

# Investigating the Usefulness of TikTok as an Educational Tool

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*Abstract*— Living in a modern world requires educators to acquire skills in integrating technology into classroom activities to make the lessons more viable and fun for our generation Y and Z. There are a variety of new applications which can be used by educators as educational tools. This research aims to investigate the usefulness of Tik Tok as an educational tool and to gather students' feedback after using the TikTok application in their listening comprehension. The overall response to the survey was promising as most of the respondents gave positive feedback on the use of this application in their language learning process. Thus, the insights provided by this study on the usefulness of TikTok can be a guide for educators as well as policymakers aiming at exploring new educational tools to ease the teaching and learning process.

**Keywords**—TikTok, Educational Tool, Listening

## I. INTRODUCTION

### A. Online Learning During Pandemic and The Use Of Social Media

The roadmap of language teaching and learning has experienced huge changes in the era of deployment of new technologies around the globe (Azlan et al., 2019). In this 21st century, mobile technology with the integration of interactive Web 2.0 Internet based applications better known as online social media is becoming more visible and vibrant in our lifestyles. The world is moving towards using the latest technological implementation via the fourth industrial revolution (IR 4.0). Hence, education is currently instilling the progressing technologies to generate new types of teaching and learning mediums, thus providing knowledge, and even catering students with all the essential skills to get through the machine age (Schwab, 2017). It is undeniable that the use of online social media is contributing towards aspirations, which is in line with MOE Malaysia (2013) whereby the processes involve

blended learning and flipped classroom. The methods of teaching and learning are integrated with face interaction and technology-facilitated instructional approaches in the form of online lectures or e-learning lessons, where students finish their tasks at home. The lessons in the classroom are for peer-group sessions, project-based learning, assignments, and discussions. In addition, the teacher's responsibility therefore evolves from a lecturer to that of a facilitator and coach (MOEM, 2013). In 2016, a new Standard Curriculum for Primary Schools or *Kurikulum Standard Sekolah Rendah* (KSSR) aligned with the Common European Framework of Reference or better known as CEFR for the English language was introduced to all English teachers teaching kindergarten up to the secondary level. The new KSSR aligned curriculum has gradually influenced the teaching and learning methods in comprehending English context to a more applicable and fun learnings style.

### B. TikTok as an Educational Tool

Social networks, according to Bartlett-Bragg (2006), offer a variety of applications that enhance group interactions and shared spaces for collaboration, social connections, and information exchanges in a web-based environment. In September 2016, TikTok, also known as Douyin in China, made its debut. The following year, TikTok was launched worldwide. With more than 45 million downloads globally during the three-month period, the application launched by Beijing-based digital unicorn Bytedance has surpassed Facebook and WhatsApp as the most popular app (Zheping, 2018). As the most downloaded application in July 2020, TikTok is one of the most famous social networking sites which targeted youngsters to share their 3 to 60-second-long videos. TikTok allows users to record videos of themselves goofing off to music or spoken-word clips and then edit the footage with a variety of effects. As of 2021, TikTok is one of the world's most popular

applications (at least among those under a certain age). Hence, this study aims to discover the usefulness of the TikTok application as an educational tool to teach listening skills in English.

### C. Research Question

From students' perspectives, what are the benefits and defects of integrating TikTok into classroom teaching?

## II. LITERATURE REVIEW

### A. The Use of Social Networking Sites as Educational Tools in ESL

One of the crucial expansions to the use of computers and mobile phones in foreign language learning is the idea of utilizing social networking sites as educational tools. Extensive studies have investigated the usage of social media sites for their ability in increasing grades, motivation, cognitive ability, and levels of engagement. According to Al-Rahmi and Zeki (2017), when students are not controlled by the traditional way of learning, their motivation and academic resourcefulness are increased. It is a well-known fact that social networking sites have been an important part of students' lives. A study conducted by Lin et al. (2016) found that students who used social networking sites in learning a foreign language had a marked improvement in their attitudes and motivation, as well as progressed well in their listening and speaking skills. Another large-scale study conducted in Malaysia on Facebook and learning English in higher education discovered that students felt that Facebook could be used as an online environment to enhance English language learning (Kabilan et al., 2010). According to Black (2009), language learners who use online interaction platforms develop distinct components of their linguistic, cultural, and social identities and divert their attention from form and structure to meaning and function. Another study by Junco et al. (2011) reported that the use of social networking sites has positive impacts on students' engagement levels in English Second language (ESL) courses. The influence of social networking sites in education will continue to bloom with the advancement of technology and future trends.

