Understanding technical term translation using language translator as Mobile-Assisted Language Learning (MALL)

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Article Info

Abstract

Language barriers often prevent a person from understanding information. For that, internet users need to know the best mobile application to translate or translate foreign languages. Numerous mobile apps can be used for English language learning. The apps grow as technology improves then other apps were created specifically for the purpose to teach any subject. Mobile-Assisted Language Learning (MALL) is a prominent practice nowadays. The MALL for translation usage is gradually established for EFL students because of the development of ICT. However, the research that discussed this issue is still far on the ground. This research is conducted to fill this void. There are four concerns to consider namely 1) MALL in improving students' translation skills, 2) Students' way of translating technical terms 3) The most translation strategy applied by the students to translate the technical terms (4) Challenges faced by students when translating the technical terms from English into Indonesian by using MALL. This research was carried out with a qualitative method. The data were taken from both an online survey and a semi-structured interview. The findings revealed that the students were helpful to use Language Translator (LT) for translating technical terms, especially in determining word choice. They selected three strategies for translating technical terms, i.e. translation by definition, literal translation, and borrowing. The strategy that the students used was a translation by definition. The challenge that they faced when using MALL was primarily regarding guidance availability. Nonetheless, most of them agreed that the LT was very supportive.

INTRODUCTION

By closing or eliminating learning activities as usual by all educational institutions, it is hoped that it can reduce the spread of COVID-19, especially by protecting students from being exposed to or becoming carriers of this COVID-19. This policy makes the government, related educational institutions, and teachers (as the spearhead of education implementers) act quickly to present alternative educational processes for students). Due to a Coronavirus disease outbreak, the government of Indonesia has the policy to implement an online mode for educational activities the level primary up to tertiary. In response to this condition, several technological tools are required in managing that mode, particularly for EFL students.

One of the technological tools that can provide access to language learning is a mobile phone (smartphone). The level of development of smartphone devices which is getting higher and relatively cheaper is a factor supporting the increasing number of smartphone users. Indonesian smartphone users are also growing rapidly. The presence of mobile learning is intended as a complement to learning and provides opportunities for students to learn material that is less mastered anywhere and anytime. Mobile learning that will be studied is based on Android so that it can be used by students to increase interest in learning. Mobile phones or smartphones are devices equipped with an operating system for the wider community. Its function is not only for SMS and calling, but users can freely add other applications and functions or change them according to the user's wishes. In other words, a smartphone is a mini-computer that has the capabilities of a telephone.

Mobile phones allow users to learn languages through certain applications. The type of language learning that uses mobile phones and can be accessed anywhere is called Mobile Assisted Language Learning (MALL). MALL in translation is increasingly prevalent among Indonesian EFL students due to ICT development and practical usage in teaching and learning (Fitria, 2021d). MALL is part of Computer Assisted Language Learning (CALL) for mobile learning (m-learning) and language learning. Therefore, the MALL knowledge in translation has great importance for skill improvement both for EFL students and educators. Paying attention to MALL, multi-functional mobile devices can give a contribution to language learners in terms of the teaching environment (Yang, 2013). Wu et al. (2018) also stated about mobile device usage proved language acquisition improvement. After that, it was obvious that MALL confirmed significantly in contextualization learning (Alona & Hagit, 2019).

Many studies pertinent to MALL, especially for increasing the competence of English were already completed. First, Baleghizadeh & Oladrostam (2010) state that pre-intermediate Iranian female students who had benefitted from mobile-assisted learning performed considerably better on a multiple-choice grammar posttest than those in the control group. Second, Taj et al. (2016) stated that MALL was a beneficial tool for the development of language acquisition. Third, Ahmad et al. (2017) state that Vocabulary acquisition occurred in both non-MALL and MALL migrant women English learners; however, the MALL atmosphere offered a much more enriched vocabulary learning experience. As a result, the MALL framework has the potential to improve migrant women's learning and vocabulary development. Fourth, Miqawati & Wijayanti (2017) state that the use of flashcards in combination with MALL lets students participate fully in communication while maintaining proper pronunciation. Fifth, Keezhatta & Omar (2019) state that MALL systems and apps, in general, create a compelling learning environment for teaching reading, which has beneficial consequences for students in four public secondary schools in Saudi Arabia's Riyadh District. Sixth, Hadi & Emzir (2016) state that action research at Muhammadiyah University of Jakarta's English Department in enhancing English speaking ability utilizing Mobile Assisted Language Learning (MALL) has shown that MALL significantly improves students' ability to speak English. Seventh, Islam & Hasan (2020) discuss the MALL's effectiveness in increasing listening skills. They reviewed papers from empirical research of university students. They were validated regarding the content of listening skills and the MALL as well. Eighth, Gharehblagh & Nasri (2020) state that on the post-hoc interview revealed that MALL students were enthusiastic about the use of mobile technology in writing classes.

