Canadian Journal of Educational and Social Studies
Vol. 3(2), 2023, pp. 45-62

Microlearning As a Learning Tool for Teaching and Learning in Acquiring Language: Applications, Advantages, And Influences on the Language

Zanyar Nathir Ghafar[1] & Sana Tahir Abdullkarim[2] & Lanya Mahmud Mhamad[3] & Rezhin Abubakr Kareem[4] & Pshtewan Awat Rasul[5] & Tablo Ibrahim Mahmud[6]

[1,2,3,4,5,6] ESP Department, National Institute of Technology, Sulaymaniyah, Kurdistan Region, Iraq
Correspondence: Zanyar Nathir Ghafar, National Institute of Technology, Sulaymaniyah, Kurdistan Region, Iraq
Email: zanyareng92@gmail.com

DOI: 10.53103/cjess.v3i2.127

Abstract

This article discusses microlearning, including its uses, benefits, and limitations. The analysis shows that gamification, infographics, videos, apps, and social media may all be leveraged to provide microlearning. The advantages of microlearning, which allow lessons to be given in a little length of time, are supported by several researchers. It is accessible at any time and from anywhere. Microlearning is flexible enough to support several learning modalities and may be tailored to each student's requirements. By making it accessible, teachers may allow students to choose succinct, necessary, desired, and relevant information. Using microlearning increases student comprehension and retention. When lessons are broken down into digestible pieces, students and teachers are more likely to remember what they learned. It is also easier for teachers to update material and be aware of learning goals. Complex or challenging subjects do not lend themselves well to microlearning, and in-depth explanation is required. The learning process' objectives determine the teaching approach. If the material is provided to students in little parts, they may not be able to understand it completely. It is required teachers to develop their lesson plans. However, not all teachers have the time or funds to develop curricula. Microlearning strategies are influenced by various elements, including how instructors employ digital technology, the qualities of each student, and outside variables, like how easily accessible learning resources are.

Keywords: Instructions, Micro-Learning, Teaching, Learning, Technology

Introduction

Numerous institutions and organizations have embraced online schooling due to the Covid-19 virus's transmission to almost every country (Fitria et al., 2022). The concentration and attention of the students during study time are among the numerous difficulties in implementing this online learning. Of course, it is not realistic to have online

knowledge last the same amount of time as in-person instruction since, in addition to being more expensive, students' attention spans may suffer due to boredom and weariness after lengthy lecture periods. The learning process is not always optimized by e-learning; sometimes, some learning process objectives are not reached. Many alerts from social media, online gaming, or other distractions might easily keep some students from using e-learning systems in their studies (Fitria, 2022). Because so many distractions can cause students to lose focus while studying, trying to present E-substance learning or information becomes a complicated problem that must be solved. Making a strategy to give students enough engaging material that is yet simple to grasp is one method to solve this difficulty. According to Fitria (2020), training participants in different businesses and government agencies also reported experiencing a decline in concentration, motivation, and attention during online learning. These factors have led to a search for answers to the issue of pupils' shifting attention and lack of concentration. Microlearning is one of these remedies, and Hector Correa first proposed it in (1963). He discusses human resource economics in his book. This phrase was first used since the introduction of online education, and microlearning has gained popularity. As a result, many businesses, organizations, and governmental agencies have adopted this learning strategy since it is thought to speed up and facilitate student assimilation of the material. Microlearning, a novel approach anticipated to assist students in achieving their learning objectives in online learning, has just come to light. Microlearning may be understood as learning activities on tiny scales since it comprises the terms "learning" and "Micro/Micro," which refer to small-scale activities that break up large amounts of learning material into manageable chunks. The approach of microlearning is used. According to Biech (2018), microlearning is a strategy that is becoming more and more common for delivering focused, brief material to learners who choose what and when they study. The assertion that microlearning is one of the newest developments in the eLearning sector is backed by Badrul et al. (2021). Microlearning is one of the innovative teaching strategies that use digital technology, according to Sozmen (2022). It entails developing quick-to-understand training materials in bite-size formats. A technique called microlearning exposes students to little snippets of material that they may access at any time. A brief virtual lecture with group discussion, an infographic, or a movie may all be considered forms of microlearning. "Microlearning" refers to various learning approaches rather than an organized idea (Hug, 2007).

