



The Nano Learning Pedagogical support booklet

Drafted by ARESH



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Introduction

Social media platforms have influenced pedagogical practices and given rise to new theoretical approaches that emphasize connected learning in order to improve learning outcomes. This e-learning distance learning methodology aims to make training content available on a single platform and to manage the users of this platform. Its tools are, for example, MOOCs, interactive videos, serious games. In constant evolution, e-learning has come to use more and more digital tools - digital learning - to boost learning. Fluid and immediately available, these tools complement, replace or support face-to-face training.

In the mid-1990s, the development of cell phones, iPads and laptops made it possible to start using them in the learning process. Digital tools, accessible everywhere thanks to these digital devices, are now part of the world of training and learning. This is the advent of mobile learning. That is to say, mobile learning, a learning concept that allows learning on the move thanks to short and fun formats.

It is in this context that, according to an article published in the *International Journal of Educational Excellence*, two new branches derived from e-learning are developing, which can be considered as two branches of the educational strategy that focus on small learning sequences and are linked to connected learning. These two branches are microlearning and nanolearning.

1. Microlearning versus Nanolearning

There is disagreement about whether microlearning and nanolearning are the same or different. Nano learning and micro learning share many similarities. For example, both seek to present ways to design, distribute, and use small learning elements. Compared to microlearning, nanolearning involves further miniaturization of learning into subunits to achieve sustained attention. Both microlearning and nanolearning focus on a single learning objective. However, nanolearning is more focused on an ultra-specific learning objective due to its even shorter runtime. Both learning models make extensive use of multimedia tools (text, graphics, video vignettes, audio, illustrations).

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A nanolearning sequence can last one to two minutes or less. A microlearning sequence may last three to five minutes. However, no typical duration has been defined. As a result, research has shown that in nano-learning, the duration of a sequence does not exceed 10 minutes. In practice, the two techniques are confused. It is often said that nano-learning is part of microlearning, that it is a subsystem.

Both microlearning and nanolearning offer learners a learning experience in a short period of time, meeting learning objectives on demand.

The major distinction between microlearning and nano learning is that microlearning can be used in **both formal and informal learning environments while nano learning can only be used in informal learning environments.**

2. Characteristics of NanoLearning

The National Association of State Boards of Accountancy (NASBA) has defined NanoLearning as a tutorial **program designed to allow a participant to learn a given topic in ten minutes through the use of electronic media and without interaction with a real-time system.**

The principle of nanolearning is to **be able to access ultra-short content at the moment of need.** The content is relearned at the moment, is not necessarily memorized and can be reused at will when the need arises.

It is a teaching pedagogy that offers **condensed learning** content in a training plan.

The essence of nanolearning is to **break down an hour of content into two minutes or less.** (Typically, nano-learning courses are between 2 and 10 minutes long.)

It covers **only one learning objective** and provides focused **learning on a single topic.**

It aims to **capture the learner's attention through** small formats.

Nanolearning has **rich multimedia features** such as text, video, images, illustrations and sound.

A course may **contain links to related training materials**, practice aids, or other additional resources to expand the learner's knowledge base.

It allows learners to **access information more quickly.**

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It facilitates **focused learning** and spaced **repetition**.

It is **designed to be reusable** (very little is retained of what we learn unless repetition is done).

This allows us to leverage content **by using it multiple times**.

Nanolearning techniques allow us to **retain** only the **information we need**, easily **skip** the parts we already know, and **move** forward in a program.

It does not require any **prerequisites**, it is self-sufficient.

Learning in bite-sized chunks makes learning more efficient.

The courses are **compatible** with all types of tablets and smartphones, as well as laptops and desktops, allowing for convenient **learning on the go and** at times convenient to the learner.

For the learner, the investment **cost is low**.

However, nano learning **cannot be used for comprehensive training, nor will it work when content is taught to learners for the first time**.

A nano learning program **differs from a self-study program** in that it is usually focused on a single learning objective and does not use the paper medium.