Considering the previous research, most of them scrutinize the MALL's effectiveness to promote both learning English and finding out the perception about the mobile. In other words, while existing studies have established the benefits of MALL in learning and teaching English, they have not addressed MALL in the realm of translation for EFL learners. To fill the void, research with the main focus on technical terms translation from English into Indonesian was conducted. As stated by Fitria (2021), since almost everyone has had prior experience with machine translation,

translation practice experience in translating an English text using a mobile device, in this case for pre-service teachers, is an important activity (Fitria, 2021b). This type of translation may be found for free on the internet, is easy to use, and gives accurate results in a matter of seconds.

Consistent with the background, this research is about the translation of technical terms from English into Indonesian by using MALL. Concisely, four questions about this issue, such as 1) How Mall can help the students to improve their translation skills, 2) How do the students translate the technical terms?, 3) Which is the most translation strategy applied by the students to translate those technical terms?, and 4) What challenges do students face during translating the technical terms from English into Indonesian by using MALL?

This research aimed at exposing the answer finding to the research's problems. First, it was to elucidate the practice of MALL for assisting the students to translate technical terms from English to Indonesian. Subsequently, it was to describe how the students translate technical terms. And, it was to reveal the most translation strategy taken by the students in translating technical terms. Lastly, it was to identify the challenge that students face when translating the technical terms from English into Indonesian using MALL. Hence, this knowledge was considered to be an advantageous input to EFL learners at the tertiary education level.

Strategies of technical terms translation

Three strategies of technical terms translation discussed are borrowing, literal translation, and description translation. According to Pym (2017), borrowing a word or expression in the source language into the target language has an aim. It was to overcome an unknown concept found in the culture of the target language. Borrowing is also utilized for introducing the essence of the culture in the source language. In other words, the choice of borrowing a word or expression of the source language is to introduce an element of the source language as well as to create meaningful effects. For example, a radio which is from English as a source language is translated into radio in Indonesian as a target language. Fitria (2019) states two types of borrowing. Pure borrowing is when a word is copied directly from the source language (SL) and entered into the target language (TL) without any changes to the letters. Naturalized borrowing, on the other hand, allows a term to be naturalized to match the spelling rules of the target language (TL) so that readers may readily comprehend what it means.

The literal translation is also well known as the word-for-word translation. It is the direct transfer of source language text into an appropriate target language text in terms of grammar. Principally, the literal translation is the reversible solution. This means that a literal the translation is commonly applied when translating between two languages of the same family (e.g. between French and Italian) and the same culture. While the descriptive translation is used in parallel with the transcription. However, this strategy is usually taken for terms, cultural words, and unique objects translation with no lexical equivalents in the target language. Therefore descriptive translation aims to explain so that the reader of the target language gets a comprehension meaning (Polyakova et al., 2019).

Mobile-Assisted Language Learning (MALL)

A mobile translator is a mobile application that can be utilized for translating from English to any other dialect, and vice versa (Ogundokun et al., 2021). One example of a mobile translator is Language Translator (LT). Viberg & Grönlund (2013) state that MALL referred to the function of mobile devices as the technological advancement for acquiring a language. This definition was in line with Ishaq et al. (2020). He described mobile learning is considered as a sophisticated device used for instructional goals. Furthermore, Son (2014) explained that MALL became more popular as a device for language learning. Therefore its potential usage leads to be researched, besides CALL. Dominic (2016) and Muhammad et al. (2020) described MALL as a CALL novel subfield. The process of learning a language tended to be more at ease to complete by using MALL because the form promotes practicality. The learners may gain language knowledge through cell phones (Matthew, 2021). We used Language Translator (LT) as an example of MALL for this research.

