thariqah ilmiah
JURNAL ILMU-ILMU KEPENDIDIKAN DAN BAHASA ARAB
IMLA
**Vol. 11. No. 2 Desember 2023**
**ISSN Print**: 2355-8717 **ISSN Online**: 2721-8406 Sinta 5
**Doi**: https://doi.org/10.24952/thariqahilmiah.v11i2.8657

# THE USE OF SPEECH RECOGNITION TO FIND OUT READING ERRORS ON GOOGLE TRANSLATE

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## تجريد

تهدف هذه الدراسة إلى معرفة الأخطاء في قراءة 50 مفرداة العربية باستخدام *recognition speech* الموجود في مترجم جوجل. هذا البحث هو بحث وصفي نوعي، يقوم على أسلوب جمع البيانات باستخدام أسلوب الملاحظة والتوثيق. كانت مصادر البيانات المستخدمة في هذه الدراسة ٥٠ مفرداة تم تحضيرها ليقرأها ٢٠ طالبا. تحليل البيانات المستخدمة في هذه الدراسة هي تفاعلية لتحليل البيانات. كانت نتائج البحث التي تم الحصول عليها أن هناك العديد من المفردات التي كانت تحتوي على حذف عدد من الأخطاء، حذف كانت هناك أيضا كلمات تحتوي على جميع المفردات الصحيحة حذف. الأخطاء الموجودة في استخدام *speech recognition*متنوعة للغاية، مثل ترتيب الحروف غير المناسبة بحيث لا تتطابق المفردات التي يقرأها الطلاب مع ما تم التقاطه بواسطة وظيفة *speech recognition* في ترجمة جوجل. كانت أخطاء القراءة الأكثر شيوعا حذف في المفردات المنتهية بحرف "ة". وذلك لأن ترتيب الحروف في المفردات التي أعدها الباحث لا يتطابق مع النتائج التي تم التقاطها بواسطة الترجمة جوجل عندما يقرأها الطلاب.

**كلمات مفتاحية** : *Speech Recognition*؛ اللغة العربية؛ المفردات؛ الأخطاء؛ ترجمة جوجل

***Abstract***

This study aims to find out the errors in reading 50 Arabic vocabularies using speech recognition found on Google translator. This research is descriptive qualitative research, with collection techniques using observation and documentation techniques. Data used in this research is 50 vocabularies prepared for reading by 20 students. Data analysis techniques used in research and interactive data analysis. The research result obtained is that several vocabularies that have many errors, in the accuracy of letters, and there is also a vocabulary that has the correct letter and vowel accuracy. Errors found in using speech recognition are very diverse, such as the arrangement of letters that do not match up with what is captured by the speech recognition function from Google Translate. Common reading errors in the vocabulary prepared by the researcher an error in the vocabulary ending in the letter *Ta' Marbutah* "ة". This is due to the arrangement of letters and vowels in the vocabulary prepared by the researcher not by the result captured by Google translator when students read it.

***Keywords:*** Speech Recognition; Arabic Language; Vocabulary; Error; Google Translator

## INTRODUCTION

| Submited: 2023-08-14 | Revised: 2023-12-01 | Accepted: 2023-12-21 |
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Currently, the global world has entered the era of revolution 4.0, which is marked by increased connections, interactions, digital development, artificial intelligence and virtual systems. With the shifting boundaries between humans, machines, and other resources, information and communications technology will inevitably impact many areas of life. One of the areas affected is education. Facing this situation, every branch of education must prepare adjustments and new literacy in the education sector. Old literacy that relies on reading, writing and mathematics needs to be strengthened with new literacy, namely literacy about data, technology, and other resources.[1] Ongoing technological developments present challenges and opportunities for the continuity of the education sector, especially those related to school management and the way teachers carry out learning activities in the classroom. Teachers certainly need technology as a medium of learning for the continuity of learning activities.[2] Technology as a learning medium is certainly no stranger to use by teachers, learning media that contains artificial intelligence (Artificial Intelligence) in it.