### B. Exploring TikTok as a Tool in Improving Listening Skills

It would be a waste not to use TikTok for educational purposes, given its growing popularity as a social media platform. Although there is no extensive research on how TikTok can facilitate learning specifically in listening skills, it cannot be denied that TikTok could be an effective educational tool. Students should be given a variety of options from which to pick the activity that best suits their interests and learning styles, as well as increase the usage of autonomy-supportive behaviours, so that all students may participate in the way that is most comfortable for them (Reeve et al., 2004). Therefore, with the technological advancement and current students' learning styles, it is important to study the connection between social networking sites and interactive online learning in ESL courses, specifically in listening. According to Chamot and

O'Malley (1987), listening comprehension strategies can be categorized into three categories: metacognitive strategies, cognitive strategies, and socio-affective strategies which depend on the kind or amount of process involved. ESL learning via interactive listening is said to rely on immersing students in tasks that demand them to negotiate meaning and engage in realistic and meaningful dialogue, not only in "comprehensible input" (Long & Crookes, 1991). In another study, Wolvin and Coakley (1996), claimed that in preparing graduates to become good listeners in the working world, colleges and universities should make every attempt to expose students to interesting listening activities. Although extensive research has been carried out on the effectiveness of social networking sites in assisting learning, no single study exists which discusses ways TikTok could facilitate listening comprehension. Therefore, this paper attempts to explore the usefulness of TikTok as an educational tool in improving listening skills.

### C. Theoretical Framework - Richard Mayer's 12 Principles of Multimedia Learning

This theory's core proposition is that students learn more deeply from words and pictures than from merely words because they can make meaningful connections between them (Mayer, 2002). The human information-processing system, according to the theory, has three memory stores: sensory memory, working memory, and long-term memory (Mayer, 2002). Based on Mayer's principles in using multimedia for e-learning, the present research is aimed at providing insights into the TikTok application as an educational tool in learning English language.

<b>Richard Mayer's 12 Principles of Multimedia Learning</b>
1. Coherence Principle
2. Signalling Principle
3. Redundancy Principle
4. Spatial Contiguity Principle
5. Temporal Contiguity Principle
6. Segmenting Principle
7. Pre-training Principle
8. Modality Principle
9. Multimedia Principle
10. Personalization Principle
11. Voice Principle
12. Image Principle

Fig. 1. Mayer's 12 Principles of Multimedia Learning (2002)

With the aim to explore the use of TikTok as an educational tool to improve listening skills, a survey was conducted to allow a deeper insight into its effectiveness. The following research procedure was adopted for this study. 105 diploma students in their second semester from Universiti Teknologi MARA (UiTM) Permatang Pauh were selected to be the sample as their syllabus is pertinent to the aim of this study. These ESL students majored in various fields such as Mechanical Engineering, Electrical Engineering, Health Science, and Hotel Management. It is compulsory for the students to enroll in an English course called Integrated Language Skills II or better known as ELC151. The course mainly focuses on four skills: listening, speaking, reading, and writing. Among the learning outcomes is to be able to listen and respond to various discourses at a higher intermediate level. To achieve this, one of the listening strategies that can be used is to transfer information from audio to graphic representation, and this is also known as audio-visual. According to Mimi et al. (2018), audio-visual method (AVM) is a highly respected teaching method whose roots lie in the constructivist learning style and the field of multiple intelligence theory. Using vision and sound, AVM is the perfect medium for auditory, visual, and kinesthetic learners. In addition, AVM as a listening tool can enhance the listening experience of students. The visual information in AVM is very important in the teaching process, especially in the teaching of second language listening.

#### A. Research Procedure

The students were required to listen to a 10-minute audio clip on life lessons. Then, they were asked to transfer the information from the audio to graphic representation using the TikTok application. They were given 1 week to complete the task. After a week, they were requested to listen to another 10-minute audio clip on 'Success'. They were then required to do the same task but using the traditional mind-map method.

After the submission of both tasks (TikTok and Mind-map), the students were gathered to give feedback on these two methods used in the English listening activity. Students were asked the following questions verbally and their responses were video recorded.

1. Can you share your experience using TikTok as a learning tool?
2. Which is better for you? TikTok or the traditional mind-map method? Why?

The responses from the students were analyzed to acquire an in-depth understanding of their opinion on this activity. In addition, the use of TikTok for information transfer was analyzed by employing Mayer's principles of multimedia learning as the analytical framework.