According to Simonson et al. (2018), "micro-learning" is a methodology that emphasizes learning in short bursts and is supported by various platforms. Microlearning delivers brief teaching tools that are conveniently available via mobile devices and often last just a few minutes (Palmer & Blake, 2018). Micro-Learning (ML) has been emphasized as an effective learning strategy for some learning phenomena (Khong & Kabilan, 2020). Microlearning has been identified as an effective technique for workplace education (Leong et al., 2020). Microlearning is becoming more popular since it is simple

to implement and can be provided in many formats. This benefits folk who need to acquire new knowledge but are short on time. Microlearning is a low-cost learning approach that may be used with other teaching strategies. This learning aims to convey knowledge so individuals can remember and use it daily. Although microlearning is not a new idea, it has often been implemented into the classroom activities, such as in the creation of blended learning. Instruction is provided in typical classroom settings with microlearning to help retain memory in blended learning. Mini-learning, micro-courses, infographics, instructional videos, motion graphics, and other tools supplement microlearning. Microlearning use has grown with technological advancement, as has navigation among device users. The device's ability to discover documents, labels, connections and rapid views simplifies microlearning. Students may now access information and educational materials whenever and wherever they choose. The explanation mentioned above piqued the scientist's curiosity in microlearning. This research investigates the advantages and disadvantages of incorporating microlearning into education and learning.

Literature Review

This section discusses the many types of microlearning, including long-duration learning and microlearning, and the features of microlearning media and their applications in the classroom.

Short-Term Learning Via Microlearning

One of the learning techniques that take less time is microlearning. For this reason, short-term learning is often used to describe microlearning or microteaching. There is no accepted definition of microlearning. However, with this knowledge, we may comprehend the general idea behind this approach. Microlearning is a learning strategy used by instructors that is more condensed. Microlearning is a technique for short-term learning, to put it simply. Short-term learning activities and relatively tiny learning units are the focus of microlearning. This phrase refers to the learning process in a media-mediated environment and is used in e-learning and related domains. Microlearning is a comprehensive approach to education abilities related to brief learning units. It incorporates a short-term concentration technique for skill-based education focused on understanding and learning. As a result, the time needed to locate certain concepts and contents may be reduced. Micro-learning enables real-time access to similar information, images, and videos in mobile settings (Park & Kim, 2018).

According to Rafli and Adri (2022), microlearning is a type of instruction instructors use in a condensed manner. Microlearning may be defined as techniques of short-term learning. With the help of students, instructors may provide relevant

information using a variety of mediums, such as text, multimedia, and others, that can be quickly followed by some examples of microlearning materials or microlearning 1) Text. You may use this material to extract concise paragraphs that are simple enough for kids to grasp. 2) Pictures: Pictures used as images may be considered fact and serve as an example. 3) Film: a quick instructional video that includes a lesson's subject or how-to instructions. Educational organizations like universities and schools typically host microlearning, but businesses may also host it. There are currently many topics and ideas for microlearning, so learning doesn't have to need a lengthy education. However, microlearning may also be used as a quick learning technique. Microlearning techniques aim to retain a small quantity of knowledge quickly. This is distinct from conventional learning strategies, which require ingesting much knowledge simultaneously. Because it makes it easier for us to recall knowledge, microlearning is more effective. We are encouraged to investigate and apply our information in this kind of learning, which may lead to developing previously undeveloped abilities and knowledge. Microlearning allows us to do more activities in less time and be more productive.

Online courses, training, seminars, workshops, and other types of short-term learning are examples of micro-learning (Fitria, Simbolon et al., 2022). As a result of our familiarity with and frequent participation in the brief event, we are aware of how the concepts of micro-learning might be applied to a straightforward procedure. Most of the time, this learning is finished in a few days or even hours. As further confirmation that we have acquired the ability or information related to the lesson's subject matter, we sometimes get certificates for quick tasks. Educational institutions often conduct Microlearning schools and universities, but businesses may also run it. Today, various topics and ideas for micro-learning may be discovered so that learning does not necessarily need a lengthy education but can instead use micro-learning as a quick learning technique.

With microlearning, lengthy learning materials are delivered in brief movies that last one to three minutes or even as an infographic on a single page. In order to make the material simple to understand and retain, this is done to lessen pupils' cognitive overload. A presentation with a microlearning method creates the kind of knowledge that is condensed, useful, and accessible whenever and wherever it is required. For four reasons, microlearning is considered to be able to increase the effectiveness of the e-learning learning process. 1). Learning materials are sized extremely tiny (Bite-sized). A brief presentation of the subject is simpler since distractions outside the learning setting may readily divert students' attention while learning. 2) Particular. Due to its compact size, the material is not entirely composed of theory but instead pairs an approach with a practice or example that addresses a common issue. 3) Fast. Short material will be presented, resulting in rapid learning, allowing a learning object to be accessible on a smartphone and comprehended quickly. So that they won't be drawn to activities that aren't related to learning. 4) Modifying Needs and Conditions. It is possible to construct learning objects

whenever necessary, which makes it simpler for students to locate and reaccess the material. Learning material may be made simpler to grasp and more easily remembered with the help of microlearning (Maria & Anna, 2022).