Nano learning **is not a group program**.

Nano Learning **is not a substitute** for comprehensive programs dealing with complex problems.

Nano learning helps **counteract the forgetting curve** - more than half of what is learned is forgotten within the first few days - and maintain knowledge and awareness over time, nanolearning **should be viewed and treated** as an ongoing **process**, not as a stand-alone event.

Nano learning **is learner centric**. It is a granular solution which means that each part of the initial module **is independent**. This allows learners to organize themselves as they wish and customize their learning plan. With **adaptive** learning strategies, the experience is modified based on the learners' performance and engagement with the course material. Teaching is then based on the learners' **adaptation** to the technology and data. The learning path adjusts to the learner's mastery to fulfill a specific objective based on :

- what he/she really needs to discover among the new features ;
- what he/she does not know yet;
- what he/she cannot access online;
- what is a gap or a performance pattern (failure-correction).

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3. A learning strategy

Studies show that modern learners can only devote 1% of a typical work week to learning and development, or about 5 minutes per day during a work week. For busy learners who have very little time to devote to continuous learning, nanolearning has a strategy that works very well. That's because learners can consume bite-sized, single-goal learning anywhere, **using their mobile** devices of choice such as smartphones and iPads. A short **video/clip** (video/capsule) or mini podcast can be an effective way to quickly disseminate information.

This very short, electronically based format **is nonetheless content dense**.

When it comes to **reinforcing concepts** or providing support at the **exact moment** learners need it, nanolearning is powerful as bite-sized learning pieces **guarantee higher learning retention rates**.

Nanolearning allows learners **to avoid cognitive overload**: they learn through small segments of information in order not to overtax their attention. Indeed, segmenting programs into small units, setting very short-term objectives will reinforce attention. This will also **reinforce success and therefore self-confidence**. If the objective is short, it will be easier to spot a drift of attention and to rectify it. **This implies that concentration is improved by a succession of small tasks interspersed with small pauses**.

Nanolearning is based on research and learning principles: **repetition, reflection, reinforcement. Spaced repetition, spacing effect and retrieval practice maximize learning and awareness and reduce the effect of the forgetting curve (we only remember 20% of what we learned the day before** as previously explained).

This type of learning allows for short, **focused bites of content** to be delivered at various intervals such as days, weeks or months. This spaced repetition helps to effectively overcome memory loss caused by the forgetting curve. The more a piece of information is repeated over time, the more it **becomes ingrained in** our memory.



3.1. The gamification strategy

Nanolearning can be considered through **gamification**. Gamification is part of the **nanolearning strategy**. It is a method **that consists of applying the codes and mechanisms of games** to sectors for which they were not intended, notably learning. "Gamification is the art of deriving all the fun and engaging elements found in games and applying them to real or productive activities. This process is what I call 'human-centered design,' as opposed to 'function-centered design.' It is a design process that optimizes human motivation in a system, as opposed to pure efficiency," as defined by Yu-kai Chou, one of the pioneers of this method and creator of the Octalysis model¹.

Since learning is an **active process**, it requires motivation to be initiated, continued and finalized. **Playing** while learning is a **vector of motivation** and can make the learning activity more interesting when, for example, levels of progression are possible in the acquisition of skills. The objective of gamification is to allow a **user to perform an action** while being entertained, the purpose of the action not being to play but to learn.

What is the contribution of gamification in a learning process? Gamification allows to reach the *flow* (**state of mind** in which an individual is when **he is totally dedicated to the activity he is doing** - according to the psychologist Mihaly Csikszentmihalyi). On the other hand, **the principle of gamification allows to encourage** an effort produced instead of punishing the mistakes made.

To include gamification in a training course, it is necessary to think about it from the training design phase. The most illustrative example is Duolingo, a language learning application. It is based on the principle of gamification, which means that the courses use the codes of mobile games: hearts for the number of lives or crowns to collect to unlock new features or new lessons. A lesson takes 5 minutes and gives 10 experience points.