Language Translator (LT)

A language translator is a program that converts statements from one computer language to another, without changing the meaning. Language Translator (LT) manages over 100 languages in the world. The Language Translator software enables users to swiftly, efficiently, and effortlessly search up or

translate words and sentences using a dictionary. Additionally, it enables users to swiftly submit text using the speech recognition feature and to listen to the translated text via the voice broadcast capability. It is completely free, and users can use it even while they are offline. This application is perfect to translate texts fast on our phones or tablet. With this online translator, we won't have communication problems.

Among the features are the following: 1) Support for offline translation in 59 languages. 2) Rapid translation: simply choose the text and translate it to any location. 3) Voice recognition and broadcasting in all 47 languages (speech recognition and text-to-speech). 4) Detect and translate text from images: users may pick a picture and the program will assist them in detecting and translating text. 5) Can be used in conjunction with a dictionary. 6) Copy and paste translated content directly into other programs. 6) A straightforward and user-friendly interface. 7) Extremely convenient when traveling. 7) A slew of other user-friendly features. Besides that, the interface is simple and stylish, the translations are done instantly, the application is free, possibility to copy the translated text by using one button, possibility to delete the text by clicking one button, and users can translate from 90 different languages, users can translate by using our voice, and users can listen to translations.
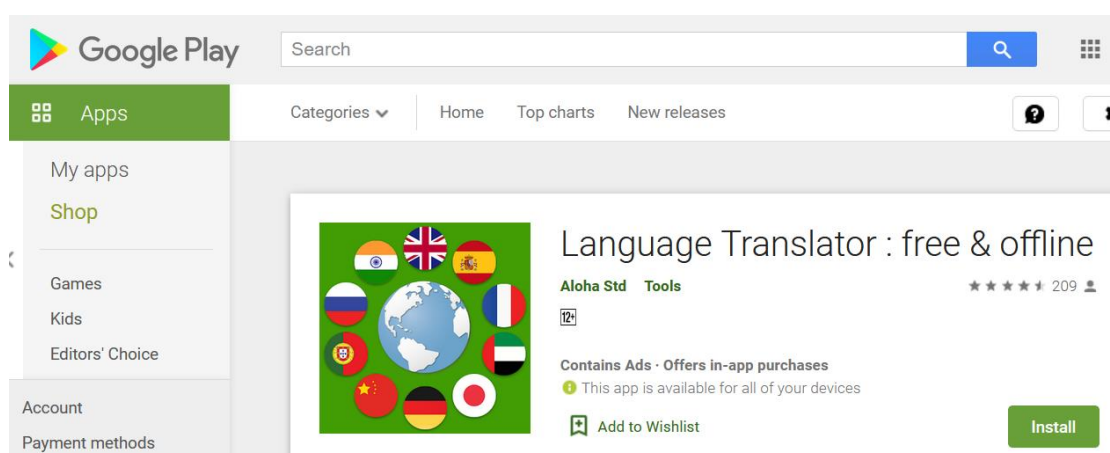

Figure 1. Language Translator

Based on figure 1 depicted Language Translator (LT) which is found in Google Play. The software allows us to look up words or phrases in a dictionary. Also, it translates such phrases with ease and fast. This application is completed as well by a speech recognition that permits the user to input a text right away. Then, a voice broadcast lets us listen to the text being translated. It could be used not only with an internet connection but also offline. Overall, Language Translator (LT) supports text detection derived from both image and voice recognition.

METHODS

This study was managed under a qualitative method because the result is presumed to explore the value of MALL in translation activities (Phakiti, 2014). Hence, in obtaining the answer to four research questions, we applied an online survey and semi-structured interview as the research instrument. We decided to implement more than one data source, i.e. online survey and interview. The reason was such triangulation or data collection may improve the credibility of research findings (Creswell, 2015).