The antithesis of microlearning, long-duration learning involves pupils following a drawn-out and strict learning process. For instance, seminars, workshops, or training need 24 to 960 lesson hours. By condensing a variety of abilities into a single substantial task, long-term training strives to provide students with multiple competencies. Boredom and tiredness, mainly while learning, are the effects that learners experience most readily. Additionally, this effect causes individuals to lose focus while learning the covered subjects, particularly when required training or assignments are involved. Although they were physically present in the classroom, the knowledge construction that the students created was different. The efficacy of the material's absorption may provide poor outcomes. It won't take long for media like YouTube, Facebook, Tik Tok, and similar platforms to replace this extensive study and training. For instance, I have no idea how many computer installation or cooking lessons we have completed after watching 5 minutes of YouTube. This results in cookery and introductory computer courses starting to run out of students. For the record, the platform does not take the role of this regular course; instead, the platform's content and user experience do. The quality of the information offered is more important than the platform type regarding microlearning.

Traits of an Effective Microlearning Environment

Nevertheless, each way of learning must have its own set of features, and microlearning is a technique of education with its own set of qualities compared to other learning methods. The following is a list of markers that are associated with microlearning:

1. More swiftly generated and distributed learning resources. The fact that the information is given in small, manageable study units is one of the advantages of microlearning. A compact study unit will reduce the time needed to create teaching materials. To make learning materials, courses, or training, teachers may prepare hundreds of learning units using this microlearning technique. These units are then merged into a single coherent teaching resource. It is easier to make essential modifications and updates with small study units. Developing instructional materials for the microlearning technique is more challenging than simply breaking up more considerable teaching resources and segmenting them into smaller learning units. If this is done, the integrity of the learning unit will be jeopardized, if not wholly destroyed, depriving students of the whole learning experience. Each learning unit must have a broad subject of discussion and be able to stand alone to be classified as microlearning. In other words, a single learning unit may serve as a standalone instructional resource.

2. The price of producing educational materials is lower. Because it only needs

fewer resources to develop learning materials, creating online lectures or training using the microlearning approach is less expensive.

3. Almost all themes and learning resources are covered. The micro-learning approach may offer various learning materials and course subjects, particularly those that teach technical and non-technical skills. It is possible to offer material that covers a wide range of topics by breaking it into many concise instructional units. The only content that does not work well with this microlearning approach deals with a narrow, intricate, complicated issue with in-depth discussion.

4. The learning process seems more participatory in the participants' eyes. Students become aware because the learning contents are presented succinctly using various learning media and because questions, quizzes, and quick tests may be incorporated into the learning materials' presentations. Some students even compare this microlearning approach to opening social media programmes on their cell phones. It takes a few seconds to listen to brief study units in microlearning classes, such as a glance at social media.

5. Learning content that is simple to recall. According to research, learning materials that are brief and easy to remember are more memorable. Students find it simpler to repeat sections of the content that they haven't yet grasped since it is short. Because it is kept brief, the subject matter for the microlearning approach is ideal.

6. Learning resources may be used in many ways. Students may better manage their study time when learning resources are presented straightforwardly. Students may quickly download video files and store them on a mobile device or computer to study offline or offline if the course content is in video format.

7. The number of participants. Microlearning typically has 5 to 10 participants, a minimal number of individuals. The time needed to complete this learning is also relatively brief; it might take minutes, hours, or even days. The learning goals must be met, given the limited time available. Limiting participation is one technique to ensure that all participants get enough attention from the material provider and that learning goals are successfully met.

8. Time is short. The topic or material being taught is also affected by time constraints, making the best material necessary to choose. Additionally, unlike long-term learning techniques that may be switched up or employ different teaching components, the teaching components that have been produced are likewise restricted. In order to make the most of the limited time available to optimize learning to accomplish the objective, one must possess the knowledge of the material provider.

Variations of Microlearning Used in Instruction

Students get little information from the material presented in some formats via games, exams, and quizzes, such as text, photos, videos, and audio. This kind of learning

is called microlearning (Kulhanek & Mandato, 2022). As a result, this kind of learning, known as microlearning, may be presented in various ways, including video, audio, picture, or text. The use of video in microlearning is becoming more popular and is seen as an efficient teaching method by many. Nevertheless, other types of content may be consumed in this manner than video. E-learning, video games, blogs, podcasts, infographics, and different types of visual content are a few more examples. The next step is to choose the media most suitable for the circumstance and the particular educational requirements. For instance, when looking for knowledge concerning the origin of the cosmos and how it was put together. If we were only to read a book about how the cosmos came to be, we would learn:

1. Videos: Videos are watched by internet users all around the globe, whether on the YouTube platform or via streaming services like Netflix or other similar services. However, only a subset of the videos is accessible via the Microlearning platform. Microlearning videos are often presented in one of two formats: the first is a Video Explainer, such as the one seen above called "What If," and the second is a Motion Graphics format. Videos intended for microlearning are typically short and conveyed using straightforward language. In other cases, the scenario will be a picture with some commentary. Videos are designed to be entertaining, but they also have the potential to have an educational influence on the viewers' understanding. Learners can maintain concentration since the videos have short durations and tiny file sizes, making it simple for them to be distributed to their peers.

