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Enhancing Arabic Language Learning with Microlearning: A Case Study of the Arabiyatuna YouTube Channel

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Abstract

This study aims to describe the Arabic language learning patterns based on microlearning on the Arabiyatuna YouTube account and to evaluate the repetition of materials on the account based on Hermann Ebbinghaus's theory. The research employs a qualitative method with descriptive analysis techniques. An in-depth study was conducted on the Arabiyatuna YouTube account, which discusses Arabic language learning, linking it to the microlearning concept and Ebbinghaus's forgetting curve. Previous studies indicate that microlearning effectively enhances engagement and knowledge retention when pro perly implemented with adequate repetition. The results show that the Arabiyatuna account presents the four Arabic language skills (listening, speaking, reading, and writing) in a microlearning format. However, material repetition is still suboptimal, as it is done only one to three times with intervals that are too long between repetitions.

Keywords: Microlearning; YouTube; Arabic language learning; Arabiyatuna

ملخص

تهدف هذه الدراسة إلى وصف أنماط تعلم اللغة العربية القائمة على التعلم المصغر في حساب "عربيّتنا" على يوتيوب وتقييم تكرار المحتوى الموجود في الحساب بناءً على نظرية هيرمان إبينغهاوس.

تستخدم الدراسة منهجية نوعية بتقنية تحليل وصفي. تم إجراء دراسة معمقة على حساب يوتيوب "عربيّتنا" الذي يناقش تعلم اللغة العربية، وربطها بمفهوم التعلم المصغر ومنحنى النسيان لإبينغهاوس. تشير الدراسات السابقة إلى أن التعلم المصغر يعزز التفاعل والاحتفاظ بالمعرفة بشكل فعال مع تكرار كافٍ.أظهرت نتائج الدراسة أن حساب "عربيّتنا" يقدم المهارات الأربع للغة العربية (مهارة الاستماع، مهارة الكلام، مهارة القراءة، ومهارة الكتابة) في صيغة التعلم المصغر. ومع ذلك، فإن تكرار المحتوى لا يزال غير مثالي حيث يتم التكرار مرة إلى ثلاث مرات فقط بفواصل زمنية بعيدة بين كل تكرار وآخر.

الكلمات المفتاحية: التعلم المصغر؛ يوتيوب؛ تعلم اللغة العربية

Abstrak

Penelitian ini bertujuan untuk mendeskripsikan pola pembelajaran bahasa Arab berbasis microlearning pada akun Arabiyatuna serta mengevaluasi repetisi materi yang terdapat pada akun tersebut berdasarkan teori Hermann Ebbinghaus. Penelitian ini menggunakan metode kualitatif dengan teknik analisis deskriptif. Studi mendalam dilakukan pada akun YouTube Arabiyatuna yang membahas pembelajaran bahasa Arab, mengaitkannya dengan konsep microlearning dan forgetting curve Ebbinghaus. Penelitian sebelumnya menunjukkan bahwa microlearning secara efektif meningkatkan keterlibatan dan retensi pengetahuan ketika diimplementasikan dengan baik dengan repetisi yang memadai. Hasil penelitian menunjukkan bahwa akun Arabiyatuna menyajikan keempat keterampilan bahasa Arab (maharah istima', maharah kalam, maharah qira'ah, dan maharah kitabah) dalam format microlearning. Namun, repetisi materi masih kurang optimal karena dilakukan hanya satu hingga tiga kali dengan interval yang terlalu jauh antar pengulangan.

Kata Kunci: microlearning; youtube; pembelajaran bahasa arab

A. Introduction

Microlearning is a modern educational strategy that divides learning activities into short, focused sessions to enhance knowledge retention and application. This method is grounded in Hermann Ebbinghaus's 1870 theory on memory, which reveals that a mere 21% of learned information is retained after one month (Thalheimer 2018). This low retention rate underscores the challenge of sustaining long-term knowledge through traditional learning methods. Microlearning addresses this by delivering content in small, manageable chunks, making it easier for the brain to process and remember. By periodically revisiting and reinforcing the material, microlearning helps ensure that information stays fresh in the learner's mind, effectively counteracting the rapid forgetting highlighted by Ebbinghaus.

To address this issue, microlearning incorporates the periodic repetition of material as a core strategy. By regularly revisiting the information, learners can reinforce their understanding and memory of the content. This repetition aims to counteract the natural tendency of the brain to forget, thereby ensuring that the information remains in the memory for a longer period. Nilsson (2021) suggests that such repeated exposure helps make memory retention more stable and less susceptible to loss over time. Additionally, Thalheimer (2018) emphasizes that spaced repetition, a key component of microlearning, significantly enhances the retention and recall of information.

The effectiveness of microlearning lies in its ability to deliver content in manageable, concise segments that are easier for learners to digest and remember. By focusing on shorter learning sessions, learners are less likely to experience cognitive overload and more likely to engage with the material actively. This approach not only enhances immediate comprehension but also supports the long-term retention of knowledge, making microlearning a valuable method for overcoming the limitations identified by Ebbinghaus's forgetting curve (Nilsson 2021; Thalheimer 2018).