Artificial intelligence is the science of the development of science and technology which is used to create and realize intelligence using hardware and software solutions, this is inspired by reverse engineering such as neuron patterns that work in the human brain. A network of neurons is called a neural network which has limitations for solving and resolving problems that exist in the real world, in this case, it can be used with the help of the role of artificial intelligence.[3] The use of artificial intelligence in the field of education is no longer strange, one of which is in learning Arabic. One implementation of the use of artificial intelligence in the field of education, especially Arabic language education, is the use of Google Translate.

According to Wohrley, quoted by Aziez and Hidayat, Google Translate is a translation tool that recommends translations of words or sentences in text form in various official languages developed by Google.[4] And according to Harahap, Google

[1] Delipiter Lase, "Pendidikan Di Era Revolusi Industri 4.0," *Jurnal Sunderman*, 2019, https://jurnal.sttsundermann.ac.id/index.php/sundermann/article/view/18/16.

[2] Muhammad Hasyimsyah Batubara, *Kampus Merdeka : Menilik Kesiapan Teknologi Dalam Sistem Kampus*, ed. Masduki Khamdan Muchamad, Taufiq A. Gani, and Putri Wahyuni (Aceh: Syiah Kuala University Press, 2020), https://books.google.co.id/books?hl=id&lr=&id=fXgREAAAQBAJ&oi=fnd&pg=PA53&dq=penerapan+teknologi+artificial+intelligence+dalam+proses+belajar+mengajar+di+era+industri+4.0&ots=mk2N1gXcCu&sig=bw4b0fKZ5Emi_Y7SlN5Ub17v7Ks&redir_esc=y#v=onepage&q=penerapan tek.

[3] Batubara.

[4] Furqanul Aziez and Kosadi Hidayat, "Pengaruh Penggunaan Google Translate Terhadap Kualitas Terjemahan Mahasiswa Psm Pbsi Ump," *Metafora: Jurnal Pembelajaran Bahasa Dan Sastra* 5, no. 2 (2019): 88–103, https://jurnalnasional.ump.ac.id/index.php/METAFORA/article/view/5076/2646.

| Submited: 2023-08-14 | Revised: 2023-12-01 | Accepted: 2023-12-21 |
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Translate can translate into 80 languages in the world.[5] In Google Translate some features can make it easier for users to translate the language they want to translate, such as the write-your-own feature, image or camera feature, speech or voice feature, document feature, and others.[6] The speech or voice feature of Google Translate is one implementation of the use of speech recognition or voice recognition. In the opinion of Andriana et al, speech recognition is a method carried out by a computer to recognize sounds made by humans without regard to the person's identity. The pronunciation time and vowel sound emphasis level which will later be aligned with the existing template in the database are references to be used as parameters[7] and speech recognition using the Google Speech API can recognize spoken sounds and then convert them into text.[8] According to Amrizal and Aini, speech recognition has advantages and disadvantages. These advantages include, fast and easy to use. Meanwhile, the weaknesses in speech recognition are that it is prone to interference and the number of words known is limited.[9]

Meanwhile, the definition of vocabulary, or what is called Mufrodat in Arabic according to Muchtar is a collection of selected words that will later create a language, and words are the smallest components of language that have independent characteristics.[10] Language is a communication tool that plays an important role for humans to understand it, take advantage of it, and adapt it to various kinds of science and knowledge.[11] Arabic is a language found in the Koran and also hadith. Arabic is a special

[5] Khoirul Amru Harahap, "Analisis Kesalahan Linguistik Hasil Terjemahan Mesin Terjemah Google Translate Dari Teks Bahasa Arab Ke Dalam Bahasa Indonesia," *Jurnal Penelitian Agama* 15, No. 1 (2014): 26–43, Https://Doi.Org/10.24090/Jpa.V15i1.2014.Pp26-43.

[6] Prasetya Eghy Satriatama, "Persepsi Mahasiswa Terhadap Penggunaan Fitur Foto Pada Google Translate Sebagai Media Menerjemahkan Materi Berbahasa Jepang" (Universitas Negeri Semarang, 2020), Http://Lib.Unnes.Ac.Id/42268/1/2302416061_Prasetya Eghy Satriatama_Pend. B.Jepang.Pdf.