2. The learning application discussed in the microlearning media has navigational elements to make studying easier for pupils. Learning microcontent is also included in the application. The instructions for working on, reading, and completing tasks related to the subject matter are examined to show how the learning principle under investigation may be implemented.

3. Game elements. Microlearning, often known as gamification, is quite similar to traditional learning programmes, with the critical difference being that the learning goals are masked as game-like activities. The score that students end up with is more of an accomplishment than anything else, and it does not always come from following the traditional scoring standards based on measurement theory. This gamification encourages students to participate in more learning activities by providing more enjoyable approaches. One example of this kind of gamification is similar to how each correct response may vary individually, even if the final results are identical.

4. Infographics are a kind of visual communication and media that are two-dimensional and include information in the form of text, pictures, and other visual elements. The arrangement of the words in the product prioritizes both the final product's content and visual appeal.

5. Social networking significantly impacts microlearning and may include social

media. It is essential to know this since internet users often utilize social media. Platforms for social networking, including Facebook, Twitter, Instagram, and Tik Tok may be used as a substitute for education. Microlearning depends on the material given on a platform, not the other way around. Because every social media platform has unique qualities, the distributed microlearning materials must reflect those traits. For instance, Instagram is highly dependable with its picture material, making typography and infographics the ideal micro-content, but Tik Tok excels at short-form films, making video explainers or motion graphics the ideal micro-content for this platform.

We must be aware that not all microlearning strategies can be implemented utilizing the mentioned techniques. In order to meet our demands or those of our learning apps, we must develop material specifically for them.

Method

This kind of study used the secondary study method, which includes activities related to gathering library information, reading and taking notes, and managing study materials. The researcher comes across both textual and qualitative data when doing library research. The data in the library is "ready for use" (Zed, 2004). This shows that researchers are using the library's existing collection of sources. Because they are secondary sources, the researcher looks at data from standard libraries. In this section, the researcher will propose the idea, perform an inquiry into the subject utilizing the appropriate literature, and synthesize the information to emphasize key points. On the Google Scholar website, one may search for publications using the term "micro-learning." We searched for pertinent papers on the subject we investigated in national and international periodicals. The qualitative data analysis used the Miles and Huberman model, including data extraction, processing, and conclusion (Miles et al., 2018). During the reduction process, the researcher streamlines (reduces) the data to create information consistent with the study. The investigator organizes the data into a table to make the information easier to understand at the presentation stage.

Findings and Discussion

First, Micro-learning is thought to be able to increase the learning process in the context of e-learning, and as a consequence, a quick presentation of the subject will result in easy-to-grasp and simpler, cost-efficient, efficient, and skillfulness, according to Basith & Al-research Bari's from 2022. Second, the peculiarities of learning in small groups, such as how the offered information includes one theory, one example, or drill based on the difficulties encountered. Third, learning time may be reduced with rapid exposure to small details. When accessible on the phone, one subject can also be absorbed quickly. to prevent

outside influence from the learning process. Fourth, it is effortless for students to create and reaccess the material since the criteria and requirements of learning subjects may be adjusted whenever necessary. Microlearning may be used for various purposes, including home assignments, enrichment, introduction content, improving the effectiveness of material preparation, and individual and group learning.

According to Danver (2016), examples of microlearning events or activities include surveys, draughts of conclusive assessments, listening to podcasts, and watching movies. Instead of practice questions or quizzes using flashcards or paper, micro-learning activities in online classrooms might take the shape of interactive tutorials or brief webinars with evaluation questionnaires at the conclusion. Since it relies on fast learning activities and events to fully understand a topic, microlearning is used more often online than in conventional schooling. The teacher may alter the microlearning activities if the students seem to understand particular ideas or concepts in a traditional context. In online courses, the paradigm often requires progressing through each step to evaluate outcomes and validate knowledge gained. This strategy may be used in the classroom by lecturers or teachers.

First, we must divide the issue into smaller, more digestible subtopics. You should give this subtopic in no more than 10 to 15 minutes. Additionally, flipped classroom techniques may be employed in combination with microlearning. The idea is to provide all pupils with links to content through videos or infographics before the course begins. Let them analyze the sub-material that will be covered before going on to the next one. This strategy is effective since it saves time and encourages pupils to study independently. Ensure every student has the equipment needed in class, such as PCs or mobile devices. For five minutes, make your digital stuff available. Next, use online exams to motivate students to contribute more to their education. Before the class is over, separate the students into groups and have a discussion. Give the following subtopic as homework (PR) for the students to hear after class. This approach of assigning work doesn't stress students and may help them learn.

Microlearning is short-term learning, usually for 5–15 minutes. This kind of learning is based on the idea that the brain retains and understands knowledge better quickly. Each student will experience study dullness differently. Breaking information into smaller bits may reduce cognitive overload and emotional tiredness when pupils study increasingly complicated subjects, microlearning new. When used often and for long periods, digital media is harmful. Microlearning reduces these negative impacts while meeting learning goals and student abilities.