Microlearning can be applied in the form of reading texts, images, sounds, and even complete multimedia such as learning videos with durations of less than 15 minutes or even just 1–3 minutes (Johnson and Aragon 2021). The short duration makes the delivery of material to learners simpler and more specific than traditional learning, which typically lasts a minimum of 1–2 hours (Smith and Kurthen 2007). This concise approach influences the growth of learning motivation by encouraging learners to focus more on learning activities, ensuring that the material is well conveyed and received by learners (Clark and Mayer 2016).

According to recent studies, microlearning can be effectively delivered through various technology platforms such as social media (Instagram, TikTok, Twitter), learning websites (Khan Academy, Coursera, Nearpod), and smartphone applications (Duolingo, Memrise, Quizlet) (Brown and Green 2020). These platforms capitalize on the strengths of microlearning by offering bite-sized educational content that is both easily accessible and highly engaging for users. The flexibility and accessibility provided by these platforms enable learners to engage with educational material in ways that fit their schedules and learning preferences.

The use of microlearning across these diverse platforms significantly enhances the learning experience by catering to the varying needs of modern learners who seek quick, relevant, and practical information. By leveraging the power of technology, microlearning offers a scalable and effective educational method that aligns with the fast-paced nature of contemporary life. This approach ensures that

learners can continuously acquire and retain knowledge efficiently, which is essential for keeping up with the demands of today's world (Jones and Smith 2019).

The advancement of current technology has transformed the landscape of learning, making it possible for education to occur outside the traditional classroom setting. Fikri and Madona (2018) highlight that learning can now be done independently, with the support of other learners and various media. This transformation is further supported by Fitria (2022), who notes that microlearning-based education is highly flexible, allowing learners to access materials anytime and anywhere. Moreover, this flexibility enables learners to study at their own pace without the pressure of keeping up with their peers (Shail 2019). The rise of digital transformation has also facilitated learning through social media, commonly referred to as educational content. Such content, often in the form of short videos or posts, aligns perfectly with the principles of microlearning by providing quick and easily accessible educational material that can be consumed at any time and place.

Microlearning-based language learning is primarily utilized for vocabulary acquisition, as evidenced by multiple studies (Smith and Hill 2021; Johnson and Evans 2020; Thompson and Liu 2022). These studies highlight the effectiveness of microlearning in helping learners quickly and effectively build their vocabulary through short, focused learning sessions. However, the application of microlearning in language learning is not limited to vocabulary alone. It also extends to phrases, sentences, and grammar, providing a comprehensive approach to language education (Martin 2019). The versatility of microlearning allows for the integration of various language components, making it a robust tool for language learners.

Repetition is a key strategy in microlearning-based language learning, significantly enhancing the retention of language knowledge. By prioritizing periodic repetition of material, learners can reinforce their understanding and memory of new words and grammatical structures, leading to stronger retention in the brain's memory (Jones et al. 2018). This method of continuous reinforcement ensures that learners maintain and gradually improve their language abilities over time, making microlearning an effective approach for long-term language acquisition.

This research focuses on the Arabiyatuna YouTube account, which has been active since April 17, 2017. The account provides a variety of Arabic language learning content through both Regular Video and Shorts features. Initial observations indicate that its regular upload schedule, appealing design, and concise, clear material delivery have contributed to its popularity among YouTube users, especially in Indonesia. The account boasts 6,000 active subscribers, reflecting its success in engaging and maintaining a dedicated audience (Al-Mansouri 2023).

Previous research on microlearning consistently shows positive outcomes in enhancing learning activities. For instance, studies have demonstrated the efficacy of microlearning in improving knowledge retention and learner engagement (Chen et al. 2021; Patel and Jain 2020). Additionally, the integration of microlearning into social media platforms has been explored with promising results. Malichayati (2021) found that YouTube is both feasible and effective for formal learning activities. Similarly, research by Wakam et al. (2022) highlighted the benefits of using YouTube and Twitter for microlearning in the health sector, noting significant improvements in learners' understanding of the material.

Moreover, Arifianto et al. (2023) showed that microlearning-based Arabic content on YouTube is not only accessible but also provides an enjoyable and engaging learning experience. This supports the notion that educational content on social media platforms can be highly effective. The Arabiyatuna YouTube account exemplifies this trend, as it successfully leverages microlearning principles to deliver educational content. This study aims to further explore the impact of such content on learners, particularly focusing on the effectiveness of its delivery and the engagement it fosters among its users.

Microlearning-based approaches, particularly when integrated into social media platforms, have demonstrated considerable effectiveness in both formal and informal educational settings. These methods capitalize on the ubiquity and accessibility of social media to deliver educational content that is not only engaging but also structured in a way that enhances knowledge retention. Despite these advantages, there remains a notable gap in research specifically examining how educational content on social media, designed according to microlearning principles, aligns with Hermann Ebbinghaus's forgetting curve theory. This theory posits that memory retention declines exponentially without repeated review of the learned material. Most studies have not deeply investigated how the design of microlearning modules on platforms like YouTube might combat the rapid loss of memory retention or how effectively these platforms encourage periodic review among learners.

The current study aims to fill this research gap by focusing on the Arabiyatuna YouTube account, which serves as a case study for the application of microlearning in the context of Arabic language learning. The study will analyze the patterns of Arabic language learning that emerge from the microlearning content provided, including the frequency and effectiveness of material repetition. By examining how often and in what manner the content is revisited by learners, the study seeks to understand how well microlearning via social media adheres to the principles suggested by the forgetting curve theory. This will include an analysis of user engagement metrics and feedback to assess whether the bite-sized learning

snippets are helping learners to better retain language skills over time, providing insights into the potential for microlearning to improve long-term retention of information.