Twenty-two students, including male and female, took part in this research. They came from the graduate program of English education study program with the age of between 21 and 24 years old. A model sample of an information-oriented was used in selecting participants. We both concentrated on the perspective of academic background because they completed the subject of translation. Besides, they also agreed to participate voluntarily in this study. The main objective of the subject is for the students can translate many kinds of text which were taken from different fields of knowledge from English to Indonesian. During the course, the students use both English and Indonesian. Therefore, it remains appropriate to support us in probing this topic and gathering the data.

All of the participants had instructions to fill in the online surveys to obtain information. The information regarding in what way MALL can help them to improve their English. This survey was

created using Google Forms. They answered the questions by a means of selecting the optional boxes. In addition, they also expressed their opinion with an open answers. The online interview was also completed to record the participants' reflections in line with their experiences of making use of LT in translating technical terms.

Technical terms they had to translate were taken from the video. It was about video editing and definitions for beginners. The video was originally from YouTube. After they watched it, there were eleven technical terms that they need to translate. These terms are "jump out, transition, zoom in, scale-up, ripple delete, copy attributes, B roll, keyframe, L-cut". The students also had the experience to operate the MALL. In this case, we used the Language Translator (LT) application developed by one of the leading companies. In the beginning, they installed it on their cellular phone and were explained to work with it through online sessions. The aim is they understand how to use it for translating the text from Indonesian into English and from English into Indonesian, particularly technical terms.

The quantitative data were analyzed based on students' responses. Their responses were grouped into four categories, i.e. the benefit of MALL (BM), Translation Technical Terms (TTT), Translation Strategy (TS), and the challenge of MALL (CM). We employed an analysis of thematic to evaluate the data. Initially, the semi-structured interviews were transliterated. After that, we examined the data based on meaning units (Bryman, 2016). It referred to two different topics i.e. the translation strategy to translate technical terms and the difficulty using MALL. The topics analyzed were based on the interview and the questionnaire. The finding report was organized in line with the research questions. To sum up, the data were investigated in three steps, namely the description of data, the display of data, and the verification of data.

FINDINGS AND DISCUSSION

Findings

Concerning the stated research goals, the analysis results of this study were presented in detail. The data sources were online surveys and interviews. They would be explained below:

MALL helps students to improve translation skills

Two out of 22 students stated that Language Translator (LT) was not useful because they can use other devices which are favorable for them. They did not want to inform others about this application as well since it has the same function as other MALL. Nine students expressed positively about the function of a Language Translator (LT). Mostly, they described that this application was easy and practical to operate. Moreover, the features and the services offered were complete, such as converting the source language in the form of text to voice and vice versa. It can be used offline too. In brief, they can increase their knowledge in terms of translation skills.

> *"The reason is LT is easy to download. To use this application I don't have to make registration so it can be used right away"*
> *"LT is easy and practical. No need to connect with the internet".*
> *"LT is very easy to use anywhere and anytime even without the internet".*

However, eleven students proved that Language Translator (LT) was informative for translation practice because of its various services. It helped them in determining the word chosen for the translation as well as to translate the word or the term or the expression that the students were not familiar with. They felt that it became easy to understand the meaning of the word in English with Language Translator (LT).

> *"I am the type of person who is a bit difficult to memorize, with the LT application.*
> *"It is easier for me to find and memorize difficult words".*
> *"LT is very helpful to translate some words from English into Indonesian and vice versa".*
> *"LT can help remind words from Indonesian to English".*
> *"Yes, LT helps to translate words that I don't know".*

95.5 % of students agreed that using Language Translator (LT) can improve their translation skills and all of them completely agreed that it was easy to operate. The majority of them liked the service offered by this application. On the other hand, they said that it was their first to translate a

text (technical terms) using Language Translator (LT). In other words, it confirmed that they were uninformed about this application before.

Students' technical term translation

There were eleven technical terms relating to the process of editing videos to be translated by the students. They were "jump out, transition, zoom in, scale-up, ripple delete, copy attributes, B roll, keyframe, and L-cut". The students have the freedom to apply the translation strategies for the translation of technical terms after using a Language Translator (LT). They preferred three translation strategies, namely literal, borrowing, and descriptive translation.