[7] Andriana Et Al., "Speech Recognition Sebagai Fungsi Mouse Untuk Membantu Pengguna Komputer Dengan Keterbatasan Khusus," *Seminar Nasional Sains Dan Teknologi 2016*, No. November (2016): 1–7, Https://Jurnal.Umj.Ac.Id/Index.Php/Semnastek/Article/Download/778/706.

[8] Supriyanta, Pudji Widodo, And Bekti Maryuni Susanto, "Aplikasi Konversi Suara Ke Teks Berbasis Android Menggunakan Google Speech Api" 2, No. 2 (2014), Https://Repository.Nusamandiri.Ac.Id/Index.Php/Unduh/Item/2061/Jurnal-SPT-Aplikasi.Pdf.

[9] Victor Amrizal And Qurrotul Aini, *Kecerdasan Buatan*, Ed. Qurrotul Aini, *Kecerdasan Buatan* (Jakarta: Halaman Moeka, 2013), Https://Repository.Uinjkt.Ac.Id/Dspace/Bitstream/123456789/44538/2/Naskah Kecerdasan Buatan.Pdf.

[10] Ilham Muchtar, "Peningkatan Penguasaan Mufradat Melalui Pengajian Kitab Pada Mahasiswa Ma'Had Al-Birr Unismuh Makassar," *Al-Maraji' : Jurnal Pendidikan Bahasa Arab* 2, No. 2 (2018): 14–26, Https://Journal.Unismuh.Ac.Id/Index.Php/Al-Maraji/Article/View/1978.

[11] Yunaldi And Syahlawani Siregar, " مشكالت مهارة الكالم في تعليم اللغة العربية بمدرسة الثانوية أالهلية إلسالمية تنجونج أوبار حسن نولي المركزية بادانج بوالك جولو المقاطعة بادانج الوس الشمالية," *Thariqah Ilmiyah; Jurnal Ilmu-Ilmu Kependidikan Dan Bahasa Arab* 9, No. 2 (2021): 61–74, Http://Jurnal.Iain-Padangsidimpuan.Ac.Id/Index.Php/TI/Article/View/4382.

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language because Arabic is rich in meaning.[12] In Indonesia, where the majority are Muslim, many people are interested in studying Arabic, with the aim of understanding and studying the content of the Koran and Hadith. Studying Arabic can be done at formal or non-formal schools[13]. Learning a language is not as easy as imagined, it takes time to learn the sciences related to Arabic itself.[14] Among these sciences are language skills known as speaking skills, listening skills, writing skills, and reading skills.[15]

In learning Arabic, reading skills are among the main skills that must be mastered by Arabic language learners and are also an important factor in learning Arabic[16]. Reading skills are activities carried out based on the participation of several skills, namely scanning, digesting, and remembering.[17] Reading skills are a communication process between readers and writers through written text.[18] With reading skills, students will better understand and master everything, and students will also have more understanding and knowledge. Reading skills are the main initial capital for students. In reading skills, usually starting from the lowest level, starting with letters, then continuing to vocabulary, then continuing to sentences. In this research, vocabulary is the context that will be studied.[19] According to Fitriliza and Fahmi, vocabulary is a collection of words known by

[12] ارمنشاة And لوكيتا, ''تأثير التعليم الميداني و أساليب التعلم على استيعاب المفردات التلاميذ في الفصل الرابع الخامس و السادس بالمدرسة الإبتدائية الكونية الإندونيسيا فالمبانج,'' تقدير, 5, No. 1 (2019): 49–68, Https://Garuda.Kemdikbud.Go.Id/Documents/Detail/1062151.

[13] Irsal Amin, "المشكلات اللغوية في تعليم اللغة العربية لدي الطلبة في إندونيسيا," *Thariqah Ilmiyah; Jurnal Ilmu-Ilmu Kependidikan Dan Bahasa Arab* 9, no. 2 (2021): 102–17.

[14] Nova Yanti and Sholehuddin, "Efektifitas Pelaksanaan Strategi Kalam Dalam Pembelajaran Bahasa Arab Di Mts Al-Jauhar Duri," *Armala* 1, No. 1 (2020), https://e-journal.iainptk.ac.id/index.php/armala/article/view/84.