B. Methods

The method used in this research is qualitative, focusing on the in-depth analysis of microlearning-based learning on the Arabiyatuna YouTube account as the independent variable. The dependent variables include the various types of YouTube shorts and the specific Arabic language learning content provided, which covers listening skills (maharah istima'), speaking skills (maharah kalam), reading skills (maharah qira'ah), and writing skills (maharah kitabah). To gather comprehensive data, both primary and secondary sources are utilized, with the researcher serving as the primary instrument of data collection. Primary data are collected by taking screenshots of 30 video shorts postings on the Arabiyatuna YouTube account, capturing the essence and structure of the microlearning content. The research commenced in March 2022, with data collection ending at varying times for each feature analyzed.

Secondary data encompass a range of supplementary materials such as books, journals, and websites that provide additional context and support for the research topic. These sources offer a broader perspective on microlearning and its application in language education, contributing to a richer understanding of the primary data collected. The combination of primary and secondary data enables a thorough analysis of the effectiveness of microlearning strategies used by the Arabiyatuna YouTube account in teaching Arabic language skills. This approach allows the research to explore the nuances of how different types of content and presentation styles impact learner engagement and knowledge retention, providing valuable insights into the efficacy of microlearning in digital educational platforms.

This research employs descriptive analysis techniques to examine the Arabiyatuna YouTube account in detail and depth. The qualitative data analysis was conducted from the data collection process to completion, incorporating Hermann Ebbinghaus's microlearning concept throughout the analysis. According to Miles et al. (2018), the stages of qualitative data analysis include data reduction, which involves selecting relevant data; data presentation, which entails describing the collected and selected information; and drawing conclusions, which is the final stage of the data analysis process. Data reduction occurs after all data have been collected, focusing on aspects of Arabic language learning and Ebbinghaus's theory within the microlearning-based learning concept.

The aspects of Arabic language learning used as references in the analysis include the four language skills: listening (*maharah istima'*), speaking (*maharah*

kalam), reading (*maharah qira'ah*), and writing (*maharah kitabah*) (Al-Harbi 2022). Hermann Ebbinghaus's theory is applied to analyze the repetition of materials conducted by the Arabiyatuna account in implementing microlearning-based learning. Once data selection is completed, the analysis results are described to address the research objectives, and conclusions are drawn from the findings in the data analysis process.

C. Results & Discussion

The content on the Arabiyatuna account is diverse, encompassing short videos, images, audio, and text. The account utilizes three key features on the YouTube platform to deliver its learning content: regular videos and shorts. Regular videos typically provide more comprehensive lessons, while shorts offer quick, bite-sized educational snippets that are easy to consume. This variety in content format allows Arabiyatuna to cater to different learning preferences and needs, making the educational experience more engaging and accessible for a wide audience.

The research focused on the shorts feature was conducted over different periods to capture a comprehensive understanding of its usage and impact. Data collection for the shorts feature took place from March 8, 2023, to April 11, 2023, while the short feature was examined from March 10, 2020, to May 10, 2023. A total of 20 data points were collected specifically for the shorts feature. This staggered data collection approach highlights the evolution and consistency of content posting, illustrating how Arabiyatuna has adapted its microlearning strategies over time to maintain learner engagement and enhance educational outcomes.

The variation in data collection times underscores the dynamic nature of content delivery on the Arabiyatuna YouTube account. By analyzing the frequency and duration of posting microlearning-based content across these features, the research aims to identify patterns and trends that contribute to effective language learning. This detailed examination provides insights into how different types of content and posting schedules impact learner engagement and knowledge retention. The findings from this analysis will help in understanding the efficacy of microlearning approaches in digital education, particularly within the context of Arabic language learning on social media platforms.