For example, "Jump cut" is translated literally into *lompatan gambar.* This translation is taken from the word stated in the dictionary or more specifically in the video editing dictionary or glossary. "Jump cut" is translated with a borrowing into "jump cut". This means that the translation is the same as the term in the source language. The word "Jump cut" is translated by descriptive translation into two options i.e. (1) "Lompatan gambar pada rangkaian *shot* yang disebabkan oleh perubahan posisi karakter atau obyek dalam satu latar, (2) Posisi karakter dan obyek tetap namun latar berubah seketika secara tidak wajar". In English it means (1) an image jumps in a series of shots due to changes in the position of characters or objects in the same setting, (2) the position of characters and objects remains but the background changes in an unnaturally way). This translation strategy provided more explanation in detail so that the readers would understand the meaning of a term comprehensively.

Translation strategies to translate technical terms

To know the most translation strategy to translate technical terms, the researchers conduct an online survey of the students, the result analysis can be seen in the table below:

Table 1. Translation Strategy for Technical Terms

No	Translation Strategy	Percentage
1.	Translation with definition	50 %
2.	Translation literally	40 %
3.	Borrowing	10 %

Based on the table above, the students perceived positively the proportion of 50 % for translation with definition. Most of them said in the interview that the descriptive translation strategy gave the readers more information so that they will understand technical terms correctly. They do not mind the translation will expand as long as they can comprehend the meaning of the term. Particularly, the domain of the original terms was not known well by students.

"For me, to translate technical terms with a descriptive translation is the right one because I can understand it fully.
"I am satisfied with the result of translation with a descriptive translation".
"Frankly speaking, it is hard to translate the technical term. It becomes harder if we are not familiar with the field of knowledge where the technical terms are taken".

The second-highest proportion was 40 % for translation literally. The students described that the aim of translation literally is to maintain the message conveyed in this case the technical terms. In other words, the students preferred to translate literally for preserving the similar meaning of technical terms between the source language and target language.

"I like to translate technical terms literally because the reader may understand it at ease".
"For those who want to be more precise in translation of the term, it's better to choose literal translation".
"In my opinion translation literally is the most applicable for translating the technical term".

The third percentage went to translation strategy and borrowing. There were two students out of 22 who took borrowing strategy for translating technical terms. The translation result by applying the borrowing strategy is a similar term used between the source language and target language. It did not change at all for the translation. This strategy is taken as long as the readers recognized well the technical terms being translated.

Students' challenges to translate technical terms using MALL

To know the students' challenges to translate technical terms using MALL, the researchers conduct an online survey of the students, the result analysis can be seen in the table below:

Table 2. The Students' Challenges to Translate Technical Terms Using MALL

No	Translation Strategy	Percentage
1.	Guidance availability	36.5 %
2.	Technical problems	22.7 %
3.	Time management	22.7 %
4.	Others	16.2

Based on the table above, shows that the students met four types of challenges when applying MALL to translate technical terms as indicated before. According to 36.5 % of students, there is no one to guide them is the most challenging. The same percentage, 22.7 %, went through technical problems and time management. The rest, 16.2% was for others such as their cellular quality is supported by installing the LT application and this made them wait for loading.

Based on the result of the interview, students had a problem with technical concerns. They faced difficulty accessing their translation history. Additionally, some students told that they still needed assistance because it was their first experience using Language Translator (LT). Though, several of them produced contradictory statements. They had a great understanding of how to utilize LT since they had listened carefully to online sessions which are organized by researchers.

Discussion

The need for translating exists in many activities, ranging from activities in the education room to activities while traveling. Translator or translator applications, such as Google Translate, are certainly very useful at times like this. Of course, Google Translate is not the only translator app that can help us translate anything. There are many similar applications that we can choose from the Google Play Store or Apple's App Store. The type of translator app we need depends on our needs. These translator apps can generally translate text, speech, images, or even have a real-time conversation with someone who speaks a different language. Some other applications offer audio pronunciation, example sentences, or there are even applications that pack offline support so that we can continue translating without an internet connection.