Microlearning may be used with face-to-face theoretical or practical learning during regular schooling. The schedule may include microlearning if common education is delivered for 40 to 60 minutes every meeting. Print or electronic material may be used for microlearning integrated into everyday learning. Micro-learning may even be the

primary method of content delivery when used in online education, as in this example. The offered information may be distributed via infographics, student workbooks, educational videos, android applications, or games. Microlearning's rapid turnaround time and usage of online resources allow it to be completed anywhere. Small-scale learning provides succinct and focused knowledge. Microlearning will enable teachers to create text, videos, images, audio, examinations, quizzes, and games. This reduces the material to 1-3 minutes or an infographic. The table below lists the positives and cons of microlearning in education:

Table 1: Previous studies conducted on the effects of microlearning on teaching and learning

No	Published research papers	The Findings of the Studies
1.	(Zarshenas etal., 2022)	The use of microlearning, especially in internship units, is an excellent training method to improve nursing students' educational objectives and personality. This approach is used in this article because multimedia may accommodate a variety of learning styles, and because it can impact both the learning results and the learner's sense of self-efficacy, this technique is recommended.
2.	(Yusnidar & Syahri, 2022)	Following the experiment, a case study-based microlearning implementation's success (efficacy) was assessed, and The conclusion drawn from the t-test was that the performance affected the pupils' learning outcomes, as shown by the result of 7.769. Microlearning strategies based on case studies might be used in a mixed-learning setting. These strategies could help students overcome the challenges they face.
3.	(Rafli & Adri, 2022)	Microlearning is one e-learning strategy that emphasizes learning's core concepts and provides information in a condensed manner. This method delivers knowledge in the form of media created to make the course more appealing to students and is a terrific way to find answers to particular problems rapidly. Later, some learning resources will be developed, such as infographics in the form of images with content that will later be shared via social media like Instagram, hyper content modules that will be in the form of a detailed explanation of the subject

		and preceded by a Bar code scanner as an intermediate step to other having read sources, and media in the form of Presentation software that contains some of the material and is also furnished with a sponsoring video. Students will find it simpler to learn this information anywhere and anytime.
4.	(Yuniarsih etal., 2022)	Microlearning-based learning material might help encourage pupils to pursue independent learning. Teachers should provide engaging learning tools to encourage students to think critically and explore a topic. It is impossible to resist using ICT to keep the learning process going. Through micro-learning, teachers may give their students more flexibility and creativity throughout the learning process. Teachers need to provide captivating microcontent that encourages pupils to think creatively.
5.	(Susilana et al., 2022)	Microlearning is useful for easing students' intrinsic, ancillary, and relevant cognitive loads during online learning. Since the approach allows them to choose their degree of study readiness, students are more adaptive in their knowledge, which makes using microlearning techniques in online learning simpler for students to comprehend the content. With this strategy, students may reduce useless cognitive load while increasing productive cognitive load. Their learning outcomes are, therefore, nearly exceptional.
6.	(Nugraha et al., 2021)	Academic institutions can produce instructional resources for micro-learning in various formats, including webinars, Presentation slides, infographics, motion graphics, explainer videos, podcasts, active unified communications, and interactivity. These efforts were created to address pandemic-related learning to lessen boredom during classroom courses by swiftly developing information and communication technology.
7.	(Gagne et al.,2019)	The use of microlearning as a teaching approach has been shown to improve students' understanding of how to carry out processes, remember information, do research, and participate in collaborative learning. Microlearning can have drawbacks, too, including pedagogical discomfort, technical disparities, and privacy concerns. Future studies

		should focus on higher-level outcomes, including patient benefits and practice changes.
8.	(Mohammed et al., 2018)	Learning things via microlearning might help them become simpler to understand and recall. This research assessed the effectiveness of microlearning techniques used to teach ICT in elementary schools. From a primary school in Sulaimani city, we chose two groups. The class is then instructed for six weeks using one microlearning technique and a standard approach. Having evaluated both groups, Compared to the control group, the microlearning group showed around 18% greater learning. We may conclude that microlearning can improve learning effectiveness and efficiency. Additionally, the data may be kept on file for more extended periods.
9.	(Fang, 2018)	Since microlearning solves the challenges of short class periods, too many students in a class, and a range of student demands, it may be helpful in college English instruction. One benefit of microlearning is the considerable quantity of English input students get. Based on this, students can improve their capacity to produce words through well-thought-out classroom teaching. Microlearning is characterized by repeated disintegration, replication, and differentiation. Students who use this method will find that it dramatically increases their drive to learn, increases their time on independent study, and broadens their perspectives.
10.	(Meng & Wang, 2016)	The traditional way of systematic learning differs from micro-learning, sometimes called fragmented understanding. As long as they have access to relatively few learning units, learners may study whenever, whenever, and for a limited time using this Teaching form. English education at the college level aims to improve students' overall English abilities, including listening, talking, understanding, and composition, as well as their ability for independent study. Microlearning is very beneficial when used in college English classes.