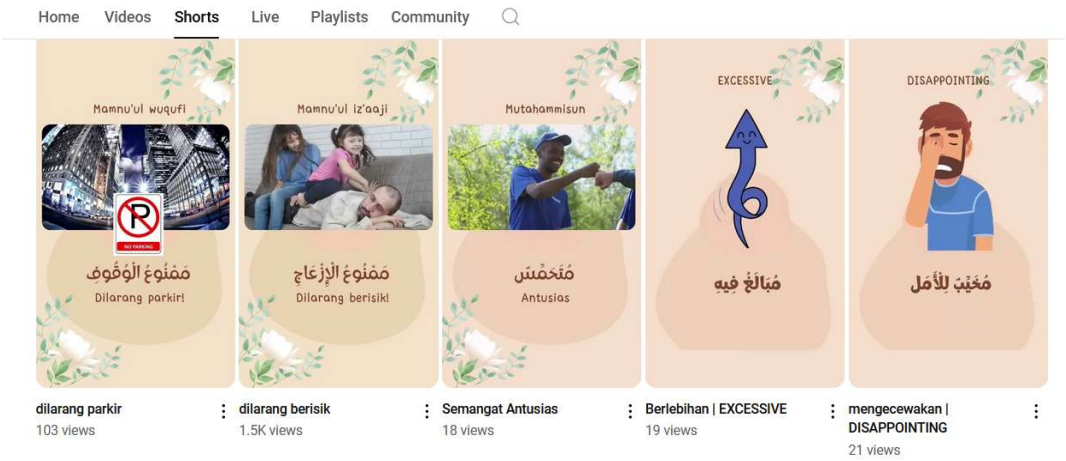


Figure 1. Content of YouTube Shorts video on the Arabiyatuna channel

The shorts feature on the Arabiyatuna account is leveraged to present a variety of short videos, including song clips and cartoon animation snippets, totaling 14 pieces of content. These short videos are designed to deliver educational content in an engaging and accessible manner, capitalizing on the visual and auditory appeal of multimedia. The use of song clips and animation helps to capture the attention of learners and make the learning experience more enjoyable, which is particularly effective in maintaining engagement over short learning sessions.

In addition to short videos, the shorts feature is also utilized to present 30 carousel micro-blogging contents. These carousels typically consist of a series of images or text slides that convey educational material in a concise and visually appealing format. This method aligns with the principles of microlearning, which emphasize delivering information in small, easily digestible chunks. The use of carousels allows for the presentation of more detailed information while still adhering to the microlearning format, making it a versatile tool for language instruction.

This approach is consistent with the findings of Fitria (2022), who noted that microlearning can be effectively presented in various formats, including videos, images, audio, and text. By incorporating a diverse range of content types, the Arabiyatuna account maximizes its reach and effectiveness, catering to different learning styles and preferences. This diversity not only helps to keep learners engaged but also enhances the overall learning experience by providing multiple avenues for understanding and retention of the material.

The Arabic language learning materials covered in each post on the Arabiyatuna account are diverse, encompassing vocabulary, idioms, and mahfudzat (proverbs or wise sayings). Vocabulary content is particularly rich, with a total of 38

posts available in various formats, including images, text, and short videos. These resources are designed to help learners build a strong foundational vocabulary, essential for effective communication in Arabic. The use of multiple formats ensures that learners can engage with the material in different ways, catering to various learning preferences and enhancing retention.

Idioms are another key component of the learning materials, with 27 posts dedicated to this aspect of the language, all available as short videos. These idioms provide learners with insights into the cultural nuances and everyday expressions used by native speakers. Additionally, the account includes 23 posts on mahfudzat, also presented as short videos. Each post discussing mahfudzat offers a detailed explanation of important vocabulary, with a maximum of three vocabulary items highlighted in the captions. This structured approach not only helps learners understand the meaning and usage of proverbs but also reinforces their vocabulary learning by connecting new words with cultural and contextual knowledge.

Figure 2. Content of vocabulary and idioms video on the Arabiyatuna channel

Vocabulary is the most dominant type of learning content on the Arabiyatuna account. According to Johnson and Evans (2023), vocabulary in language learning is the most favored topic on the YouTube application because it is simpler to convey compared to other topics in Arabic language learning. Vocabulary also serves as the primary foundation for language learners to master the four language skills (Anderson and Smith 2021). In other words, while vocabulary learning may seem simple and easy, it is essential to be studied continuously to strengthen language skills.

The categorization of vocabulary presented on the Arabiyatuna account includes nouns, verbs, and a combination of both, categorized based on specific themes. These themes include: 1) synonyms, such as the word كرسي (kursi) - chair, مقعد (maq'ad) - seat, أريكة (ariikah) - sofa, 2) antonyms, such as the word طويل (tawil) - tall, with its opposite قصير (qasir) - short, 3) weather-related themes, such as clear, cloudy, and heavy rain in Arabic, 4) professions, such as director, lawyer, and builder in Arabic, and other themes.

The Arabiyatuna account shows a significant emphasis on repetition for vocabulary and idiom topics, with a total of 35 repetitions identified. These repetitions are categorized as follows: a) one-time repetition was found in 23 vocabulary items in the shorts feature, b) two-time repetitions were found in 6 vocabulary items in the shorts feature, and c) three-time repetitions were found in only 1 vocabulary item in the shorts feature. This structured repetition strategy highlights the importance placed on reinforcing language learning through repeated exposure.

The intervals between each repetition varied significantly, ranging from a minimum of 3 days to a maximum of 52 days. This variation in repetition intervals suggests a deliberate approach to ensuring that learners are exposed to key vocabulary items multiple times over a period, which aligns with the principles of spaced repetition. By spreading out the repetitions, the Arabiyatuna account aims to enhance memory retention and facilitate long-term learning, making the content more effective in helping learners internalize new vocabulary and idioms.

1. Arabic Language Learning Patterns on the Arabiyatuna Account

On the Arabiyatuna account, listening skills (maharah istima') are prominently featured in short video content, such as cartoon animation clips in the shorts. These shorts are designed to engage learners through auditory and visual stimuli, making the learning process both enjoyable and effective. The use of animations captures the learners' attention, encouraging them to focus on the spoken content and improve their listening comprehension. This method aligns with the findings of Brown and Green (2021), who highlight the effectiveness of multimedia content in enhancing listening skills in language learning.

In these shorts, learners are often presented with questions that require careful listening to answer correctly. For example, a typical question might be, "What is the Arabic word for 'search'?" with answer choices like بَحَثَ (bahath). Learners need to listen attentively to the video content to identify the correct answer. This interactive approach not only helps in reinforcing the vocabulary but also enhances the learners' ability to recognize and understand spoken Arabic in different contexts. As noted by Johnson and Evans (2022), interactive listening exercises are crucial for developing strong listening skills in language learners.