#### A. Students' Feedback

[S1] "I think the traditional way is easy but I really like TikTok because it's something new... I like the music on Tik Tok"

[S2] "Sometimes we can challenge ourselves using TikTok"

[S3] "I like the traditional method because I don't like to edit video"

[S4] "I think the traditional method is easier but for TikTok, it is very interesting. So, I like Tik Tok"

[S5] "For me, I like Tik Tok because it's more enjoyable and it has music. So, it's more fun compared to the classic way. So, that inspires me to use TikTok"

[S6] "I like the traditional way. I think Tik Tok is easy, but I don't like to edit videos, but I think TikTok is a good platform to give motivation"

[S7] "In terms of content, I think using TikTok, we can remember better"

[S8] "I feel the content is better to put on Tik Tok. People pay more attention to it rather than the traditional way"

[S9] "I think TikTok is a lot easier because it is quick and simple. Easy to understand."

[S10] "I think it depends on people. Some people can remember better when they write, like me, I can remember better when I write."

From the students' feedback, it was found that, out of 105 students, 70 students preferred using TikTok as a learning tool to transfer information from audio to graphical representation. They mentioned that the music and fun elements in TikTok made it more interesting compared to the traditional mind-map method. One of them also stressed that TikTok challenged him to use new methods and be more explorative. In terms of content, the students admitted that they remembered the content better with TikTok compared to the traditional mind-map method because more time was spent in looking at the information to produce the video.

However, few students voiced their opposing views pertaining to TikTok. They mentioned that TikTok is time consuming and challenging as editing is required. Some students were not in favor of editing. Having no passion for it, they feel less motivated to do so.

#### B. TikTok as the multimedia tool for e-learning

Relying on Mayer's Principles: Using multimedia for e-learning, this research aimed to provide insights into the

usefulness of TikTok application in teaching and learning English listening skills to tertiary level students. Among the 12 principles, there are five principles that are in line with this research.

### 1. The Spatial Contiguity Principle

The Spatial Contiguity Principle is about the space in between text and visuals on the screen, stating that users learn best when relevant text and visuals are physically near one another. In the context of this study, the TikTok application allows the users to choose their own images and attach their own text. This can make the learning process easier for the users.

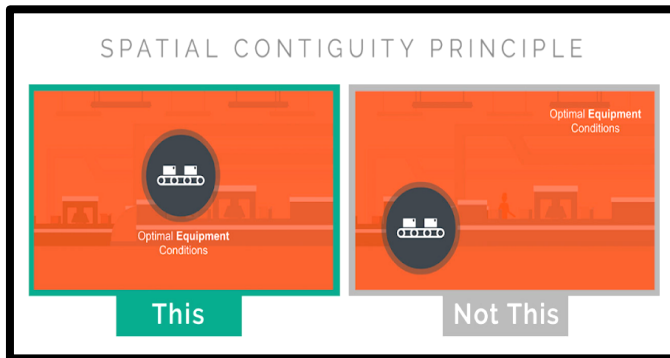


Fig. 2. Spatial Contiguity Principle



Fig. 3. Spatial Contiguity Principle – A Sample of Student's TikTok

### 2. The Temporal Contiguity Principle

The Temporal Contiguity Principle states that people acquire new information at the highest level when corresponding words and visuals are presented at the same time, instead of in consecutive order. In the context of this study, students were allowed to be creative in arranging their words and visuals. Most students preferred presenting their words and the visuals related to the words together in TikTok as they believe this will enhance the viewers' comprehension.

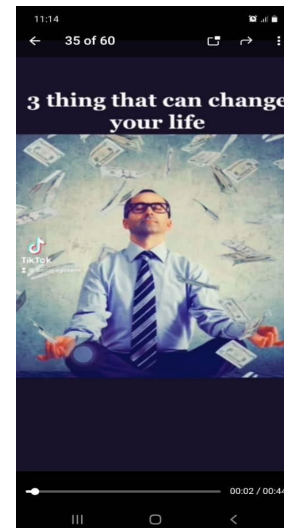


Fig. 4. Temporal Contiguity Principle – A Sample of Student's TikTok

### 3. The Pre-Training Principle

The Pre-training Principle reveals that people learn more efficiently if they have existing background knowledge on certain things. This often means understanding basic definitions, terms, or concepts before starting the learning experience. If a learner starts an eLearning course with a background knowledge, they can easily get motivated when complex visuals and definitions are thrown in their way. A bit of pre-training before starting the course would be helpful. According to the students, some of them have been using TikTok actively for pleasure even before it was introduced as a learning platform. Therefore, they had prior Tiktok basics, and this made it easier and enjoyable for them.