Previous studies have shown that microlearning provides many benefits, which depend on the abovementioned articles, in line with Zarshenas et al. (2022). A great

training strategy for raising students' learning results and self-efficacy is microlearning. It is advised to use multimedia since it supports a variety of learning styles, enhances learning outcomes, and boosts learner self-efficacy. According to Yusnidar & Syahri's (2022) case, study-based microlearning may be used in a mixed learning setting to lessen students' challenges. Following the experiment, there was a connection between case study-based microlearning and the student's progress. Third, Rafli & Adri (2022) claim that microlearning concentrates on learning fundamentals while providing quick information. This method is excellent for answering specific questions quickly, with the help of the material supplied in multimedia created to increase the course's attractiveness to learners. Fourth, according to Yuniarsih et al. (2022), microlearning-based learning materials may help encourage students to do independent research.

Teachers may use microlearning to encourage students' independence and creativity while learning. The ability to provide microcontent that inspires pupils to think creatively should be available to teachers. Fifth, Susilana et al. (2022) assert that microlearning consists of intrinsic, pointless, and pertinent actions and is valuable for lessening students' cognitive burden while online learning. When employing microlearning methodologies, students have more understanding flexibility since they may choose the degree of preparation they want to study, making it simpler to comprehend the subject matter. Sixth, according to Nugraha et al., institutions can provide instructional resources for micro-learning in several formats (2021). These micro-learning initiatives leveraged swiftly evolving information and communication technologies to struggle with the epidemic's effects on learning indifference. Seventh, according to Gagne et al., microlearning has improved students' understanding of and comfort in carrying out processes, remembering content, conducting research, and participating in collaborative learning (2019). Eighth, Mohammed et al. (2018) assert that microlearning may enhance long-term retention and comprehension of information. Microlearning techniques may improve learning effectiveness and efficiency since the microlearning group displayed approximately 18% more learning than the control group. According to Fang, the ninth grade handles the issues of short class periods, large class sizes, and a range of student requirements (2018). Microlearning has the traits of constant practice, segmentation, and differentiation. The motivation to study, the amount of time spent on their academics, and the scope of their worldviews will all be greater in students who use this technique more frequently. Meng & Wang (2016) assert that micro-learning differs from the normal systematic learning strategy. Students may consequently study whenever, wherever, for a little significant period, and with a few education ecosystems without being constrained by time or place.

In line with the previous description, microlearning is efficient and effective, enabling students to concentrate on a very narrow ability (Furterer & Wood, 2021). In

order to address the need for ongoing learning and development, microlearning is a relatively recent method to on-demand learning (Ford, 2020). Microlearning is excellent when a student has limited time and has to gain information and abilities swiftly. It is an adaptable system that can be tailored to the student's unique requirements (Greene, 2020). It is further backed by the claim that mobile micro-learning is a powerful informal educational method that can cater to the individualized demands of language learners (Huo & Shen, 2015). Microlearning has the potential to be a fantastic remedy, claim Torgerson & Iannone (2019). We assist students in completing work projects quickly and successfully so they can return to work by providing brief, focused lectures.

The kind of micro-learning that emphasizes delivering knowledge in tiny, digestible bits is already known. Six advantages of microlearning are as follows:

1) Microlearning adapts well to many settings and circumstances. 2) Lessons may be finished quickly, making them ideal for learning wherever you are. 3) Microlearning is inclusive for students since it is adaptable to various learning methods. 4) Microlearning may be tailored to each learner's requirements to provide them with individualized feedback. 5) Simple, easy-to-understand microlearning may improve understanding and retention rates. 6) Since microlearning may be accessible at any time and from any location, it is ideal for those with hectic schedules who have little time for studying.

In addition, the Microlearning approach, one of the most successful for the teaching and learning process, demonstrates that 1) Lessons are more accessible for pupils to recall. Short, engaging materials packed with animated films, infographics, and other digital assets have been shown to hold students' attention and help them remember each lesson. 2) Content updates are made simpler for instructors. It is simpler for instructors to rewrite and modify since the material is provided in less time. This may save time, allowing instructors to concentrate more on Teaching, which is undoubtedly advantageous. 3) Microlearning works better. Students may comprehend the lesson more quickly since the topic has been divided into smaller sub-materials. The more quickly pupils understand the material, the more effectively they will learn. 4) Learning outcomes are more straightforward for instructors to understand. It is simpler for instructors to assess the success of learning when a particular subject is covered quickly. As a result, instructors may more simply improve their instructional materials. 5) Lesson resources become more individualized. Students may choose the most important, appealing, and pertinent information to their studies with concise content.