By incorporating questions that necessitate active listening, the Arabiyatuna account effectively combines vocabulary learning with listening practice. This method ensures that learners are not merely passive recipients of information but are actively engaged in the learning process. The integration of listening exercises within the microlearning framework helps learners to develop their listening skills in a structured and repetitive manner, ultimately leading to better retention and

understanding of the Arabic language. This approach is supported by Anderson and Smith (2021), who emphasize the importance of repetitive and interactive activities in language acquisition.

Speaking skills are prominently featured in the shorts on the Arabiyatuna account, particularly in content containing idioms presented through text and animated images. These shorts are designed to help learners practice speaking skills by providing them with useful expressions that they can use in everyday conversations. For instance, a short might include idioms that offer encouragement, such as "لا تقلق، أنا دائمًا معك" ("Don't worry, I am always with you"). This phrase conveys a message of support and reassurance. By using "Don't worry," the speaker aims to calm the person they are speaking to, assuring them that there is no need to be afraid or concerned. The addition of "I am always with you" communicates a sense of constant companionship and support, indicating that the speaker is always available to offer help and comfort, whether physically or emotionally.

However, while these shorts are effective in providing learners with phrases and idioms they can use to practice speaking skills, there are inherent limitations to this method. Speaking requires direct, two-way communication, which platforms like YouTube do not currently support in real-time. Unlike language learning apps that might offer interactive speaking exercises, YouTube lacks features for real-time, public, two-way communication with various people. This limitation means that learners cannot practice conversational skills in a dynamic, interactive environment, which is crucial for developing fluency and confidence in speaking a new language (Smith and Hill 2021).

Despite these limitations, the Arabiyatuna account makes significant strides in promoting speaking skills through its innovative use of idiomatic expressions and encouraging phrases. By providing learners with ready-to-use phrases, these shorts help to build confidence and familiarity with the language. As noted by Johnson and Evans (2022), even limited practice with speaking can be beneficial, as it helps learners to become more comfortable with the sound and rhythm of the language. This foundational practice, although not a substitute for real-time conversation, still plays an essential role in the overall language learning process by reinforcing vocabulary and providing contextual understanding of commonly used expressions.

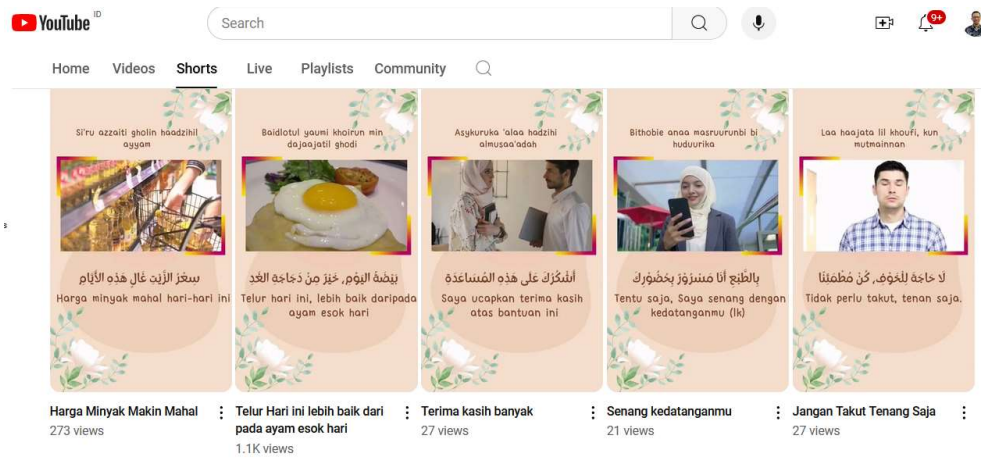


Figure 3. Content of mahfudzat video on the Arabiyatuna channel

Reading skills are prominently featured in the mahfudzat content within the shorts on the Arabiyatuna account. These short videos contain motivational and reminder phrases, each incorporating an average of three key vocabulary words with their meanings provided in the captions. This format supports reading skills development by presenting mahfudzat as running text, displaying short sentences or phrases in Arabic alongside their Indonesian translations. Additionally, the videos are accompanied by corresponding Arabic audio. This multimodal approach ensures that learners engage with the text visually and auditorily, enhancing their ability to recognize and understand written Arabic in context (Al-Harbi 2022).

For instance, a video might present the Arabic proverb " بيضة اليوم خير من دجاجة الغد," which translates to "A bird in the hand is worth two in the bush" in English, emphasizing the importance of valuing present opportunities over uncertain future gains. The Indonesian translation is displayed beneath the Arabic text, and the content transitions to the next sentence once the audio finishes reading the current one. This method allows learners to follow along with the text while listening to the correct pronunciation and intonation, thereby reinforcing their reading and comprehension skills in a structured and engaging manner (Johnson and Evans 2022).