Along with the development of information technology in recent times, several innovative apps appear, notably on mobile phones (Tedjosurya & Suharjito, 2014). The usage of mobile phones, apart from being a communication medium, is also a medium of learning, such as translation applications. Translation application may be a tool to learn a language, such as the English to Bahasa Indonesia translator application. Mobile technology was very helpful in terms of improving translation skills because of the supported features. Because of the advancement of ICT and its practical use in teaching and learning, MALL in translation is becoming more common among Indonesian EFL students (Pudjiati et al., 2022).

The majority of students believed that utilizing Language Translator (LT) helped them improve their translation skills, and they all thought that it was extremely straightforward to use. The majority of them expressed satisfaction with the service provided by this application. On the other side, they stated that this was their first time utilizing Language Translator to translate a document (technical words) (LT). In other words, it verified that they had previously been unaware of this application. After utilizing Language Translator, students are allowed to use their translation procedures for technical words (LT). Indeed, they favored three modes of translation: literal, borrowing, and descriptive.

Students rated translation with definition positively at a rate of 50 %. The majority of them stated during the interview that the descriptive translation technique provided additional information to help readers comprehend technical phrases correctly. They don't mind if the translation widens as long as they understand the term's meaning. Students, in particular, lacked familiarity with the area of origin words.

According to the interview results, students encountered difficulties with technological issues. They had difficulties in gaining access to their translation history. Additionally, several students said that they required additional support because this was their first time using Language Translator

(LT). Several of them, though, made contradicting assertions. They had a firm grasp of how to use LT, having listened attentively to an online session prepared by researchers. The interview data showed that the students expressed positively toward MALL. Along with previous research, MALL was an aid that is applicable for acquiring a language, particularly in terms of translation Conversely, as a technological issue, for example, the lack of Google Translation or GT service of speaker setting option, became one of the discussions that the students had regarding MALL. At the time students listened to the native speaker's voice GT was sputtering, which it made kind of difficult for them to use.

We used Language Translator (LT) as an example of MALL for this research. IT can work well without connecting to the internet. Additionally, students had to download it on their android phones through Google Play. Then, it needed to set the target language for translation i.e. Indonesian because the source language i.e. English is already embedded. Language Translator (LT) also holds the resources which are from written text, oral, and pictures. For example, the voice was recorded as the source of language thus the translation could be both the text and the voice. In other words, it serves voice translation and other linguistic services in a simpler feature. The uniqueness of this application is the simplicity of its appearance. Apart from that, users can also translate for free words in 90 languages. This app can translate written words and spoken foreign languages. However, a Language Translator requires an internet connection to function.

In this modern era, anything can be done with the help of an application, one of which is when we find it difficult to interpret a foreign language to translate (Fitria, 2021c). The option that we have to do is to take advantage of an android or smartphone by installing the best translation application. Translating words and even sentences is not a difficult thing to do nowadays. Simply by using an application on our cell phone, the translation process can be done quickly. With the development of technology, everything can become easier and faster to do, including terms of translating languages. Translator applications or translators have an important role in this multi-language world to help people to be able to communicate or understand the meaning of a 'foreign language' without having to study the language for a certain time.

The type of translator app we need depends on our needs. These translator apps can generally translate text, speech, images, or even have a real-time conversation with someone who speaks a different language. Some other applications offer audio pronunciation, example sentences, or there are even applications that pack offline support so that we can continue translating without an internet connection. Before choosing, we should consider the following aspects of the existing translator applications: 1. Usage. What we are looking for from this app are usability and features. Make sure the features and capabilities match our needs. If it is difficult to use, difficult to manage, or the translation process takes too long, instead of helping, the translator application will be a pain. 2. Language. No translator app supports all languages in the world. So, make sure the application that you download does support the language you need, especially when the language is not very common. 3. Pronunciation. If you need a pronunciation in a certain language, choose an application that offers audio pronunciation features. Applications with this kind of feature will be useful when we travel abroad. 4. Extra. Some apps are just a kind of dictionary that will translate words literally or based on lexical meaning. If there is an application that can translate text in the form of images or read menus in restaurants, it will certainly be more fun. However, it all comes back to our needs. To help with the work and needs of translating foreign languages, we can try some of these applications on our Android smartphones to find out the weaknesses or strengths of the mobile translator applications that we use.