¹ <https://yukaichou.com/gamification-examples/octalysis-complete-gamificationframework/#.Vy3c9uSZMzX>



The mobile application is available on iOS (Apple), Android (Google Play) and Windows Phone. It also has a website (<https://duolingo.com>) accessible from most browsers. It is free to use and also offers a premium subscription.

The learning path of the platform offers a progression in the form of an experience bar. Each course session is divided into different worlds that become more complex as you progress through the learning process. *Duolingo* engages its users by offering them daily appointments to gain experience by completing the challenges of each world. The application rewards its learners by serving them badges according to the missions they complete.

It is now commonly accepted that we learn more easily when we play, as the game stimulates our emotions and senses, which channels our attention and improves our memorization. A gamified training has the advantage of offering a new experience to learners through original and playful learning that makes them want to come back, builds loyalty, and creates a desire to evolve and go further. In this way, learning is done progressively. It is easier to learn while having fun and to retain things when you **don't feel forced to**.



Figure 1: Three illustrations of activities on Duolingo

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The effectiveness of this teaching method is continuously monitored through various tools. One of these tools is the checkpoint quiz, a short assessment that takes place at the end of each section of a course. By analyzing the answers of millions of users, the system can discover the areas where they are having the most difficulty and use this information to improve the teaching method.

In general, quizzes are one of the most popular ways to test knowledge acquisition.

4. The benefits of nanolearning

It allows learners **to learn quickly** and instruct efficiently.

Learning is goal-oriented, which implies an immediate benefit from learning.

It improves accessibility to content.

It helps **eliminate learning gaps**.

It increases learner retention power.

It reinforces learning in a short **period of time**.

It is **complementary** to the traditional learning style.

It provides easy availability of learning modules.

It allows for learning on one's own time and pace.

It helps **eliminate doubts**.

It helps to understand the logic behind a concept or formula.

Nanolearning **requires little time to absorb information**. Learners are more **likely to pay attention** in a nanolearning course because it is not time consuming.

Nanolearning content is an effective way to retain and receive information. In addition, learners feel less overwhelmed because they can break down their learning objectives.

Also, screen time can be reduced by using nanolearning methods.



5. Tools for creating nanolearning

Nanolearning works well with Learning Management System (LMS) software applications such as Live Learning, BlackBoard, Edmodo, Moodle and Schoology.

In all cases, the choice of the creation tool (here an application) is made **by evaluating the available functionalities** and the richness of multimedia integration.

It is also necessary to choose a solution **that offers strategic and qualitative support before**, during and after the training.

The user uses an LMS **via his computer, tablet** or cell phone. This training platform is available at any time and on any interface. Thus, **the learner connects whenever he wants**.

Advantages of using a LMS:

- Create interaction templates that **can be reused**.
- Create a "theme" that can be **customized**.
- Create content that can be viewed immediately on a range of devices.
- Be cloud-based so that more than one team member can work on it at the same time.
- Use a predefined menu so you don't have to create your own.

Access a database of **ready-to-use media files** (graphic images and icons). Use tools like Canva (<https://www.canva.com>) or Adobe Spark (<https://www.adobe.com/fr/>) to create illustration images **easily**.

6. Implementing Nanolearning

Creating a nanolearning training programme requires knowing who the learners are in order **to best set the learning objectives and professional goals**. For example:

- Learn more
- Learn something new
- Solve a problem
- Respond to a specific challenge

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- Apply and remember
- Practicing to gain mastery

Advices to create a nanolearning training:

- **List each step of the learning process** (even the simple ones).
- **Break down each step into micro-actions** without omitting the difficulties that learners may face.
- Add a **narrative to clarify** what is being shown (avoid anything that distracts from your topic), if necessary add captions.
- **Transform raw content into engaging, effective and stimulating** learning devices to match the educational **objectives** and needs of the target audience, using the various media available (video vignette, infographic, whiteboard animations, quiz).
- Define what information is "good to know" and what is "**necessary to know**" in order to eliminate the superfluous and leave only the **essential**. (Neuroscience has shown that people retain mostly what they have **identified as necessary**).
- Before proceeding to divide the training into several items, it is necessary to classify and prioritize the information **to be disseminated in order of importance**. All information deemed unnecessary should be **removed** from the training materials.
- It is necessary **not to offer content in bulk** or in one block. The breakdown of a module is essential for reading and re-reading. It is essential to follow a coherent and understandable breakdown plan.
- Offer a quantity of information that can **be assimilated**. The tension, the balance between difficulty and feasibility of the content keeps the learners motivated and ensures that they learn.
- **Structure** the selected information in modules and then in several **sequences**. It is necessary that all the contents **within a module** have a common basis and form a coherent whole. (In the YAE project, the 4 modules have been defined. Depending on the concepts to be taught, it will be necessary to segment them into sequences of small bites. As many bites as there are concepts in each module, 1 bite = 1 concept).



Each bite-sized piece of information can be both an activity to perform (e.g., a quiz) **and information to assimilate**. Various ways of organizing the content, using several media to explain the same concept, are possible. The designer will choose these associations according to the objective assigned to each learning bite.

It is useful to think about creating a template that can be reused to make several bites and to explain several concepts.

It is also possible to use predefined templates to create your content. They have the advantage of having already been tested.

It is important **to synthesize** and **cut up** the content in such a way as to get straight to the point, without forgetting the overall coherence.

Choose **the medium**, cell phone, tablet, computer. In all cases, it is necessary to ensure that all learners have access to these tools.

Choose a distribution platform. (Here an application).

It is recommended to find a unique **solution to host the content**. Indeed, learners do not want to download and connect to several applications, they might drop out.

It is recommended **to include a social** learning aspect in a course when possible. Social interaction is a great learning gas pedal. **Social learning** is designed **to replicate observed behavior, so that learning is not based solely on mistakes**. According to the Canadian psychologist Albert Bandura, observation is a complementary, rapid and effective way to acquire new skills and use them in new situations. From these observations, new representations can be constructed by the learner who can appropriate and personalize them.

The attention span of learners must be taken into account when designing a nano-learning course. **(According to a study, 8 seconds is now the average concentration time of a human being, compared to 12 seconds in the early 2000s - before the digital revolution).**

The **title** of each module should make **a clear offer of the task or skill it covers**, e.g., "How to make a sales call."

Make the **content identifiable** by using intuitive terms. For example: "How do I.../How to do + task". If there is a specialized or technical name for the task, include it in the title. This is

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because the learner cannot waste time identifying terminology they do not yet know, adding time and frustration and increasing the risk of dropping out.

The objectives of each bite-sized piece should be simple, direct and specific. For example, here, "MODULE 1: Analysis of needs, supply and demand for cultural services" could be broken down into several vignettes of the following type: "Needs analysis" (what is a need? how is a need analyzed), then a vignette could be considered to identify each of the needs listed in the general analysis vignette. This sequence can be used for the analysis of supply and demand.

Nanolearning **courses** last from **5 to 30 days**.

Specific **titles and objectives allow learners** to focus on specific and crucial points. Quizzes can be offered to verify and fix the content in a fun way.

It is important to remain very visual. Text alone is neither attractive nor conducive to rapid memorization.

Make extensive use of visuals to **enrich the content**: photos, illustrations, computer graphics. There are several free professional photo bases (Unsplash, Pixabay, Pexels) or design bases (Dribbble) to complete your content.

Use shapes and lines to describe relationships, processes and flows.

Use symbols and icons to make information more memorable.

Use visuals and data to tell stories.

Use color to indicate importance and draw attention.