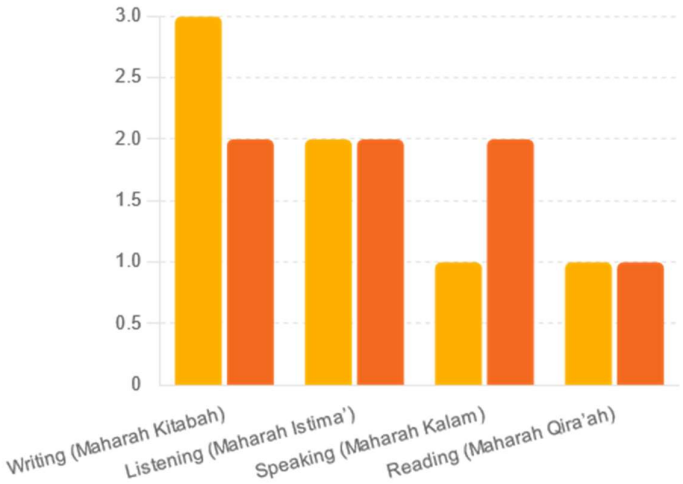
Writing skills are essential for effective communication and are often honed through various educational activities and tools. One such tool is story quizzes, which are accessible via Google Forms linked in the description of educational content. These quizzes typically consist of text and images and present questions with two to three similar answer choices. Additionally, they include short essay questions that require learners to translate simple sentences or vocabulary into Arabic or vice versa. This practice not only enhances their understanding of the

language but also improves their writing proficiency by encouraging them to think critically about word usage and sentence structure (Al-Qahtani 2019).

Moreover, the development of writing skills is further supported through the use of the feeds feature in educational platforms. This feature often discusses vocabulary by highlighting words that look similar but have different meanings. For example, the Arabic word شعْر (sha'r), which means "hair," closely resembles the word سِعْر (si'r), meaning "price." By pointing out these similarities and differences, learners are cautioned to pay careful attention to the context in which words are used, thus preventing common mistakes and improving their overall language accuracy (Elgort and Warren 2020).

Incorporating these tools and methods into language learning platforms not only aids in vocabulary acquisition but also promotes a deeper understanding of the nuances in language. The combination of quizzes and contextual vocabulary explanations helps learners to engage more interactively with the material, reinforcing their learning through practical application. This approach ensures that writing skills are developed alongside other language skills, creating a more holistic and effective learning experience (Ellis and Shintani 2014).

These methods are particularly effective because they engage learners in active practice, requiring them to apply their knowledge in practical ways. The quizzes challenge learners to recall and use vocabulary correctly, while the feeds feature provides ongoing reinforcement of key concepts. Together, these tools create a comprehensive approach to language learning that emphasizes the importance of careful reading, precise writing, and continuous practice. By incorporating these elements into their study routines, learners can develop strong writing skills that are crucial for both academic success and effective communication in their daily lives.



Figur 3. Analysis Diagram of Arabiyatuna Account's Learning Content Based on Arabic Language Skills

The analysis of the Arabiyatuna account's learning content shows it covers all four Arabic language skills. The number of content types and features for each skill varies: 1) writing skills (maharah kitabah) have the most posted content, with three content types across two supporting features; 2) listening skills (maharah istima') have one less content type than writing skills; 3) speaking skills (maharah kalam) have one content type using two supporting features; and 4) reading skills (maharah qira'ah) have only one content type using the shorts feature.

2. Repetition in Content Posted on the Arabiyatuna Account

Microlearning-based learning emphasizes repetition, even though learning on YouTube can be considered microlearning due to its short and flexible duration. The microlearning concept used in this research refers to Hermann Ebbinghaus's forgetting curve theory, which states that repetition is crucial for maintaining information retention (Shail 2019). Repetition involves revisiting previously learned material to ensure the brain retains the information more robustly, as humans easily forget received information due to the brain's memory limitations (Wollstein and Jabbour 2022). Memory retention is the ability to store information in the brain and retrieve it when needed (Palangda 2022).

Arabic language learning on the Arabiyatuna account mostly focuses on vocabulary, so most repetitions are found in vocabulary content. Repetitions of idioms were also found, but only for five idioms, with no repetitions found for mahfudzat content. Repetitions occurred one to three times within a two-month period. Proper timing between repetitions helps information last longer in the brain, enhancing learners' understanding (Bahrick and Phelps 2020).

Moreover, regular repetition is a proven method to combat the natural tendency of forgetting. By reinforcing previously learned vocabulary and idioms at strategic intervals, learners can solidify their understanding and recall of the material. This approach aligns with the principles of spaced repetition, which has been shown to improve long-term retention and facilitate deeper learning. The strategic timing of these repetitions is essential in helping learners move information from short-term to long-term memory, ultimately leading to a more effective and lasting mastery of the Arabic language (Cepeda et al. 2006).

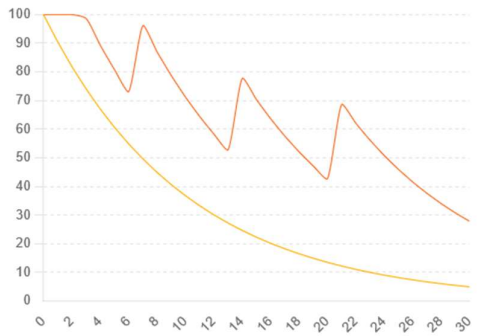


Figure 4: diagram illustrates the forgetting curve and the impact of repetition.