### 4. The Multimedia Principle

The Multimedia Principle states that people learn better from words and pictures than just words alone. This principle is the basis of all Mayer's principles, that images and words are more effective than words alone. Tiktok allows users to think out of the box. The users are not only able to insert images and words but can also add more elements such as their own videos, animations, voiceover, songs and sound effects to make their TikTok presentations livelier, informative, entertaining and fun.

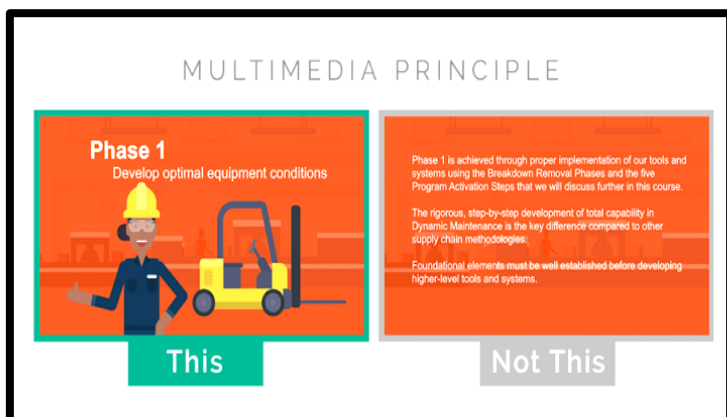


Fig. 5. Multimedia Principle

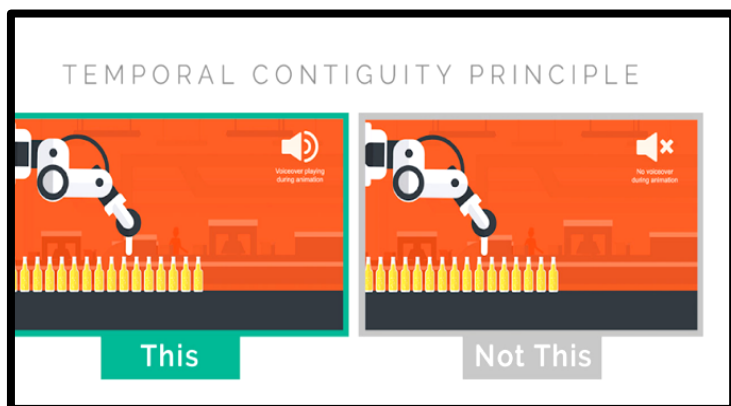


Fig. 6. Temporal Contiguity Principle



Fig. 7. Multimedia Principle – A Sample of Student’s TikTok

### 5. The Image Principle

Talking head videos are renowned in the eLearning and Massive Open Online Courses (MOOCs) but the Image Principle states that they do not necessarily help in the learning process. The idea is that if there is important information to be learned, relevant visuals on the screen

will be more effective than showing a talking head video of a teacher/ instructor. There is a feature on TikTok where users can make themselves visible in the video. They can still share their messages with special effects without saying a single word.