Use formatting. Text alone, without formatting, does not give your learners an entry point. On mobile, a long paragraph will rarely be read. Include formatting in your content: Visible titles: bold, underlined. Structured division: paragraphs, line breaks. Visual elements: icons, smileys. Content titles and subtitles should be catchy, making a promise to learners.

Choose a light and informal tone.

A situation is better than a long speech. Applicable training must be accompanied by concrete examples. Research shows that learners need cognitive support to help them learn. Showing how to solve a problem by illustrating each step helps them focus on each step and reduces cognitive load. To be able to apply what has been learned, it is useful to rely on concrete examples (film sequence, known story, famous reference, practical cases). An example replaces hours of explanations.

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If a nano-learning course must **remain synthetic**, learners must be able to go further. It is interesting to allow access to additional content: videos, in-depth articles, practical guides, integrated via the LMS platform to an external resource, for example: "To go further", "Want to know more? It is necessary not to be satisfied with "passive" formats. The sequence of viewing/**reading without any action on the part** of the learners leads to a dropout. Integrating activities during and at the end of the training module helps to maintain a high level of rhythm and attention. [Text quizzes (<https://quiz.net>), Picture quizzes (<https://ahaslides.com/fr/>)]. Offering a surmountable **challenge encourages** learners to surpass themselves.

Simplicity in tone and content: in a few minutes, get to the point in a straightforward way to maintain attention and share the promised knowledge.

Simplicity **in production**: that's what video solutions are for. From shooting to editing, they offer all the features you need.

Simplicity of distribution: email, SMS, social networks, dedicated platform.

7. The power of video as a nanolearning medium

The video formula is recognized as a **winning formula** because it is attractive, dynamic and motivating. The **segmentation** of its content into short capsules allows for personalized and almost instantaneous problem solving, in addition to facilitating the filming process.

5% of people stop watching a video after 1 minute and 60% after 2 minutes, hence the interest in using the nano format.

It is preferable not to exceed 3 minutes for a notion. The whole thing should be kept extremely short. It is because each session is felt to be very short that learners will not be afraid to come back to it.

The strength of the video is explained in this 1'10 video:

https://explee.com/fr/?utm_medium=referral&utm_campaign=ZEEF&utm_source=https%3A%2F%2Foutils-20-en-francais.zeef.com%2Ffr%2Fportail.skoden



This video was created with the Explee tool available on the site below in the video category.

https://explee.com/fr/?utm_medium=referral&utm_campaign=ZEEF&utm_source=https%3A%2F%2Foutils-20-en-francais.zeef.com%2Ffr%2Fportail.skoden

Studies have shown that the message and knowledge in drawn videos (**whiteboard animation**) are better memorized (+15%) compared to the classic video format (a person speaking), for all age categories. This innovative format can also integrate interactivity (clickable link, quiz, infographic, images)

8. The video vignette

Psychology researcher Barbara Class assumes that the status of the video vignette is at the same level of granularity as a learning activity. That is, the video vignette is the smallest component of a system.

A video vignette is a very short clip or video that gets to the essence of a topic. The vignette has a very important effect **on memorization**. Thanks to the combination of image and sound, the learner is attracted by the character used, the animations, the music, the words, the colors and all this has an influence on his/her **attention**.

Its construction must be **fluid**, follow a coherent progression and be linked to explicit objectives. The optimal length of a capsule is estimated to be between 2 and 5 minutes. The latest brain decoding tests have revealed that the maximum attention span of a human being is limited to 10 minutes. After this time, learning is no longer optimal.

It is possible to use a video **capsule as a recap** of a given course with a quiz to ensure the learner's understanding and even help him/her to better master the course.

It is possible to integrate questions into the vignettes to get the learner to react and reflect, which will facilitate **their understanding**.