CONCLUSION

Both the results and discussion denoted that using Language Translator (LT) as MALL gave beneficial effects on students' capacity to translate documents in the form of a text or a voice from English into Indonesian. This exposed the students' ability to translate technical terms. An online survey and semi-structured interviews have also generated encouraging results for the students. They felt that MALL aids them in translating and understanding the terms due to not only its fast response but also its simplicity. This research suggests using another text type of source language, such as figurative language and idiom from literary works. They will prove another function of MALL which can enrich their experience. Therefore, the comparison of the students' difficulty in translating both figurative language and idiom might be taken into account.

Language barriers often prevent a person from understanding information. For that, internet users need to know the best Android application to translate or translate foreign languages. Currently, there are so many translator applications with various features that make it easier for users, not only Google Translate. We can use other mobile translators depending on our needs, but before choosing it, we should consider the following aspects of the existing translator applications include usage, language, pronunciation, and extra features. To help with the work and needs of translating foreign languages, we can try some of these applications on our Android smartphones to find out the weaknesses or strengths of the mobile translator that we use.

FUNDING STATEMENT

REFERENCES
Ahmad, K. S., Armarego, J., & Sudweeks, F. (2017). The impact of utilizing mobile assisted language learning (MALL) on vocabulary acquisition among migrant women English learners. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, *13*, 37–57.

Alona, F. B., & Hagit, M. T. (2019). *Mobile Technologies in Educational Organizations*. IGI Global.

Baleghizadeh, S., & Oladrostam, E. (2010). The Effect of Mobile Assisted Language Learning (MALL) on Grammatical Accuracy of EFL Students. *MEXTESOL*, *34*(2). http://www.mextesol.net/journal/index.php?page=journal&id_article=50

Bryman, A. (2016). *Social Research Methods*. Oxford University Press.

Creswell, J. W. (2015). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. Pearson.

Dominic, M. (2016). *Handbook of Research on Mobile Learning in Contemporary Classrooms*. IGI Global.

Fitria, T. N. (2019). Borrowing Word Analysis in "I Fine Thank You Love" Movie. *Lire Journal (Journal of Linguistics and Literature)*, *3*(1), 7–14. https://doi.org/10.33019/lire.v3i1.45

Fitria, T. N. (2021a). Analysis on Clarity and Correctness of Google Translate in Translating an Indonesian Article into English. *International Journal of Humanity Studies (IJHS)*, *4*(2), 256–266. https://doi.org/10.24071/ijhs.v4i2.3227

Fitria, T. N. (2021b). A Review of Machine Translation Tools: The Translation's Ability. *Language Circle: Journal of Language and Literature*, *16*(1), 162–176. https://doi.org/10.15294/lc.v16i1.30961

Fitria, T. N. (2021c). Artificial Intelligence (AI) In Education: Using AI Tools for Teaching and Learning Process. *Prosiding Seminar Nasional & Call for Paper STIE AAS*, 134–147.

Fitria, T. N. (2021d). The Use Technology Based on Artificial Intelligence in English Teaching and Learning. *ELT Echo : The Journal of English Language Teaching in Foreign Language Context*, *6*(2), Article 2. https://doi.org/10.24235/eltecho.v6i2.9299

Gharehblagh, N. M., & Nasri, N. (2020). Developing EFL Elementary Learners' Writing Skills Through Mobile-Assisted Language Learning (MALL). *Teaching English with Technology*, *20*(1), 104–121.