Here are a few drawbacks of microlearning so that we may comprehend it more objectively as a single teaching strategy. 1) It takes more time to finish the content using microlearning. Microlearning requires two to three sessions if a topic can often be covered in a single session. This is because microlearning can break down the content into many smaller sub-materials. 2) Microlearning is not appropriate for difficult or complex content. Heavy materials should not be used with this procedure, which also needs a thorough

explanation explicitly describing complex quantum physics. 3) If instructors are incompetent, microlearning may be confusing. Due to how microlearning themes are broken down, students risk becoming confused if their teacher cannot draw links between the many subtopics and develop a unifying theme. The learning material is also broken up into digestible parts during microlearning. Students may not be able to comprehend the course material as a result fully. Learners could also experience difficulties interacting with the various instructional resources. Microlearning is often ineffective when the material being taught has to be fully understood. Likewise, case study-related learning is not a good candidate for microlearning.

The most significant obstacle to adopting microlearning is a lack of content. Additionally, teachers must produce their teaching resources, including games, quizzes, audio, video, infographics, and quizzes. Nevertheless, not every teacher has the time or means to prepare for the course. Educational technology, such as the Learning Management System (LMS), is needed to achieve that. Since not all students or learners have the same fundamental knowledge but may still benefit from learning, microlearning is vital, particularly in employee training. People know according to their requirements and pace. Microlearning is faster and more effective than traditional learning, which tends to distract pupils and cause them to forget crucial knowledge.

Lack of material is the most significant barrier to the adoption of microlearning. Teachers must also create games, quizzes, audio, video, infographics, and other instructional materials. However, not every instructor has the time or resources to set up the course. We need educational technology, like the Learning Management System, to do that (LMS). Since not all students or learners have the same underlying knowledge but may still benefit from learning, microlearning is crucial, particularly in employee training. Everybody knows differently and at their own pace. Compared to conventional learning, which takes longer, moves more slowly, and causes participants (students) to get easily distracted and lose crucial knowledge, microlearning is meant to be more effective. According to Gagne et al. (2019), microlearning has aided students in learning how to complete assignments, remember the material, conduct research, and communicate. Microlearning might be problematic from an educational, technical, and privacy perspective. Future research should concentrate on the advantages for patients and modifications to practises.

Conclusion

In this review, microlearning was explained and focused on its types and impacts on learning the English language throughout this paper. Microlearning may be presented in various ways throughout the teaching and learning process, including via video, applications, gamification, infographics, and social media. Numerous studies also show

that microlearning encourages pupils to study by dividing content into manageable chunks and facilitating learning. Due to its flexibility and ease of integration into daily life, this method enables students to study whenever and wherever they choose. Microlearning is a quick and efficient technique to learn new material. It is an easy learning method and can be tailored to many circumstances. That is, microlearning may be accomplished quickly. However, there are some drawbacks to this learning, such as the fact that there is a lack of content and that it is not appropriate for heavier material and necessitates extensive explanation. Microlearning, however, is a powerful technique that may be utilized to enhance learning outcomes due to the various advantages that can be realized. On the other hand, the success of microlearning tactics is closely related to student characteristics, instructors' tendency to use digital technology, and outside factors like the accessibility of learning materials.

References

Badrul, K., H., Saida, A., Soheil, H. S., & Zuheir, N. K. (2021). challenges and opportunities for the global implementation of e-learning frameworks. IGI Global.

Basith, A., & Al-Bari, A. (2022). Penguatan Pendidikan Kewirausahaan dengan MediaMicro Learning. *Jurnal Ilmiah Wahana Pendidikan, 8*(12), Article 12. https://doi.org/10.5281/zenodo.6943154

Danver, S. L. (2016). The SAGE encyclopedia of online education. SAGE Publications.

Fang, Q. (2018). A study of college English teaching mode in the context of micro-learning. 235–239. https://doi.org/10.2991/mehss-18.2018.50

Fitria, T. N. (2020). Teaching English through online learning system during covid-19 pandemic. *Pedagogy: Journal of English Language Teaching, 8*(2), Article 2. https://doi.org/10.32332/pedagogy.v8i2.2266

Fitria, T. N. (2022). Students' readiness of the implementation of face-to-face learning at English class in the academic year 2021/2022. ETERNAL (*English ,Teaching, Learning, and Research Journal*), 8(1), Article 1.https://doi.org/10.24252/Eternal.V81.2022.A13

Fitria, T. N., Afdaleni, Simbolon, N. E., & Suamba, I. B. P. (2022). Online learning implementation and challenges during Covid-19 Pandemic: English lecturers' perspective in Indonesia. *SOSHUM : Jurnal Sosial Dan Humaniora, 12*(2), 171–183. https://doi.org/10.31940/soshum.v12i2.171-183

Fitria, T. N., Simbolon, N. E., & Afdaleni. (2022). Possibility of Metaverse in Education: Opportunity and Threat. SOSMANIORA: Jurnal Ilmu Sosial Dan Humaniora,1(3), Article 3. https://doi.org/10.55123/sosmaniora.v1i3.821

Ford, J. K. (2020). Learning in organizations: An evidence-based approach. Routledge.