The video vignette can take various forms and can be declined in :

- a **video sequence** captured with a camera: reports, conferences ;
- a **demonstration** on the board, tabletop demonstrations;
- a **slide** show with **audio commentary**
- a recording of actions taking place on the screen or screen capture, **like the first video tutorials**;
- a **whiteboard animation** (software or mobile application) allowing the annotation of documents and the manipulation of objects or texts;
- a 2D or 3D animation made frame by frame (Stop-motion. This is an animation technique that consists of filming objects frame by frame, moving them slightly with each shot);
- an **interactive video** enriched by the integration of additional information that can be acted upon: internet link, twitter feed, additional videos, images, texts, podcasts, quiz;
- a moving text and still images with animation effects: **writing, hand drawing**.

- An example: a 3-minute vignette could include:

Image/GIF

Concept/case study

Exercise/question

Answer

This list is not exhaustive and it is always possible to combine these different types of vignettes to customize your production.

9. How to create a video clip

- **Define the topic and purpose of the vignette.**

What is the educational intent? The topic is specific.

- **Define the content.**

When the content is dense, **it is recommended to segment** it into several vignettes.

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Explanations will be better understood if they are simple and if they refer to other resources (other video vignettes, podcast, PDF, links to other applications or platforms). Simplicity in tone and content.

- **Scripting the content.**

It is advisable to at least think about the articulation of the media (text and slide show or animations).

- **Prepare the media.**

The media will allow the content to be distributed:

o **The text:** is written to be spoken, gains to be clear, precise, fluid. Avoid long sentences, repetition, and the use of information that has been forgotten.

o **Slide show:** light slides, the main information is said orally. The slide show aims to support the understanding, guide or illustrate. Easily readable images or diagrams can also serve the purpose of the video. Infographics, in particular, can improve appeal, comprehension and retention.

To help with vignettes, two videos from the University of Lausanne that provide valuable tips for :

- **Prepare to write the text** <https://www.youtube.com/watch?v=-1DDroLsDSQ>
(You can activate YouTube automatic subtitles to benefit from the content of the video)
- **Helping to organize content:** Mayer's principles help in the design and organization of educational content in order to optimize its comprehension and appropriation by learners. <https://www.youtube.com/watch?v=4JHf9wZO88>

Nanolearning is not only video based. Short pieces of learning material in slide presentations can be created. Google Slides (<https://www.google.fr/intl/fr/slides/about/>) makes it easy to change new content without having to completely redo the images and formatting each time.

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Useful sites for creating video vignettes:

- <https://primabord.eduscol.education.fr/qu-est-ce-qu-une-capsule>
- https://continuepedago.canoprof.fr/eleve/Fiches_Pratiques_ressources_outils_enseignants/Creer_une_capsule_video_avec_l_outil_de_Windows_10/

Useful sites for creating tools for making nano learning content:

- Creating interactive online quizzes.

<https://www.youtube.com/watch?v=rp7hEBVndVc> (1'53)

<https://www.youtube.com/watch?v=tHkQO44OudI> (3'45)

- How to add a web link in a SNAP, how to share a URL (Uniform Resource Locator, refers to the web address of a website) on Snapchat.

<https://www.youtube.com/watch?v=Vc7q3RCiEHE>

- Create content in quizzes, questionnaires, infographics, videos, adapted to nano-learning.

<https://outils-20-en-francais.zeeff.com/fr/portail.skoden>

<https://explee.com/fr>

- Create and use infographics

<https://fr.venngage.com/blog/infographies-elearning-templates/>

- Create whiteboard animation

<https://www.youtube.com/watch?v=wzSVKj2vBc0>

<https://www.youtube.com/watch?v=8b-shJU22I>

<https://filmora.wondershare.fr/animated-video/best-whiteboard-animation-software.html>

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<https://www.adobe.com/fr/creativecloud/video/discover/whiteboard-animation.html>

10. Examples of video clip content

Marketing strategy

<https://www.youtube.com/watch?v=aN-4oK1oJQM> (1'56)

<https://www.youtube.com/watch?v=BLVDd7WOiWc> (3'23)

Cultural marketing

<https://www.youtube.com/watch?v=WhtREQ6Al6I> (2'33)

Analyze the competition

<https://www.youtube.com/watch?v=R9OTdEcrXGY> (2'36)

Develop a prospecting plan

<https://www.youtube.com/watch?v=5zIb45QiPh4> (2'39)

What is a territorial cultural project?