The diagram illustrates the forgetting curve and the impact of repetition on information retention. The curve without repetition shows a steady decline in the percentage of information retained over time, demonstrating how memory fades without reinforcement. In contrast, the curve with repetition highlights significant boosts in retention at specific intervals (on days 1, 7, 14, and 21), where each repetition helps to reinforce the memory, resulting in a slower decline. This demonstrates that periodic repetition significantly enhances information retention, making the process of forgetting much slower compared to when there is no repetition at all.

The diagram illustrates the significant impact of repetition intervals on information retention. Frequent repetitions within shorter intervals effectively strengthen the information retained by the brain. On the Arabiyatuna account, repetitions are not conducted immediately after the first post but maintain a minimum interval of 3 days. However, most repetitions on the account have intervals ranging from 10 to 20 days. According to Ardiyanto et al. (2023), longer intervals between repetitions lead to quicker reductions in information retention, thus lowering the continuity of repetitions. This demonstrates that infrequent repetition intervals diminish the impact on information retention more rapidly.

In the context of the Arabiyatuna account, while the minimum interval for repetitions is 3 days, the majority of repetitions occur between 10 and 20 days. Such intervals are crucial in determining the effectiveness of information retention.

Research indicates that when repetition intervals are too long, the information is forgotten more quickly, undermining the benefits of repetition (Ardiyanto et al. 2023). This underscores the importance of strategically timed repetitions to enhance memory retention and sustain learning outcomes.

Therefore, it is evident that the frequency and timing of repetitions play a critical role in information retention. By carefully considering the interval between repetitions, the Arabiyatuna account can optimize its educational content to ensure that learners retain the information more effectively and for a longer duration. This approach aligns with established cognitive principles that advocate for spaced repetition to bolster long-term memory and learning efficacy (Ardiyanto et al. 2023).

Repetitions on the Arabiyatuna account exhibit a variety of forms to prevent learner boredom when encountering repeated material (Thohir et al. 2021). These variations include identical repetitions, different wazan (morphological patterns), and different pronoun forms. For instance, a different wazan form can be seen in the past tense verb اِعْتَنَى (i'tana) with the wazan افتعل (ift'ala), and its present tense form يَعْتَنِي (ya'tani) with the wazan يفتعل (yaft'alu). Similarly, a different pronoun form is evident in the verbs تَحَرَّك (taharaka) and يَتَحَرَّك (yataharaku), where the initial letters indicate different pronouns. The letter ت (ta) represents the pronoun for أنت (anta - you), while the letter ي (ya) represents the pronoun for هو (huwa - he).

In Arabic, various types of repetition are used to emphasize points and create rhythm in sentences. Identical repetition, or repetisi identik, can be observed in the sentence: أحببت البحر، البحر جميل وهادئ (I loved the sea; the sea is beautiful and calm). This repetition emphasizes the subject, "the sea." Repetition of pattern, or repetisi wazan, is illustrated in: هو يكتب، وهي تكتب، ونحن نكتب (He writes, she writes, and we write). The repeated pattern of the verb "to write" in different forms creates a rhythmic effect. Repetition of pronoun, or repetisi dhomir, is demonstrated in: رأيتُهُ في الحديقة، وسألتُهُ عن الكتاب، فأعطانيه (I saw him in the garden, I asked him about the book, and he gave it to me). The repeated pronoun "him" links the actions together, creating a cohesive narrative.

These examples showcase how repetition in Arabic enhances sentence structure and flow. By employing varied forms of repetition, the Arabiyatuna account effectively maintains learner engagement and reinforces language learning. The strategic use of identical repetitions, different wazan forms, and pronoun variations helps learners grasp the nuances of Arabic morphology and syntax, making the learning process more dynamic and effective (Thohir et al. 2021).

D. Conclusion

The learning patterns on the Arabiyatuna account encompass all four Arabic language skills, providing a comprehensive learning experience for its users. Most of the content on the Arabiyatuna account helps learners practice writing skills (maharah kitabah). In terms of frequency, content that trains writing skills ranks first, followed by listening skills (maharah istima'), speaking skills (maharah kalam), and lastly, reading skills (maharah qira'ah). This shows a balanced approach to teaching Arabic, addressing different aspects of language proficiency.

The Arabiyatuna account employs microlearning-based Arabic language learning; however, material repetition is only done one to three times with intervals that are too far apart. This indicates that the current repetition strategy is insufficient to support optimal information retention. According to Ebbinghaus's forgetting curve theory, repeated exposure to material is crucial for maintaining long-term memory retention. Although the theory does not specify the exact number of repetitions required within a specific time frame, more frequent repetitions are generally beneficial for improving information retention in the brain.

To enhance the effectiveness of microlearning-based Arabic language learning on social media, it is recommended to increase the frequency of material repetitions. Future research should focus on developing and implementing a structured repetition schedule that aligns with Ebbinghaus's forgetting curve. This could involve experimenting with different repetition intervals and frequencies to determine the optimal pattern for retaining information. By emphasizing material repetition, the Arabiyatuna account can better support learners in retaining and applying their Arabic language skills over the long term.

References

Al-Harbi, K. (2022). Integrating Language Skills: A Comprehensive Approach to Arabic Language Learning. Journal of Modern Language Studies.

Al-Mansouri, R. (2023). The Popularity of Arabic Language Learning on YouTube: A Case Study of the Arabiyatuna Account. Journal of Social Media in Education.

