning point in terms of how teaching and learning were perceived.



**Fig. 1.** Google searches for the term microlearning since 2004 until 2020

Under these circumstances, there is even more need to provide training over a short period of time and as a result, the term „microlearning” is now trending, the peak being in April 2020.



**Fig. 2.** Search for the term microlearning since 2020 via trends.google.com

Some of the characteristics of microlearning courses are summarized in tables a and b.

**Table 1:** a. Courses:

Well-structured	Need a logical connection
Self-sufficient	Need no other resources
Intuitive	Easy to navigate
Clear and direct	Easy to understand
Available	Easy to retrieve
Short-term	Easy to attend

**Table 2:** b. Content:

Simple/single topic	Will be easy to concentrate on
Reusable	Can be organized in different way and form other courses
On-demand	Will be provided only if required
Attractive	Will be interesting to those it is addressed to
Quick response	Can be used to gather quick feedback from learners

### 3. MICROLEARNING AS A SOLUTION FOR WORKPLACE LEARNING

The focus of nowadays teaching and learning is mainly on the practical, economical use of knowledge and less on other aspects. That is why, microlearning is in theory the answer to the question: How can we provide working people with the exact amount of knowledge they need in a timely manner?

In the business environment, microlearning will be the solution to train the employees while they are also fulfilling their working tasks (Torgerson K., Iannone, S., 2020). Definitely, the information available today is too vast to be learned over a short period of time and, that is why, employees end up learning certain information only when they need it for their daily routines (Mazareanu, E., 2019).

Actually, workplace learning is not an element of novelty for large corporations which use microlearning modules with the purpose of „building employee knowledge, continually reinforcing competencies, providing quick access to information, and even identifying and predicting problems” (Allela et al., 2020, p.285).

In the workplace, if the information is necessary to be used later, employees may learn it, but, most probably, they will store it so that they will be able to access

it without actually memorizing it, relying on external databases available on the Internet or cloud. Most information is actually never learned unless it is part of a recurrent task. What does microlearning do in this case is providing only the exact chunks of information that is likely to be used more often. As a result, most of the time employees may be functional without actually having in-depth understanding of the information they use. Of course, this depends on the type of information, task, etc. because microlearning does not imply necessarily that the learner will not connect the newly acquired knowledge with the previous one.

Microlearning seems to be more suitable for repetitive tasks and for reducing the time in which they will be presented to workers for them to learn and use. The result will be an automatized process in which people perform their tasks without actually knowing other information than the one directly connected to the task itself. In the end, it depends on the learner's choice, dedication, interest in that specific information for it to be remembered later.

Microlearning makes the process more convenient both from the financial and practical point of view as it involves less costs. First of all, a smaller number of classes means a more reduced number of trainers. Secondly, less time spent for learning means more time for

employees to dedicate to their daily tasks. Still, there should be a balance between the content of microlearning and the time employees have to dedicate to learning.

#### **4. DESIGNING MICROLEARNING COURSES**

Microlearning seems to be thriving while it is following the global tendency of providing minute information on an as-needed basis. This is actually how social media works, but if one needs more information, one needs to search for it. However, most of the time truncated data is enough to have a glimpse of a certain topic without having, of course, the big picture.

As microlearning seems to be less for in-depth understanding, but more for repetitive tasks, the courses have to be well-designed so as to provide the information needed. The same as for lengthier courses, those with microcontent should take into account both the nature of information and the allocated timeframe. These courses can take different forms, from traditional to blended, synchronous or asynchronous, with the help of a human teacher or without. They can be intended for self-learning, but as they are not comprehensive and are designed solely to focus on certain information/skill, they should be used wisely at the right time, place, and with the right type of learners.

Actually, in the absence of a standard model, people understand different things when they talk about microlearning and that is why the results are also very different. In fact, like any other courses, microlearning ones should take into account the following information:

- Learners: age, prerequisites, needs, expectations, etc.;
- Institution: technology available, timeframe, limitations, etc.

If other types of courses allocate more time to both teaching and learning, the frugality of microlearning may be a challenge in terms of course design. Firstly, learners' needs should be very well identified, because the limited timeframe does not permit to add a lot of elements into the design. If the course has too much information, learners will not be able to accomplish all the tasks and meet the objectives in a short period of time, if information is too little, the necessary skills may not be obtained. Secondly, even if the needs are well-identified, learners might be very different in term of knowledge, learning style, motivation, etc.

The same as traditional courses, microlearning ones should include three main components of course design: objectives, assessments, and instruction.

In addition, according to Theo Hug (2005), the design should take into account the following restrictions:

- Time. It is critical because according to it, the microunits will be designed.
- Content. It should be rather simple, easy to understand, based on preexistent knowledge.
- Curriculum. It should be part of a curricular setting, contain small elements of learning, etc.
- Format. It can be designed in a variety of formats according to learners' and institution's needs and restrictions.
- Process. It could have activities that are independent or integrated
- Mediality. It can be face-to-face, online, blended, etc.
- Learning models. It can include a variety of learning models ranging from reflexive, pragmatic ones to the corporate learning and others.

Another issue is connected to the materials used for the course, their quality and layout, but also to how much information they should include considering that the internet has made readers' attention drop. As a result, such a course should contain selected material packed in a reduced amount of available space.

There are many platforms that provide the tools for designing such courses. They offer the possibility to insert a variety of media into

the course itself, each of them with the purpose of both meeting the objectives and creating a modern and interactive environment. The materials used could be podcasts, videos, texts, infographics, self-check exercises, etc. each of them taking an average of 5 minutes or even less, but also other types of microcontent that could be both interesting and appealing such as memes or custom images that are used to transform knowledge into visual input.

All the above show that microlearning may be very different in terms of length and content according to its purpose. Carla Torgerson and Sue Iannone (2020, pp.8-9) have identified four ways to use microlearning, each of them containing activity ranging from thirty seconds to ten minutes:

- Preparation before a learning event,
- Follow-up to support a learning event,
- Stand-alone training,
- Performance support.

All these elements are meant to provide some guidelines in order to create microlearning courses that have a certain degree of similarity in terms of the design and use. Still, microlearning continues to be extremely diverse in format and use because it is meant to serve not only different learning objectives, but also different types of learners and institutions.

## 5. CONCLUSIONS

The fast-paced society and the need to learn knowledge and skills in a short period of time have led to the use of microlearning courses. These consist of short and simple courses that contain chunks of information with the purpose of helping learners to improve knowledge, abilities and skills in a timely manner. Moreover, the popularity of microlearning courses with the business sector also comes from the fact that they do not need a long period of time to complete, they are easy to design, and the expenses are kept at a low level.

However, in order to maximize these strong points, the design of these courses has to be conducted with utmost care so that their objectives will be met. Therefore, microlearning has a number of obvious advantages especially for lifelong and professional learning, but it cannot replace the traditional education which will provide the foundation on which any other educational products are based.

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