[15] Nurmasyithah Syamaun, "Pembelajaran Maharah Al-Kalam Untuk Meningkatan Keterampilan Berbicara Mahasiswa Program Studi Pendidikan Bahasa Arab Fakultas Tarbiyah Dan Keguruan | Syamaun | لسانـنـا," *(LISANUNA): Jurnal Ilmu Bahasa Arab Dan Pembelajarannya* 4, No. 2 (2015): 343–59, https://jurnal.ar-raniry.ac.id/index.php/lisanuna/article/view/852/667.

[16] Idam Kholid Nasution, Triana Susanti, and Muhammad Fikri, " تعليم اللغة العربية باستخدام الطريقة الانتقائية لترقية مهارة قراءة طالبات المدرية الثانوية الإسلامية الأهلية دينية فتري باكنبارو," *Thariqah Ilmiah: Jurnal Ilmu-Ilmu Kependidikan Dan Bahasa Arab* 10, no. 2 (2022): 157–70.

[17] Muhajirun Najah, "Penerapan Pembelajaran Shorof Bagi Pembelajar Tingkat Pemula Menggunakan Metode Pemerolehan Bahasa," *Al Mahāra: Jurnal Pendidikan Bahasa Arab* 5, no. 1 (July 1, 2019): 117–40, https://doi.org/10.14421/almahara.2019.051-07.

[18] Dani Firdaus, Hasyim Asyari, and Asmad Hanisy, " املشكالت في تدريس اللغة العربية لغيرالناطقين بها في مهارة القراءة وحلولها باملدرسة الثانوية االسالمية الحكومية االولى جمبر," *Lisan An-Nathiq: Jurnal Bahasa Dan Pendidikan Bahasa Arab* 1, no. 1 (2019): 1–21, http://ejournal.kopertais4.or.id/tapalkuda/index.php/LAN/article/view/3531.

[19] Afrina Refdianti and Afwan Afwan, "Fa'ãliyat Istikhdãm Al-Kitãb Al-Asãsiy (Dirãsah Taqwîmiyyah Fi Jãmi'ah Imam Bonjol Al-Islãmiyah Al-Hukumiyyah Padang)," *Akademika: Jurnal Keagamaan Dan Penddikan* 17, no. 2 (2021): 238–51.

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every individual or other human being, which are members of a particular language.[20] When reading vocabulary, there are bound to be errors in reading it. This error is called a language error. According to Tarigan in Putra, an error is something that deviates from the applicable rules or norms of adult language performance.[21] While language users are still in language acquisition and learning mode, language errors can still occur and are often encountered in language learners, especially second languages.[22] This research focuses on the use of speech recognition in Google Translate.

This research has several connections with several relevant previous studies. This research is very interesting to study because technology is developing that contains artificial intelligence systems that can be used in the world of education, especially Arabic language education. Thus, the researcher took three samples from previous research that are relevant to the research to be studied by researchers, such as; 1) the Application of Speech Recognition in the Android-Based Educational Game "Tahfidzul Qur'an Zaman Now",[23] 2) Speech Recognition Technology for English Pronunciation Practice Using the Dictation Method in the Multimedia Broadcasting Study Program,[24] 3) Implementation of the Google Speech API in the Android-Based Al-Qur'an Memorization Correction Application.[25] The 1st and 3rd studies focused on the use of speech recognition in correcting Al-Quran memorization, memorizing, and memorizing. The second study focuses on the use of speech recognition for English pronunciation practice.

From these three studies, the results showed that by using speech recognition in this study, the results were in line with expectations, such as helping in correcting memorization, memorizing, repeating memorization, and increasing self-confidence in

[20] Fitriliza and Ari Khairurrijal Fahmi, "Peningkatan Penguasaan Kosakata Bahasa Arab Melalui Metode Contoh Morfologi (Penelitian Tindakan Di Fakultas Agama Islam)," *Jurnal Pendidikan Islam* 8, no. 2 (2017): 183–204, http://journal.uhamka.ac.id/index.php/jpi.

[21] Wahyu Hanafi Putra, "Analisis Kesalahan Berbahasa Arab (Teori, Metodologi,Dan Implementasi)," ed. Sofyan Hadi Nata, 1st ed. (Indramayu: Penerbit Adab, 2022), 182.