Hadi, M. S., & Emzir, E. (2016). Improving English Speaking Ability through Mobile Assisted Language Learning (Mall) Learning Model. *IJLECR - International Journal of Language Education and Culture Review*, *2*(2), 71–74. https://doi.org/10.21009/IJLECR.022.019

Ishaq, K., Rosdi, F., Azan, N., & Abid, A. (2020). Usability and Design Issues of Mobile Assisted Language Learning Application. *International Journal of Advanced Computer Science and Applications*, *11*(6). https://doi.org/10.14569/IJACSA.2020.0110611

Islam, A. B. M. S., & Hasan, M. (2020). The Effectiveness of Mobile Assisted Language Learning (MALL) on ESL Listening Skill. *NOBEL: Journal of Literature and Language Teaching*, *11*(2), 188–202. https://doi.org/10.15642/NOBEL.2020.11.2.188-202

Keezhatta, M., & Omar, A. (2019). Enhancing Reading Skills for Saudi Secondary School Students through Mobile Assisted Language Learning (MALL): An Experimental Study. *International Journal of English Linguistics*, *9*(1), p437. https://doi.org/10.5539/ijel.v9n1p437

Matthew, M. (2021). *Digital Pedagogies and the Transformation of Language Education*. IGI Global.

Miqawati, A. H., & Wijayanti, F. (2017). Optimalisasi Penggunaan Flashcards Melalui MALL (Mobile Assisted Language Learning) pada Pengajaran Pronunciation. *Prosiding*. https://publikasi.polije.ac.id/index.php/prosiding/article/view/781

Muhammad, M., Sabnani, R. L., Asmara, R., Kusumaningrum, W. R., Wulansari, A., Arvianti, G. F., Hantari, W. C., & Wulanjani, A. N. (2020). *ICLLT 2019: Proceedings of the 1st International Conference on Language and Language Teaching, ICLLT 2019, 12 October, Magelang, Central Java, Indonesia*. European Alliance for Innovation.

Ogundokun, R. O., Awotunde, J. B., Misra, S., Segun-Owolabi, T., Adeniyi, E. A., & Jaglan, V. (2021). An android-based language translator application. *Journal of Physics: Conference Series*, *1767*(1), 012032. https://doi.org/10.1088/1742-6596/1767/1/012032

Phakiti, A. (2014). *Experimental Research Methods in Language Learning*. Bloomsbury Publishing.

Polyakova, L. S., Yuzakova, Y. V., Suvorova, E. V., & Zharova, K. E. (2019). Peculiarities of translation of English technical terms. *IOP Conference Series: Materials Science and Engineering*, *483*, 012085. https://doi.org/10.1088/1757-899X/483/1/012085

Pudjiati, D., Sianna, & Fitria, T. N. (2022). A Confirmation of Indonesian EFL Students' Achievement and Views in Translation through Mobile-Assisted Language Learning. *Al-Lisan: Jurnal Bahasa (e-Journal)*, *7*(1), 1–16. https://doi.org/10.30603/al.v7i1.2360

Pym, A. (2017). *Exploring Translation Theories*. Routledge.

Son, J.-B. (2014). *Computer-Assisted Language Learning: Learners, Teachers, and Tools*. Cambridge Scholars Publishing.

Taj, I. H., Sulan, N. B., Sipra, M. A., & Ahmad, W. (2016). Impact of Mobile Assisted Language Learning (MALL) on EFL: A Meta-Analysis. *Advances in Language and Literary Studies*, *7*(2), 76–83.

Tedjosurya, D. P., & Suharjito, S. (2014). Model of Mobile Translator Application of English To Bahasa Indonesia with Rule-Based And J2ME. *CommIT (Communication and Information Technology) Journal*, *8*(1), 28–34. https://doi.org/10.21512/commit.v8i1.593

Viberg, O., & Grönlund, Å. (2013). Systematising the Field of Mobile Assisted Language Learning. *International Journal of Mobile and Blended Learning (IJMBL)*, *5*(4), 72–90. https://doi.org/10.4018/ijmbl.2013100105

Wu, T.-T., Huang, Y.-M., Shadiev, R., Lin, L., & Starčič, A. I. (Eds.). (2018). *Innovative Technologies and Learning: First International Conference, ICITL 2018, Portoroz, Slovenia, August 27–30, 2018, Proceedings* (Vol. 11003). Springer International Publishing. https://doi.org/10.1007/978-3-319-99737-7

Yang, J. (2013). Mobile Assisted Language Learning: Review of the Recent Applications of Emerging Mobile Technologies. *English Language Teaching*, *6*(7), p19. https://doi.org/10.5539/elt.v6n7p19