Furterer, S. L., & Wood, D. C. (2021). The ASQ Certified Manager of Quality/Operational Excellence Handbook. Quality Press.

Gagne, J. C. D., Park, H. K., Hall, K., Woodward, A., Yamane, S., & Kim, S. S. (2019). microlearning in health professions education: Scoping Review. *JMIR Medical Education, 5*(2), e13997. https://doi.org/10.2196/13997

Greene, R. (2020). Instructional story design: develop stories that train. American Society for Training and Development.

Hug, T. (2007). *Didactics of microlearning*. Waxmann Verlag.

Huo, C., & Shen, B. (2015). Teaching reform of English listening and speaking in China based on mobile micro-learning. *Creative Education, 06*(20), Article 20. https://doi.org/10.4236/ce.2015.620228

Khong, H. K., & Kabilan, M. K. (2020). A theoretical model of micro-learning for secondlanguage instruction. *Computer Assisted Language Learning*, 7, 1483–1506.

Kulhanek, B., & Mandato, K. (2022). *Healthcare technology training: An evidence-based guide for improved quality*. Springer Nature.

Leong, K., Sung, A., Au, D., & Blanchard, C. (2020). A review of the trend ofmicrolearning. *Journal of Work-Applied Management, 13*(1), 88–102. https://doi.org/10.1108/JWAM-10-2020-0044

Maria, U., Francesca, & Anna, O. (2022). Handbook of Research on Implementing Digital Reality and Interactive Technologies to Achieve Society 5.0. IGI Global.

Meng, J., & Wang, Z. (2016). Micro-learning in college English teaching. 510–513. https://doi.org/10.2991/msie-16.2016.113

Miles, M. B., Huberman, A. M., & Saldana, J. (2018). Qualitative data analysis: A methods sourcebook. SAGE Publications.

Mohammed, G. S., Wakil, K., & Nawroly, S. S. (2018). The effectiveness of microlearning to improve students' learning ability. *International Journal of Educational Research Review, 3*(3), 32–38.

Nugraha, H., Rusmana, A., Khadijah, U. L. S., & Gemiharto, I. (2021). MicrolearningSebagai Upaya dalam Menghadapi Dampak Pandemi pada Proses Pembelajaran.Jurnal Inovasi dan Teknologi Pembelajaran (JINOTEP): Kajian dan Riset Dalam Teknologi Pembelajaran, 8(3), Article 3.https://doi.org/10.17977/um031v8i32021p225

Palmer, K., & Blake, D. (2018). *The expertise economy: how the smartest companies use learning to engage, compete and succeed*. Hachette UK.

Park, Y., & Kim, Y. (2018). A design and development of micro-learning content in e-learning system. *International Journal on Advanced Science, Engineering and Information Technology, 8*(1), Article 1. https://doi.org/10.18517/ijaseit.8.1.2698

Rafli, M. A., & Adri, M. (2022). Pengembangan Micro-Learning Pada Mata Kuliah

Kewirausahaan di Universitas Negeri Padang Berbasis Media. *Jurnal PendidikanTambusai, 6*(1), Article 1. https://doi.org/10.31004/jptam.v6i1.3044

Simonson, M., Schlosser, C., & Flores, J. G. (2018). Distance Learning. IAP.

Susilana, R., Dewi, L., Rullyana, G., Hadiapurwa, A., & Khaerunnisa, N. (2022). Canmicrolearning strategy assist students' online learning? *Jurnal CakrawalaPendidikan, 41*(2), Article 2. https://doi.org/10.21831/cp.v41i2.43387

Yuniarsih, T., Sobandi, A., Meilani, R. I., Supardi, E., Indriarti, R., & Faldesiani, R. (2022). Analysis of microlearning-based learning media needs: A retrospective study at vocational high school. 3–6. https://doi.org/10.2991/aebmr.k.220701.002

Yusnidar, Y., & Syahri, W. (2022). Implementasi microlearning berbasis case studyterhadap hasil belajar mahasiswa pendidikan kimia. *Jurnal Studi Guru DanPembelajaran, 5*(1), Article 1. https://doi.org/10.30605/jsgp.5.1.2022.1530

Zarshenas, L., Mehrabi, M., Karamdar, L., Keshavarzi, M. H., & Keshtkaran, Z. (2022).The effect of micro-learning on learning and self-efficacy of nursing students: An interventional study. *BMC Medical Education, 22*(1), Article 1. https://doi.org/10.1186/s12909-022-03726-8

Zed, M. (2004). *Metode Penelitian Kepustakaan*. Yayasan Obor Indonesia.