[22] Ari Khairurrijal Fahmi, "Analisis Kesalahan Gramatikal Teks Terjemah (Indonesia-Arab) Dalam Pendidikan Bahasa Arab," *Kordinat: Jurnal Komunikasi Antar Perguruan Tinggi Agama Islam* 15, no. 1 (2016): 105–16, https://doi.org/10.15408/kordinat.v15i1.6311.

[23] Krisna Febrianto and Iskandar Ikbal, "Penerapan Speech Recognition Pada Permainan Edukasi 'Tahfidzul Qur'an Zaman Now' Berbasis Android," *Komputa : Jurnal Ilmiah Komputer Dan Informatika* 9, no. 1 (March 23, 2020): 17–24, https://doi.org/10.34010/KOMPUTA.V9I1.3721.

[24] Aliv Faizal Muhammad and Akhmad Alimudin, "Penerapan Technology Speech Recognition Untuk Latihan Pronunciation Bahasa Inggris Melalui Metode Dictation Di Program Studi Multimedia Broadcasting | Education Journal : Journal Educational Research and Development," *Education Journal : Journal Education Research and Development* 2 No. 2 (2018): 23–34, https://jurnal.ikipjember.ac.id/index.php/ej/article/view/110.

[25] Affandy Akbar et al., "Implementasi Google Speech Api Pada Aplikasi Koreksi Hafalan Al-Qur ' An Berbasis Android ( The Implementation of the Google Speech on Qur ' an Recitation Correction," *Jtika* 1, no. 1 (2019): 1–8.

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pronouncing as well as increasing motivation to learn English pronunciation. This research focuses on analyzing the use of speech recognition in Google Translate to find errors in reading 50 Arabic vocabulary words. This research aims to find out what errors there are in reading 50 Arabic vocabulary words using speech recognition on Google Translate.

## RESEARCH METHODS

This type of research is descriptive qualitative research with data collection techniques, observation techniques, and documentation techniques. The observation technique used by the researcher is a research observation table where during the research students read the vocabulary prepared in the table, then the researcher observes the results obtained and analyzes them and simple observations from previous journals related to speech recognition research. The data analysis technique that researchers used in this research is interactive data analysis. This interactive data analysis model was coined by Miles & Huberman. Interactive data analysis has three elements, namely; data reduction, data presentation, and conclusion. This research was carried out at SMP Muhammadiyah 35 Jakarta, taking a sample of 20 grade 7 students.

## RESULT AND DISCUSSION

Based on research conducted by researchers using speech recognition on Google Translate to find out errors in reading 50 vocabularies on Google Translate, researchers observed the results of reading 50 Arabic vocabularies that researchers had prepared in the research instrument table. The following are the results of the research data that have been obtained, then the researcher counted the number of correct and incorrect numbers of correct letters and pronouns in each vocabulary seen by each student, and then obtained the following results:

| Nmb | Vocabularies | Indicator | True | False |
|---|---|---|---|---|
| 1 | الساعة | Letter accuracy | 3 | 17 |
| 2 | على | Letter accuracy | 10 | 10 |
| 3 | تحت | Letter accuracy | 4 | 16 |

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|---|---|---|---|---|
| 4 | أمام | Letter accuracy | 0 | 20 |
| 5 | وراء | Letter accuracy | 3 | 17 |
| 6 | بين | Letter accuracy | 18 | 2 |
| 7 | جانب | Letter accuracy | 1 | 19 |
| 8 | كبير | Letter accuracy | 15 | 5 |
| 9 | صغير | Letter accuracy | 11 | 9 |
| 10 | بعيد | Letter accuracy | 16 | 4 |
| 11 | قريب | Letter accuracy | 17 | 3 |
| 12 | صباح | Letter accuracy | 12 | 8 |
| 13 | نهار | Letter accuracy | 9 | 11 |
| 14 | ليلا | Letter accuracy | 10 | 10 |
| 15 | مساء | Letter accuracy | 16 | 4 |
| 16 | طويل | Letter accuracy | 14 | 6 |
| 17 | قصير | Letter accuracy | 14 | 6 |
| 18 | نشيط | Letter accuracy | 12 | 8 |
| 19 | كسلان | Letter accuracy | 6 | 14 |