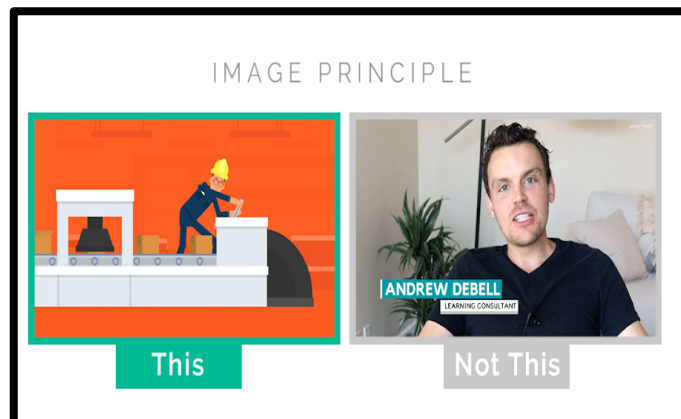


Fig. 8. Image Principle

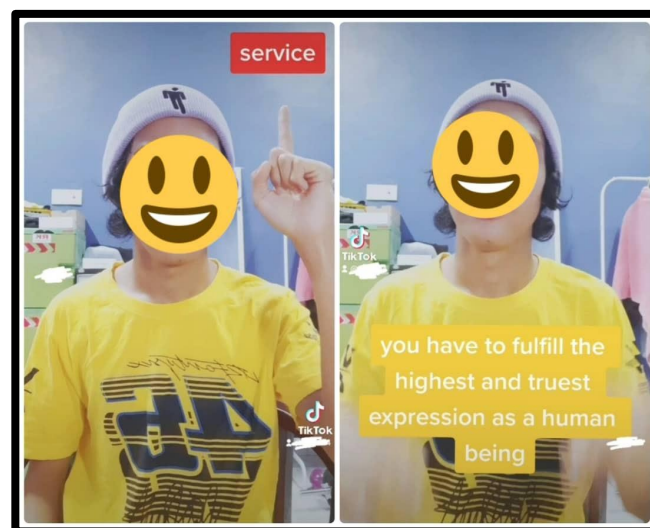


Fig. 9. Image Principle – A Sample of Student’s TikTok

## V. CONCLUSION

The main goal of the current study is to evaluate the use of the TikTok application as an educational tool for ESL learners. Overall, the evidence from this study indicates positive feedback as most of the respondents preferred this new method as compared to the traditional mind-map due to its novelty as well as the interesting features. Apart from that, the use of TikTok also corresponds to five of the principles in multimedia learning according to Mayer’s (2002) list. This demonstrates its effectiveness as a learning tool as adherence to the principles signifies a better learning experience.

Despite the small sample size and its exploratory nature, this study offers some insight into the possibility of integrating social media and language education. However, further work is needed to assess the application of this method with other language components such as reading, writing, pronunciation, and vocabulary enrichment.

## REFERENCES

- Al-Rahmi, W. M., & Zeki, A. M. (2017). A model of using social media for collaborative learning to enhance learners' performance on learning. *Journal of King Saud University - Computer and Information Sciences*, 29(4), 526–535. doi:10.1016/j.jksuci.2016.09.002
- Azlan, N. A. B., Zakaria, S. B., & Yunus, M. M. (2019). Integrative Task-Based Learning: Developing Speaking Skill and Increase Motivation via Instagram. *International Journal of Academic Research in Business and Social Sciences*, 9(1), 620–636.
- Bartlett-Bragg, A. (2006). Reflections on pedagogy: Reframing practice to foster informal learning with social software. *ResearchGate*, 20(June), 15. <https://doi.org/10.1386/jmpr.4.1.55/0>
- Black, R. (2009). Online fan fiction, global identities, and imagination. *Research in the Teaching of English*, 43, 397-425.
- Chamot, A. U., & O'Malley, J. M. (1987). The cognitive academic language learning approach: A bridge to the mainstream. *TESOL Quarterly*, 21(2), 227–249.
- Junco, R., Heiberger, G., & Loken, E. (2011). The effect of twitter on college student engagement and grades. *Journal of Computer Assisted Learning*, 27(2), 119-132.
- Kabilan, M. K., Ahmad, N., & Zainol Abidin, M. J. (2010). Facebook: An online environment for learning of English in institutions of higher education? *Internet and Higher Education*, 13, 179-187.
- Lin, C. H., Warschauer, M., & Blake, R. (2016). Language learning through social networks: Perceptions and reality. *Language Learning & Technology*, 20(1), 124-147
- Long, M., & Crooks, G. (1991). Three approaches to task-based syllabus design. *TESOL Quarterly*. 26(1), 27-56.
- Mayer, R. E. (2002). Multimedia Learning. *Psychology of Learning and Motivation*, 41, 85-139
- MOE Malaysia, 2013. Malaysia education blueprint 2013-2025 (Preschool to Post-Secondary Education) Malaysia education ministry. Retrieved from <https://www.moe.gov.my/index.php/menumedia/media-cetak/penerbitan/dasar/1207-Malaysia-education-blueprint-2013-2025/file>
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing high school students' engagement by increasing their teachers' autonomy support. *Motivation and Emotion*, 28, 147–169
- Schwab, K., (2017). *The fourth industrial revolution currency*. Penguin UK. Retrieved from <https://books.google.com.my/books?id=OetrDQAAQBAJ&dq=essential+skills+in+fourth+industrial+revolution&lr>
- Wolvin, A. D., & Coakley, C. G. (1996). *Listening. (5th ed.)*. Madison, WI: Brown & Benchmark.
- Zheping, H. (2018). The world's most popular iPhone app isn't Facebook or WhatsApp. Retrieved from: <https://qz.com/1272285/bytedances-music-video-app-douyin-tik-tok-is-the-most-downloaded-iphone-app-in-2018s-first-quarter/>