<https://www.youtube.com/watch?v=JTSaXVK55A0> (2'16)

11. Nano-learning on TikTok

Very short videos created in social media applications, particularly TikTok, can be integrated into learning environments as a nanolearning approach.

TikTok can be a potential pedagogical tool because it allows for the delivery of small learning units in a short period of time (less than 60 seconds), making it easier to create online learning content.

Billions of people around the world have accounts on one or all of the social media platforms like Youtube, Instagram, Twitter and others. Every time they read an informative post there or watch a short video explaining something they didn't know before, they learn.

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Studies on the use of TikTok in learning environments have found that students display positive attitudes toward this app because they have already used TikTok to gain various skills and knowledge in their daily lives. In addition, using TikTok encourages learners to engage in different activities. The commenting feature of this platform allows users to provide information, express opinions, leave comments or engage others in conversation.

Future efforts should be invested in creating nanolearning videos for teaching and sharing creative skills and knowledge in a variety of disciplines. TikTok can easily be integrated into the learning process, as most teachers and students already have TikTok accounts.

Examples of content and formatting: Educational content on Tiktok in one-minute videos.

Arte on Tiktok to answer specific questions in 1'.

Why are Caravaggio's paintings so dark?

https://www.tiktok.com/@artefr/video/7077960275860671750?is_copy_url=1&is_from_webapp=v1

What you didn't know about Van Gogh's paintings

https://www.tiktok.com/@artefr/video/7065733919433313542?is_copy_url=1&is_from_webapp=v1

Can our brain do two things at the same time? When driving, not really.

https://www.tiktok.com/@artefr/video/7050150926232980741?is_copy_url=1&is_from_webapp=v1

Modern ecology

https://www.tiktok.com/@artefr/video/7072781938616028422?is_copy_url=1&is_from_webapp=v1

Jamy's account (C'est pas sorcier, le monde de Jamy) : science popularization

<https://www.tiktok.com/@epicurieux>

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Throughout Europe, TikTok is setting up the #TikTokAcademie program and offering users of the platform educational content in an innovative format via short videos of 15 to 60 seconds. With #TikTokAcademy, TikTok supports and accompanies the creation of educational content in order to raise awareness of culture and knowledge.

TikTok has decided to extend the maximum duration of its videos. From 15 seconds at its inception, it went to 60 seconds, then 3 minutes. Currently, it is considering increasing the maximum length to 10 minutes.

Social networks to disclose short videos

The short format is in fashion, the majority of the big social networks have been inspired by the Chinese platform by releasing their TikTok clone. Snapchat with Spotlight, Instagram with Reels (which has just been extended to Facebook) and YouTube with Shorts.

The ARIST Example

Ryan Laverty, co-founder of Arist, an SMS-based learning platform pioneering employee training via SMS and WhatsApp, predicts, in the future, learners will learn more from Snapchat than from school, more from YouTube than from libraries, and more from TikTok than from the NY Times.

Presentation of the Arist platform on YouTube (video 1'04)

<https://www.youtube.com/watch?v=a9C52w1yJc8>

12. Recommendations

For nanolearning to work, it is essential to respect three points:

- Mobility for training that is accessible at any time (which the use of the smartphone allows).
- Brevity of short learning sequences (3 minutes maximum).
- Interactivity, an essential point to motivate and engage the learner.

What emerges from the research is that nanolearning is only used in informal learning environments.

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It appears that the most effective length of a vignette is 3 minutes. The maximum recommended duration is 5 minutes.

It is essential to cover only one topic per vignette.

Get to the point.

Be as visual as possible.

Use ready-made models that have already proven their effectiveness. Only the content needs to be created.