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| | | | | |
|---|---|---|---|---|
| 20 | كتاب | Letter accuracy | 14 | 6 |
| 21 | حقيبة | Letter accuracy | 0 | 20 |
| 22 | قلم | Letter accuracy | 1 | 19 |
| 23 | ممسحة | Letter accuracy | 0 | 20 |
| 24 | يستريح | Letter accuracy | 3 | 17 |
| 25 | كرسي | Letter accuracy | 14 | 6 |
| 26 | مسطرة | Letter accuracy | 0 | 20 |
| 27 | كراسة | Letter accuracy | 0 | 20 |
| 28 | في | Letter accuracy | 20 | 0 |
| 29 | يذهب | Letter accuracy | 11 | 9 |
| 30 | يرجع | Letter accuracy | 14 | 6 |
| 31 | إلى | Letter accuracy | 10 | 10 |
| 32 | الطلاب | Letter accuracy | 11 | 9 |
| 33 | سبورة | Letter accuracy | 0 | 20 |
| 34 | مرسمة | Letter accuracy | 0 | 20 |

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| | | | | |
|---|---|---|---|---|
| 35 | مكتب | Letter accuracy | 8 | 12 |
| 36 | مكتبة | Letter accuracy | 0 | 20 |
| 37 | فصل | Letter accuracy | 5 | 15 |
| 38 | مصلى | Letter accuracy | 10 | 10 |
| 39 | المدرسة | Letter accuracy | 0 | 20 |
| 40 | مرحاض | Letter accuracy | 11 | 9 |
| 41 | ملعب | Letter accuracy | 13 | 7 |
| 42 | حمام | Letter accuracy | 13 | 7 |
| 43 | مقعد | Letter accuracy | 15 | 5 |
| 44 | مصباح | Letter accuracy | 17 | 3 |
| 45 | مقلمة | Letter accuracy | 0 | 20 |
| 46 | مسجد | Letter accuracy | 16 | 4 |
| 47 | واسع | Letter accuracy | 9 | 11 |
| 48 | ضيق | Letter accuracy | 9 | 11 |
| 49 | جميل | Letter accuracy | 18 | 2 |
| 50 | قبيح | Letter accuracy | 5 | 15 |

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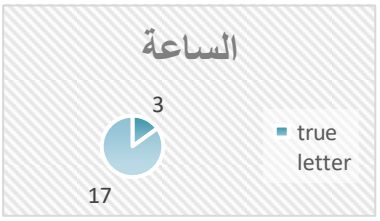
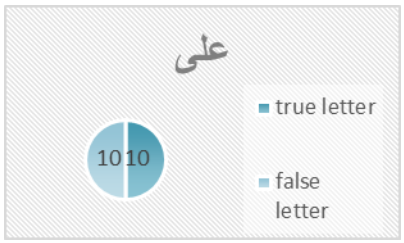
Based on the results of the number of correct and incorrect counts calculated for each student, the researcher then converted the data into diagram form which aims to make it easier to understand, such as:




Based on the diagram above, vocabulary الساعة gets the correct number of letters as 3, and the number of incorrect letters as many as 17.




Based on the diagram above, the vocabulary على has 10 correct letters and 10 incorrect letters.


Based on the diagram above, the vocabulary في has 20 correct letters and 0 incorrect letters.


Based on the diagram above, the vocabulary سبورة gets a correct number of letters of 0, and several incorrect letters of 20.

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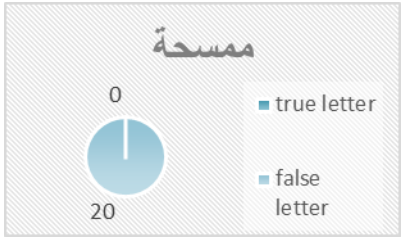
Based on the diagram above, the vocabulary مرسمة gets the number of correct letters as 0, and the number of incorrect letters as many as 20.


Based on the diagram above, the vocabulary of مكتبة gets a correct number of letters of 0, and several incorrect letters of 20.


Based on the diagram above, the vocabulary of المدرسة gets the number of correct letters as 0, the number of incorrect letters as many as 20


Based on the diagram above, the vocabulary of مقلمة gets a correct number of letters of 0, and several incorrect letters of 20.