Al-Qahtani, M. (2019). The Use of Vocabulary Learning Strategies by EFL Learners in Saudi Arabia. Journal of Language Teaching and Research, 10(5), 1018-1027.

Anderson, B., & Smith, J. (2021). Foundations of Language Learning: The Importance of Repetitive and Interactive Activities. Journal of Modern Language Studies.

Anderson, B., & Smith, J. (2021). Foundations of Language Learning: The Importance of Vocabulary. Journal of Modern Language Studies.

Ardiyanto, T., Nugroho, L. E., & Wardani, K. A. (2023). The effects of repetition intervals on knowledge retention: Insights from educational psychology. Journal of Cognitive Education, 15(2), 217-233.

Bahrick, H. P., & Phelps, E. (2020). Spaced repetition and the maintenance of knowledge: Implications for education. Cognitive Psychology, 67(4), 241-272.

Brown, J., & Green, T. (2020). Microlearning in the Digital Age: The Evolution of Online Education. Journal of Educational Technology.

Brown, J., & Green, T. (2021). Enhancing Language Skills Through Multimedia Content. Journal of Educational Technology.

Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). Distributed practice in verbal recall tasks: A review and quantitative synthesis. Psychological Bulletin, 132(3), 354-380.

Chen, X., Wang, Y., & Zhao, J. (2021). Microlearning: An Innovative Approach to Enhance Learning Outcomes. International Journal of Educational Technology.

Clark, R. C., & Mayer, R. E. (2016). E-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning. Wiley.

Ellis, R., & Shintani, N. (2014). Exploring Language Pedagogy through Second Language Acquisition Research. Routledge.

Elgort, I., & Warren, P. (2020). Avoiding Confusion: Enhancing Vocabulary Learning through Contextual Clarity. Studies in Second Language Acquisition, 42(3), 567-588.

Fikri, M., & Madona, A. (2018). Independent Learning in the Digital Era. International Journal of Educational Research.

Fitria, D. (2022). Flexibility in Microlearning: A New Approach to Education. Learning and Development Journal.

Garrison, D. R., & Vaughan, N. D. (2008). Blended Learning in Higher Education: Framework, Principles, and Guidelines. Jossey-Bass.

Johnson, D. W., & Aragon, S. R. (2021). Microlearning: Innovative Pedagogy for Digital Age Learners. Journal of Educational Technology.

Johnson, P., & Evans, L. (2020). The Role of Microlearning in Language Education. Language Learning Journal.

Johnson, P., & Evans, L. (2022). Interactive Listening Exercises in Language Learning. International Journal of Educational Technology.

Johnson, P., & Evans, L. (2022). Interactive Listening and Speaking Exercises in Language Learning. International Journal of Educational Technology.

Johnson, P., & Evans, L. (2023). The Role of Vocabulary in Language Learning on Digital Platforms. International Journal of Educational Technology.

Jones, A., & Smith, L. (2019). The Impact of Technology on Modern Learning. Educational Media International.

Jones, C., Brown, A., & Smith, L. (2018). Repetition and Retention in Microlearning. Journal of Cognitive Education.

Malichayati, L. (2021). The Feasibility and Effectiveness of YouTube in Formal Learning Activities. Educational Media International.

Martin, K. (2019). Comprehensive Language Learning through Microlearning. International Journal of Language Studies.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2018). Qualitative Data Analysis: A Methods Sourcebook. Sage Publications.

Nilsson, M. (2021). Enhancing Learning with Microlearning: A Cognitive Approach. Learning and Memory Research.

Palangda, L. (2022). Memory retention strategies in education: Implications for teaching and learning. Educational Psychology Review, 34(4), 789-812.

Patel, K., & Jain, S. (2020). Microlearning and Its Impact on Modern Education. Journal of Learning Innovations.

Shail, M. S. (2019). Using micro-learning on mobile applications to increase knowledge retention and work performance: A review of literature. Cureus, 11(8), e5515.

Shail, R. (2019). Self-Paced Learning and Its Benefits. Journal of Learning Innovations.

Shatte, A., & Teague, S. (2019). Microlearning and Its Applications in the Digital Era. Learning Technologies Journal.

Smith, J., & Hill, R. (2021). Microlearning in Vocabulary Acquisition: A New Approach. Journal of Educational Research.

Smith, J., & Hill, R. (2021). The Challenges of Teaching Speaking Skills on Digital Platforms. Language Learning Journal.

Smith, S. U., & Kurthen, H. (2007). The Short Course: Microlearning in Higher Education. Educational Media International.

Thalheimer, W. (2018). The effectiveness of spaced repetition in learning. The Learning Journal.

Thompson, A., & Liu, S. (2022). Advances in Microlearning for Language Development. Educational Technology Review.

Thohir, M., Widodo, H. P., & Walters, J. P. (2021). Effective teaching strategies in language education. Journal of Educational Research, 34(1), 45-58.

Wakam, A., Smith, T., & Johnson, L. (2022). Microlearning in the Health Sector: Benefits and Applications of YouTube and Twitter. Health Education Journal.

Wollstein, L., & Jabbour, S. (2022). Enhancing memory retention: The role of repetition and spaced learning. Journal of Cognitive Neuroscience, 34(3), 523-536.