Based on the diagram above, the vocabulary of ممسحة gets a correct number of letters of 0, and several incorrect letters of 20.

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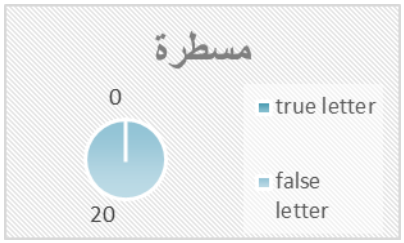
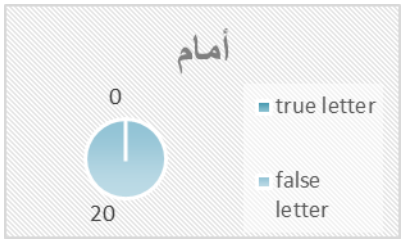



Based on the diagram above, the vocabulary مسطرة gets a correct number of letters of 0, and several incorrect letters of 20.


Based on the diagram above, the vocabulary of حقيبة gets a correct number of letters of 0, and several incorrect letters of 20.




Based on the diagram above, the vocabulary of أمام gets 0 correct numbers of letters and 20 incorrect numbers of letters.

The results obtained were based on research carried out by researchers regarding the use of speech recognition to identify errors in reading 50 Arabic vocabulary using Google Translate, so data was obtained as in the table and diagram above. In the diagram, several vocabularies have many errors in letter accuracy and some vocabularies have all letter accuracy correct. Some of the results obtained from using speech recognition from all vocabularies, only 1 vocabulary did not have several errors in letter accuracy, namely في.

Then several vocabularies do not have the correct number of letters, namely أمام, حقيبة, ممسحة, مسطرة, كراسة, سبورة, مرسمة, مكتبة, المدرس ة, مقلمة.

The errors found in using speech recognition are very diverse, such as incorrect letter arrangements and the vocabulary being read does not match what is captured by the

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speech recognition function of Google Translate. Reading errors that are often found in vocabulary are errors in vocabulary that end in the letter ta' marbutah ((ة). In its use, according to Amrizal and Aini, speech recognition has a weakness that is a bit of a nuisance to its users, a weakness that is often found during research, namely that it is prone to Interference. Speech recognition is prone to interference because the sound signal system is based on frequencies or waves. When the information in a sound signal has a wave structure that is the same as the disturbing frequency structure, it will be more difficult to sort out the interference in the sound signal.[26] During the research, the research environment was very noisy with lots of noise from the students' voices, so the speech recognition on Google Translate was hampered in recognizing the voices of students who were reading the vocabulary. Apart from that, speech recognition also has limitations on the number of words recognized, so this can also trigger errors in the results displayed by Google Translate. The limited number of words is caused by speech recognition running based on similar data held in the system database.[27]

## CONCLUSSION DAN SUGGESTION

Based on the results of research on the use of speech recognition to detect errors in reading 50 Arabic vocabulary words on Google Translate, the following conclusions can be drawn; 1) When using speech recognition in Google Translate, errors were found in the accuracy of letters and pronouns for each student. 2) In the research results, there is one vocabulary whose letters and pronouns are all correct, namely the vocabulary فِي and 10 vocabularies that do not have the correct number of letters, namely أمام, حقيبة, ممسحة, مسطرة, كراسة, سبورة, مر سمة, مكتبة, المدرسة, مقلمة. 3) Weaknesses in speech recognition affect the research results, so that several vocabularies ending in the letters *ta' marbutah* (ة) do not have the correct number, both in terms of letter accuracy and phrasing accuracy. This is due to the limited words available in the speech database system recognition.

Based on the research that has been carried out, the researcher makes several suggestions, as follows, 1) In the next development of the speech recognition system developed by Google Translate, it is better to update the vocabulary in the database system. 2) It is hoped that in the next research, we will examine why Arabic vocabulary ending in the letter *ta' marbutah* (ة) ends in the letter *ha'* (ه) when using the microphone feature on Google Translate.

[26] Amrizal and Aini, *Kecerdasan Buatan*.
[27] Amrizal and Aini.

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